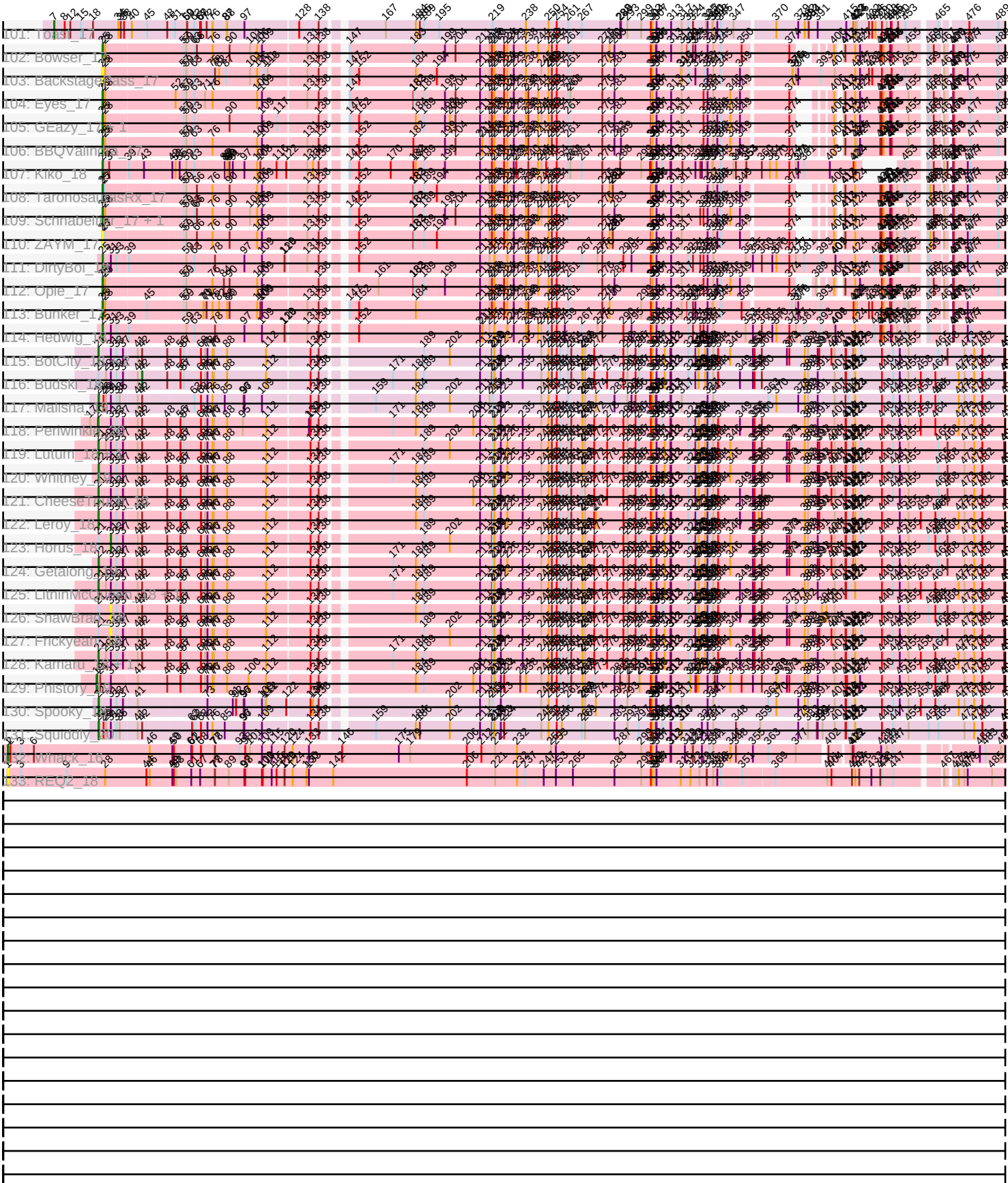


Zoomed Pham 280144

1. AikoCarson_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
2. Agatha_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
3. Bavliard_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
4. McDazzle_16 + 1	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
5. Nodigi_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
6. Cozz_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
7. Quasar_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
8. ChocoMuncher_16 + 48	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
9. Elliott_16 + 1	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
10. SteamedHais_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
11. Featonyeel_15 + 1	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
12. Amok_15	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
13. Mayweather_17	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
14. Gikk_19	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
15. CocoaPuff_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
16. Bubble_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
17. Vine_17	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
18. Elmal_17 + 1	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
19. SweatTeardrop_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
20. Nina_17	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
21. Ona_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
22. ChenyonLila_17	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
23. Lauer_15	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
24. Buttmikdreams_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
25. Yummy_17 + 1	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
26. Tolls_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
27. RSchmalz_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
28. Dre3_16 + 1	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
29. Hexbug_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
30. Chickentender_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
31. SheckWes_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
32. Zareel_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
33. Jamzy_19	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
34. Carsonalex_17	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
35. Balloona_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
36. Starburst_17	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
37. Biskit_17 + 300	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
38. Survivors_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
39. Button_17	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
40. RanchPantoot_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
41. GoldHunter_17	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
42. SummitAcademy_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
43. PotPie_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
44. MunkgeekAcademy_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
45. HippoPoloni_18	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
46. MAhor_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
47. Cleo_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
48. Typhonomachy_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
49. Nibbles_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395	413	430	446	460	478	496
50. Sopespian_16	16	19	78	84	108	124	138	151	164	178	191	205	220	237	258	280	301	314	328	346	367	381	395						

Zoomed Pham 280144



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 280144 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280144 has 163 members, 29 are drafts.

Phages represented in each track:

- Track 1 : AikoCarson_15
- Track 2 : Agatha_16
- Track 3 : Bavidard_16
- Track 4 : McDazzle_15, ElJefes_15
- Track 5 : Nodigi_18
- Track 6 : Cozz_16
- Track 7 : Quasar_16
- Track 8 : ChocoMunchkin_16, AndPeggy_15, Yarn_15, CanesSauce_16, CaramellLatte_16
- Track 9 : Elliott_16, PsychoKiller_16
- Track 10 : SteamedHams_18
- Track 11 : Feastonyeet_15, BigChungus_15
- Track 12 : Amok_15
- Track 13 : Mayweather_17
- Track 14 : GiKK_19
- Track 15 : CocoaPuff_15
- Track 16 : Bubble_16
- Track 17 : Vine_17
- Track 18 : Elinal_17, KayGee_16
- Track 19 : SweatNTears_18
- Track 20 : Nina_17
- Track 21 : Orla_18
- Track 22 : CherryonLim_17
- Track 23 : Lauer_15
- Track 24 : Buttermilkdreams_16
- Track 25 : Yummy_17, Horseradish_17
- Track 26 : Tolls_18
- Track 27 : RSchmailzl_17
- Track 28 : Dre3_16, Gibbous_16
- Track 29 : Hexbug_18
- Track 30 : ChickenTender_18
- Track 31 : SheckWes_15
- Track 32 : Zareef_18
- Track 33 : Jamzy_19
- Track 34 : Carsonalex_17
- Track 35 : Balloona_15
- Track 36 : Starburst_17

- Track 37 : Biskit_17, SketchMex_15
- Track 38 : Survivors_18
- Track 39 : Button_17
- Track 40 : RanchParmCat_19
- Track 41 : GoldHunter_17
- Track 42 : SummitAcademy_15
- Track 43 : PotPie_16
- Track 44 : MunkgeeRoachy_16
- Track 45 : HippoPololi_18
- Track 46 : MAnor_16
- Track 47 : Cleo_16
- Track 48 : Typhonomachy_16
- Track 49 : Nibbles_18
- Track 50 : Sopespian_16
- Track 51 : Troje_16
- Track 52 : RADical_17
- Track 53 : RedBaron_17
- Track 54 : Pons_16
- Track 55 : Yucky_16
- Track 56 : Socotra_17, Axym_16
- Track 57 : BillDoor_18
- Track 58 : MaVan_18
- Track 59 : MScarn_18
- Track 60 : Emalyn_15
- Track 61 : GTE2_14
- Track 62 : Margaret_19
- Track 63 : Wolfwood_20
- Track 64 : Burnsey_16
- Track 65 : Azira_18
- Track 66 : Blondies_17
- Track 67 : Fribs8_17
- Track 68 : PhrostedPhlake_18
- Track 69 : Wocket_18
- Track 70 : Malachai_18, Begonia_18
- Track 71 : Murp_17
- Track 72 : MintFen_17, Melba_17, BlingBling_17, Barco_17
- Track 73 : CaptainKirk2_17, Delian_17, UmaThurman_17
- Track 74 : Pipp_17
- Track 75 : Wisp_16
- Track 76 : Mellie_16
- Track 77 : Gambino_19, Blueberry_19, Azula_19, MissRona_19
- Track 78 : Frokostdame_17
- Track 79 : Petra_19
- Track 80 : ZiggyZoo_16, Obliviate_16
- Track 81 : Samba_17
- Track 82 : PrincePatrick_17
- Track 83 : CarolAnn_17
- Track 84 : Walrus_18
- Track 85 : Blino_17
- Track 86 : William_17
- Track 87 : CheeseSpider_20
- Track 88 : Hitter_17
- Track 89 : Jalammah_19

- Track 90 : Guacamole_17, JasperJr_17
- Track 91 : Zilla_17
- Track 92 : Fenry_16
- Track 93 : KappaFarmDelta_17
- Track 94 : JuJu_17
- Track 95 : Lysidious_18
- Track 96 : Utz_17
- Track 97 : Archis_18
- Track 98 : PCoral_17
- Track 99 : Zarbodnamra_17
- Track 100 : Fairfaxidum_17
- Track 101 : Toast_17
- Track 102 : Bowser_17
- Track 103 : BackstagePass_17
- Track 104 : Eyes_17
- Track 105 : GEazy_17, HannahD_17
- Track 106 : BBQValindra_17
- Track 107 : Kiko_18
- Track 108 : TaronosaurusRx_17
- Track 109 : Schnabeltier_17, MagicMan_17
- Track 110 : ZAYM_17
- Track 111 : DirtyBoi_18
- Track 112 : Opie_17
- Track 113 : Bunker_17
- Track 114 : Hedwig_18
- Track 115 : BotCity_18, BENtherdunthat_18, Asapag_18
- Track 116 : Budski_18
- Track 117 : Malisha_19
- Track 118 : Periwinkle_20
- Track 119 : Lutum_18, Kenna_17
- Track 120 : Whitney_19
- Track 121 : CheeseTouch_18
- Track 122 : Leroy_18
- Track 123 : Horus_18
- Track 124 : Getalong_19
- Track 125 : LitninMcQueen_18, Phabuloso_18
- Track 126 : ShawBrad_18
- Track 127 : Frickyeah_18
- Track 128 : Kamaru_18, Holliday_18
- Track 129 : Phistory_19
- Track 130 : Spooky_18
- Track 131 : Squiddly_20
- Track 132 : Whack_16
- Track 133 : REQ2_18

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 8, it was called in 37 of the 134 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archis_18, Azula_19, Barco_17, Begonia_18, BlingBling_17, Blino_17, Blueberry_19, CaptainKirk2_17, CarolAnn_17, Delian_17, Fairfaxidum_17, Fenry_16, Gambino_19, Guacamole_17, Hitter_17, Jalamamah_19, JasperJr_17, JuJu_17, KappaFarmDelta_17, Lysidious_18, Malachai_18, Melba_17, Mellie_16, MintFen_17, MissRona_19, Murp_17, Obliviate_16, PCoral_17, PhrostedPhlake_18, PrincePatrick_17, Samba_17, UmaThurman_17, Utz_17, William_17, Wocket_18, Zarbodnamra_17, ZiggyZoo_16,

Genes that have the "Most Annotated" start but do not call it:

- CheeseSpider_20, Frokostdame_17, Petra_19, Pipp_17, Toast_17, Walrus_18, Wisp_16, Zilla_17,

Genes that do not have the "Most Annotated" start:

- Agatha_16, AikoCarson_15, Amok_15, AndPeggy_15, Asapag_18, Axym_16, Azira_18, BBQValindra_17, BENTherdunthat_18, BackstagePass_17, Balloona_15, Bavidard_16, BigChungus_15, BillDoor_18, Biskit_17, Blondies_17, BotCity_18, Bowser_17, Bubble_16, Budski_18, Bunker_17, Burnsey_16, Button_17, Buttrmlkdreams_16, CanesSauce_16, CaramelLatte_16, Carsonalex_17, CheeseTouch_18, CherryonLim_17, ChickenTender_18, ChocoMunchkin_16, Cleo_16, CocoaPuff_15, Cozz_16, DirtyBoi_18, Dre3_16, ElJefes_15, Elinal_17, Elliott_16, Emalyn_15, Eyes_17, Feastonyeet_15, Fribs8_17, Frickyeah_18, GEazy_17, GTE2_14, Getalong_19, GiKK_19, Gibbous_16, GoldHunter_17, HannahD_17, Hedwig_18, Hexbug_18, HippoPololi_18, Holliday_18, Horseradish_17, Horus_18, Jamzy_19, Kamaru_18, KayGee_16, Kenna_17, Kiko_18, Lauer_15, Leroy_18, LitninMcQueen_18, Lutum_18, MAnor_16, MScarn_18, MaVan_18, MagicMan_17, Malisha_19, Margaret_19, Mayweather_17, McDazzle_15, MunkgeeRoachy_16, Nibbles_18, Nina_17, Nodigi_18, Opie_17, Orla_18, Periwinkle_20, Phabuloso_18, Phistory_19, Pons_16, PotPie_16, PsychoKiller_16, Quasar_16, RADical_17, REQ2_18, RSchmailzl_17, RanchParmCat_19, RedBaron_17, Schnabeltier_17, ShawBrad_18, SheckWes_15, SketchMex_15, Socotra_17, Sopeopian_16, Spooky_18, Squiddly_20, Starburst_17, SteamedHams_18, SummitAcademy_15, Survivors_18, SweatNTears_18, TaronosaurusRx_17, Tolls_18, Troje_16, Typhonomachy_16, Vine_17, Whack_16, Whitney_19, Wolfwood_20, Yarn_15, Yucky_16, Yummy_17, ZAYM_17, Zareef_18,

Summary by start number:

Start 1:

- Found in 2 of 163 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ2_18 (singleton), Whack_16 (singleton),

Start 5:

- Found in 1 of 163 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pipp_17 (CV),

Start 7:

- Found in 5 of 163 (3.1%) of genes in pham

- Manual Annotations of this start: 1 of 134
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Toast_17 (CV),

Start 8:

- Found in 45 of 163 (27.6%) of genes in pham
- Manual Annotations of this start: 37 of 134
- Called 82.2% of time when present
- Phage (with cluster) where this start called: Archis_18 (CV), Azula_19 (CV), Barco_17 (CV), Begonia_18 (CV), BlingBling_17 (CV), Blino_17 (CV), Blueberry_19 (CV), CaptainKirk2_17 (CV), CarolAnn_17 (CV), Delian_17 (CV), Fairfaxidum_17 (CV), Fenry_16 (CV), Gambino_19 (CV), Guacamole_17 (CV), Hitter_17 (CV), Jalammah_19 (CV), JasperJr_17 (CV), JuJu_17 (CV), KappaFarmDelta_17 (CV), Lysidious_18 (CV), Malachai_18 (CV), Melba_17 (CV), Mellie_16 (CV), MintFen_17 (CV), MissRona_19 (CV), Murp_17 (CV), Obliviate_16 (CV), PCoral7_17 (CV), PhrostedPhlake_18 (CV), PrincePatrick_17 (CV), Samba_17 (CV), UmaThurman_17 (CV), Utz_17 (CV), William_17 (CV), Wocket_18 (CV), Zarbodnamra_17 (CV), ZiggyZoo_16 (CV),

Start 11:

- Found in 36 of 163 (22.1%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 2.8% of time when present
- Phage (with cluster) where this start called: Frokostdame_17 (CV),

Start 12:

- Found in 37 of 163 (22.7%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 5.4% of time when present
- Phage (with cluster) where this start called: Walrus_18 (CV), Zilla_17 (CV),

Start 14:

- Found in 40 of 163 (24.5%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 7.5% of time when present
- Phage (with cluster) where this start called: CheeseSpider_20 (CV), Petra_19 (CV), Wisp_16 (CV),

Start 19:

- Found in 1 of 163 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phistory_19 (DN1),

Start 20:

- Found in 1 of 163 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Periwinkle_20 (DN1),

Start 21:

- Found in 15 of 163 (9.2%) of genes in pham
- Manual Annotations of this start: 11 of 134

- Called 73.3% of time when present
- Phage (with cluster) where this start called: Asapag_18 (DN1), BENTherdunthat_18 (DN1), BotCity_18 (DN), CheeseTouch_18 (DN1), Holliday_18 (DN1), Kamaru_18 (DN1), Kenna_17 (DN1), Leroy_18 (DN1), LitninMcQueen_18 (DN1), Lutum_18 (DN1), Phabuloso_18 (DN1),

Start 22:

- Found in 24 of 163 (14.7%) of genes in pham
- Manual Annotations of this start: 5 of 134
- Called 20.8% of time when present
- Phage (with cluster) where this start called: Getalong_19 (DN1), Malisha_19 (DN), Spooky_18 (DN2), Squiddly_20 (DN2), Whitney_19 (DN1),

Start 25:

- Found in 15 of 163 (9.2%) of genes in pham
- Manual Annotations of this start: 13 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BBQValindra_17 (DB), BackstagePass_17 (DB), Bowser_17 (DB), Bunker_17 (DB), DirtyBoi_18 (DB), Eyes_17 (DB), GEazy_17 (DB), HannahD_17 (DB), Hedwig_18 (DB), Kiko_18 (DB), MagicMan_17 (DB), Opie_17 (DB), Schnabeltier_17 (DB), TaronosaurusRx_17 (DB), ZAYM_17 (DB),

Start 28:

- Found in 61 of 163 (37.4%) of genes in pham
- Manual Annotations of this start: 33 of 134
- Called 77.0% of time when present
- Phage (with cluster) where this start called: Agatha_16 (CT), Axym_16 (CT), Azira_18 (CT), Bavilard_16 (CT), BigChungus_15 (CT), Bubble_16 (CT), Burnsey_16 (CT), Carsonalex_17 (CT), CherryonLim_17 (CT), ChickenTender_18 (CT), Cleo_16 (CT), CocoaPuff_15 (CT), Cozz_16 (CT), Dre3_16 (CT), Elinal_17 (CT), Elliott_16 (CT), Feastonyeet_15 (CT), Fribs8_17 (CT), Gibbous_16 (CT), GoldHunter_17 (CT), HippoPololi_18 (CT), KayGee_16 (CT), Lauer_15 (CT), MAnor_16 (CT), MaVan_18 (CT), Mayweather_17 (CT), MunkgeeRoachy_16 (CT), Nibbles_18 (CT), Nina_17 (CT), Pons_16 (CT), PotPie_16 (CT), PsychoKiller_16 (CT), Quasar_16 (CT), RADical_17 (CT), RSchmailZl_17 (CT), RedBaron_17 (CT), SheckWes_15 (CT), Socotra_17 (CT), Sopespian_16 (CT), Starburst_17 (CT), SummitAcademy_15 (CT), Survivors_18 (CT), Typhonmarchy_16 (CT), Vine_17 (CT), Wolfwood_20 (CT), Yucky_16 (CT), Zareef_18 (CT),

Start 31:

- Found in 24 of 163 (14.7%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Frickyeah_18 (DN1), Horus_18 (DN1), ShawBrad_18 (DN1),

Start 42:

- Found in 20 of 163 (12.3%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Budski_18 (DN),

Start 46:

- Found in 53 of 163 (32.5%) of genes in pham
- No Manual Annotations of this start.
- Called 5.7% of time when present
- Phage (with cluster) where this start called: Balloona_15 (CT), ElJefes_15 (CT), McDazzle_15 (CT),

Start 81:

- Found in 29 of 163 (17.8%) of genes in pham
- Manual Annotations of this start: 23 of 134
- Called 89.7% of time when present
- Phage (with cluster) where this start called: AikoCarson_15 (CT), Amok_15 (CT), AndPeggy_15 (CT), BillDoor_18 (CT), Biskit_17 (CT), Buttrmlkdreams_16 (CT), CanesSauce_16 (CT), CaramelLatte_16 (CT), ChocoMunchkin_16 (CT), Emalyn_15 (CT), GiKK_19 (CT), Hexbug_18 (CT), Horseradish_17 (CT), Jamzy_19 (CT), MScarn_18 (CT), Margaret_19 (CT), Nodigi_18 (CT), Orla_18 (CT), RanchParmCat_19 (CT), SketchMex_15 (CT), SteamedHams_18 (CT), SweatNTears_18 (CT), Tolls_18 (CT), Troje_16 (CT), Yarn_15 (CT), Yummy_17 (CT),

Start 86:

- Found in 28 of 163 (17.2%) of genes in pham
- Manual Annotations of this start: 2 of 134
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Blondies_17 (CT), Button_17 (CT),

Start 108:

- Found in 54 of 163 (33.1%) of genes in pham
- No Manual Annotations of this start.
- Called 1.9% of time when present
- Phage (with cluster) where this start called: GTE2_14 (CT),

Summary by clusters:

There are 7 clusters represented in this pham: DN, singleton, DB, DN1, DN2, CV, CT,

Info for manual annotations of cluster CT:

- Start number 28 was manually annotated 33 times for cluster CT.
- Start number 81 was manually annotated 23 times for cluster CT.
- Start number 86 was manually annotated 2 times for cluster CT.

Info for manual annotations of cluster CV:

- Start number 5 was manually annotated 1 time for cluster CV.
- Start number 7 was manually annotated 1 time for cluster CV.
- Start number 8 was manually annotated 37 times for cluster CV.
- Start number 11 was manually annotated 1 time for cluster CV.
- Start number 12 was manually annotated 1 time for cluster CV.
- Start number 14 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DB:

- Start number 25 was manually annotated 13 times for cluster DB.

Info for manual annotations of cluster DN:

- Start number 21 was manually annotated 1 time for cluster DN.
- Start number 22 was manually annotated 1 time for cluster DN.
- Start number 42 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 19 was manually annotated 1 time for cluster DN1.
- Start number 20 was manually annotated 1 time for cluster DN1.
- Start number 21 was manually annotated 10 times for cluster DN1.
- Start number 22 was manually annotated 2 times for cluster DN1.
- Start number 31 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 22 was manually annotated 2 times for cluster DN2.

Gene Information:

Gene: Agatha_16 Start: 9629, Stop: 14767, Start Num: 28

Candidate Starts for Agatha_16:

(Start: 22 @9605 has 5 MA's), (Start: 28 @9629 has 33 MA's), (32, 9656), (46, 9785), (49, 9860), (77, 10013), (78, 10016), (94, 10112), (97, 10121), (103, 10151), (105, 10157), (107, 10172), (108, 10175), (112, 10196), (122, 10268), (125, 10289), (136, 10355), (138, 10376), (155, 10493), (182, 10655), (189, 10694), (198, 10769), (215, 10928), (219, 10940), (223, 10967), (228, 11012), (230, 11024), (245, 11114), (248, 11132), (252, 11153), (255, 11183), (261, 11207), (264, 11219), (267, 11258), (271, 11291), (288, 11393), (289, 11396), (293, 11420), (304, 11513), (307, 11528), (311, 11567), (324, 11663), (333, 11705), (340, 11735), (341, 11738), (351, 11846), (352, 11849), (357, 11900), (371, 11975), (382, 12077), (390, 12122), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (428, 12278), (432, 12308), (440, 12356), (442, 12362), (446, 12389), (466, 12524), (481, 12641), (484, 12674), (486, 12695), (487, 12698), (501, 12764), (502, 12770), (504, 12785), (526, 12905), (528, 12914), (543, 12998), (607, 13319), (646, 13538), (653, 13574), (691, 13787), (729, 13979), (740, 14027), (747, 14048), (761, 14156), (778, 14222), (780, 14240), (792, 14345), (799, 14375), (800, 14384), (805, 14414), (816, 14480), (821, 14528), (828, 14588), (841, 14675), (852, 14738),

Gene: AikoCarson_15 Start: 9357, Stop: 14072, Start Num: 81

Candidate Starts for AikoCarson_15:

(Start: 81 @9357 has 23 MA's), (Start: 86 @9384 has 2 MA's), (108, 9513), (121, 9600), (124, 9615), (129, 9660), (132, 9672), (136, 9690), (139, 9717), (151, 9789), (156, 9831), (158, 9846), (159, 9849), (165, 9873), (168, 9891), (171, 9909), (178, 9954), (180, 9963), (187, 9990), (191, 10023), (201, 10083), (205, 10122), (208, 10161), (210, 10176), (223, 10245), (227, 10272), (243, 10368), (246, 10386), (258, 10449), (286, 10617), (288, 10623), (302, 10737), (304, 10743), (307, 10758), (337, 10947), (341, 10968), (344, 10986), (345, 10995), (357, 11130), (371, 11205), (373, 11241), (378, 11280), (379, 11283), (382, 11307), (386, 11337), (390, 11352), (396, 11376), (408, 11415), (414, 11454), (416, 11460), (446, 11619), (480, 11868), (481, 11871), (484, 11904), (486, 11925), (501, 11994), (502, 12000), (516, 12099), (528, 12144), (543, 12231), (574, 12366), (607, 12558), (624, 12627), (628, 12651), (651, 12792), (686, 13005), (691, 13026), (699, 13083), (755, 13386), (759, 13443), (761, 13461), (778, 13527), (785, 13599), (792, 13650), (798, 13674), (799, 13680), (800, 13689), (805, 13719), (816, 13785), (821, 13833), (828, 13893), (842, 13983), (852, 14043),

Gene: Amok_15 Start: 9357, Stop: 14069, Start Num: 81

Candidate Starts for Amok_15:

(Start: 81 @9357 has 23 MA's), (Start: 86 @9384 has 2 MA's), (108, 9513), (121, 9600), (124, 9615), (129, 9660), (132, 9672), (136, 9690), (139, 9717), (151, 9789), (156, 9831), (158, 9846), (159, 9849), (165, 9873), (168, 9891), (171, 9909), (175, 9930), (178, 9954), (180, 9963), (187, 9990), (191, 10023), (192, 10032), (205, 10122), (208, 10161), (210, 10176), (223, 10245), (227, 10272), (243, 10368), (246, 10386), (258, 10449), (286, 10617), (288, 10623), (302, 10737), (304, 10743), (307, 10758), (337, 10947), (341, 10968), (344, 10986), (345, 10995), (357, 11130), (366, 11184), (371, 11205), (373, 11241), (378, 11280), (379, 11283), (382, 11307), (386, 11337), (390, 11352), (396, 11376), (408, 11415), (414, 11454), (416, 11460), (440, 11586), (445, 11616), (446, 11619), (448, 11637), (449, 11640), (480, 11868), (481, 11871), (484, 11904), (486, 11925), (501, 11994), (502, 12000), (543, 12231), (574, 12366), (607, 12558), (624, 12627), (628, 12651), (651, 12792), (686, 13005), (691, 13026), (699, 13080), (755, 13383), (759, 13440), (761, 13458), (778, 13524), (785, 13596), (792, 13647), (799, 13677), (800, 13686), (805, 13716), (816, 13782), (821, 13830), (828, 13890), (842, 13980), (852, 14040),

Gene: AndPeggy_15 Start: 9645, Stop: 14432, Start Num: 81

Candidate Starts for AndPeggy_15:

(Start: 81 @9645 has 23 MA's), (Start: 86 @9672 has 2 MA's), (99, 9750), (108, 9801), (121, 9888), (124, 9903), (132, 9960), (136, 9978), (139, 10005), (140, 10008), (151, 10077), (158, 10134), (168, 10179), (171, 10197), (178, 10242), (187, 10278), (191, 10311), (199, 10359), (200, 10362), (205, 10410), (208, 10449), (210, 10464), (243, 10656), (246, 10674), (262, 10758), (286, 10905), (292, 10932), (302, 11025), (304, 11031), (307, 11046), (311, 11085), (312, 11097), (321, 11163), (337, 11235), (340, 11253), (341, 11256), (345, 11283), (373, 11529), (382, 11595), (390, 11640), (395, 11661), (396, 11664), (397, 11667), (408, 11703), (414, 11742), (416, 11748), (424, 11775), (445, 11904), (446, 11907), (448, 11925), (467, 12048), (469, 12063), (484, 12192), (486, 12213), (495, 12255), (501, 12282), (502, 12288), (524, 12420), (528, 12432), (543, 12519), (552, 12561), (562, 12597), (589, 12723), (595, 12762), (617, 12891), (629, 12948), (634, 12990), (651, 13083), (661, 13158), (673, 13221), (686, 13302), (691, 13323), (713, 13500), (715, 13506), (752, 13725), (759, 13803), (761, 13821), (763, 13827), (778, 13887), (780, 13905), (783, 13938), (792, 14010), (800, 14049), (805, 14079), (816, 14145), (821, 14193), (828, 14253), (842, 14343), (852, 14403),

Gene: Archis_18 Start: 10485, Stop: 16007, Start Num: 8

Candidate Starts for Archis_18:

(Start: 8 @10485 has 37 MA's), (Start: 11 @10500 has 1 MA's), (Start: 12 @10506 has 1 MA's), (Start: 14 @10536 has 1 MA's), (15, 10545), (16, 10548), (18, 10590), (38, 10701), (40, 10722), (47, 10842), (54, 10884), (65, 10950), (68, 10968), (72, 10989), (73, 10992), (76, 11010), (82, 11034), (95, 11118), (97, 11124), (105, 11160), (107, 11175), (109, 11184), (135, 11352), (138, 11379), (155, 11496), (184, 11667), (189, 11697), (211, 11901), (219, 11946), (223, 11973), (224, 11985), (240, 12075), (245, 12120), (250, 12147), (254, 12177), (267, 12264), (268, 12267), (272, 12306), (285, 12390), (293, 12426), (297, 12468), (302, 12513), (304, 12519), (306, 12531), (307, 12534), (313, 12588), (317, 12627), (320, 12648), (321, 12651), (324, 12669), (325, 12678), (330, 12696), (335, 12717), (337, 12723), (341, 12744), (345, 12771), (350, 12849), (389, 13038), (398, 13062), (404, 13074), (405, 13077), (418, 13092), (423, 13107), (424, 13110), (432, 13161), (445, 13242), (446, 13245), (452, 13278), (455, 13308), (457, 13332), (505, 13665), (514, 13713), (517, 13758), (518, 13761), (521, 13776), (529, 13821), (530, 13830), (532, 13839), (542, 13890), (556, 13962), (561, 13980), (570, 14001), (581, 14100), (582, 14103), (591, 14136), (599, 14202), (600, 14220), (603, 14235), (610, 14268), (619, 14319), (627, 14370), (633, 14418), (664, 14613), (665, 14616), (675, 14688), (676, 14691), (685, 14757), (686, 14760), (690, 14778), (700, 14838), (706, 14895), (707, 14913), (720, 14994), (721, 14997), (725, 15012), (748, 15171), (758, 15225), (762, 15291), (776, 15345), (777, 15357), (778, 15363), (782, 15393), (792, 15486), (798, 15510), (802, 15528), (805, 15552), (806, 15558), (809, 15579), (816, 15618), (830, 15759), (843, 15822), (845, 15840), (854, 15897), (864, 15990),

Gene: Asapag_18 Start: 9881, Stop: 15508, Start Num: 21

Candidate Starts for Asapag_18:

(Start: 21 @9881 has 11 MA's), (Start: 31 @9926 has 1 MA's), (33, 9947), (37, 9968), (41, 10013), (Start: 42 @10028 has 1 MA's), (48, 10112), (56, 10154), (57, 10166), (68, 10229), (71, 10244), (73, 10253), (76, 10271), (77, 10277), (88, 10325), (112, 10460), (134, 10610), (138, 10640), (189, 10964), (202, 11060), (211, 11168), (218, 11210), (219, 11213), (220, 11219), (223, 11240), (235, 11321), (245, 11387), (250, 11414), (252, 11426), (254, 11444), (255, 11456), (261, 11480), (264, 11492), (267, 11531), (268, 11534), (269, 11543), (272, 11573), (290, 11678), (293, 11693), (296, 11723), (297, 11735), (302, 11780), (304, 11786), (307, 11801), (310, 11831), (312, 11852), (313, 11855), (321, 11918), (325, 11945), (326, 11948), (327, 11951), (328, 11957), (334, 11981), (335, 11984), (337, 11990), (339, 11996), (341, 12011), (344, 12029), (346, 12074), (355, 12158), (356, 12164), (360, 12191), (373, 12284), (374, 12293), (382, 12350), (383, 12362), (391, 12398), (392, 12404), (404, 12446), (407, 12458), (414, 12497), (416, 12503), (417, 12506), (422, 12524), (423, 12527), (424, 12530), (429, 12554), (440, 12629), (447, 12668), (451, 12692), (455, 12725), (465, 12836), (468, 12869), (473, 12932), (478, 12968), (482, 12998), (493, 13076), (494, 13079), (496, 13088), (500, 13112), (512, 13193), (514, 13199), (517, 13244), (518, 13247), (521, 13262), (529, 13307), (530, 13316), (532, 13325), (533, 13328), (554, 13433), (567, 13481), (568, 13484), (570, 13487), (581, 13586), (582, 13589), (588, 13601), (603, 13718), (610, 13751), (619, 13802), (625, 13832), (632, 13892), (644, 13973), (649, 13994), (654, 14027), (667, 14099), (668, 14108), (686, 14222), (693, 14252), (696, 14261), (701, 14300), (702, 14303), (705, 14333), (706, 14354), (734, 14552), (743, 14615), (746, 14621), (756, 14672), (781, 14858), (790, 14945), (795, 14972), (796, 14975), (810, 15050), (814, 15074), (820, 15113), (822, 15149), (827, 15170), (836, 15257), (841, 15299), (847, 15332), (849, 15344), (861, 15422), (865, 15488),

Gene: Axym_16 Start: 9629, Stop: 14767, Start Num: 28

Candidate Starts for Axym_16:

(Start: 22 @9605 has 5 MA's), (Start: 28 @9629 has 33 MA's), (32, 9656), (46, 9785), (49, 9860), (77, 10013), (78, 10016), (94, 10112), (97, 10121), (103, 10151), (105, 10157), (107, 10172), (108, 10175), (112, 10196), (122, 10268), (125, 10289), (136, 10355), (138, 10376), (155, 10493), (182, 10655), (189, 10694), (198, 10769), (215, 10928), (219, 10940), (223, 10967), (228, 11012), (230, 11024), (245, 11114), (248, 11132), (252, 11153), (255, 11183), (261, 11207), (264, 11219), (267, 11258), (271, 11291), (288, 11393), (289, 11396), (293, 11420), (304, 11513), (307, 11528), (311, 11567), (317, 11621), (324, 11663), (326, 11675), (333, 11705), (340, 11735), (341, 11738), (351, 11846), (352, 11849), (357, 11900), (371, 11975), (380, 12065), (382, 12077), (390, 12122), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (428, 12278), (432, 12308), (440, 12356), (442, 12362), (446, 12389), (466, 12524), (481, 12641), (484, 12674), (486, 12695), (487, 12698), (501, 12764), (502, 12770), (504, 12785), (526, 12905), (528, 12914), (543, 12998), (607, 13319), (646, 13538), (653, 13574), (691, 13787), (729, 13979), (740, 14027), (747, 14048), (761, 14156), (778, 14222), (780, 14240), (786, 14300), (792, 14345), (799, 14375), (800, 14384), (805, 14414), (816, 14480), (821, 14528), (828, 14588), (841, 14675), (852, 14738),

Gene: Azira_18 Start: 10619, Stop: 15748, Start Num: 28

Candidate Starts for Azira_18:

(23, 10598), (Start: 28 @10619 has 33 MA's), (32, 10646), (46, 10775), (54, 10871), (62, 10922), (74, 10979), (79, 11012), (80, 11015), (94, 11102), (98, 11114), (107, 11162), (108, 11165), (109, 11171), (116, 11225), (118, 11231), (125, 11279), (136, 11345), (138, 11366), (198, 11759), (199, 11762), (208, 11864), (219, 11930), (220, 11936), (223, 11957), (254, 12161), (256, 12179), (259, 12185), (261, 12197), (264, 12209), (267, 12248), (269, 12260), (274, 12296), (281, 12353), (286, 12377), (288, 12383), (304, 12503), (307, 12518), (311, 12557), (320, 12632), (326, 12665), (330, 12680), (331, 12686), (332, 12692), (341, 12728), (351, 12836), (360, 12908), (370, 12962), (382, 13067), (390, 13112), (396, 13136), (411, 13196), (412, 13208), (414, 13214), (422, 13241), (423, 13244), (424, 13247), (438, 13340), (440, 13346), (448, 13397), (457, 13466), (463, 13499), (466, 13514), (467, 13520), (473, 13577), (475, 13589), (480, 13628), (481, 13631), (483, 13652), (484, 13664), (486, 13685), (487, 13688), (495, 13727), (498, 13739), (501, 13754), (526, 13895), (543, 13991),

(555, 14057), (565, 14078), (569, 14084), (607, 14321), (616, 14351), (624, 14390), (642, 14525), (650, 14555), (653, 14576), (682, 14735), (686, 14768), (729, 14981), (737, 14999), (740, 15005), (761, 15134), (778, 15200), (783, 15251), (792, 15323), (800, 15362), (805, 15392), (811, 15425), (816, 15458), (826, 15530), (831, 15602), (841, 15656), (843, 15662), (852, 15719),

Gene: Azula_19 Start: 10619, Stop: 16108, Start Num: 8

Candidate Starts for Azula_19:

(Start: 8 @10619 has 37 MA's), (Start: 11 @10634 has 1 MA's), (Start: 12 @10640 has 1 MA's), (Start: 14 @10670 has 1 MA's), (15, 10679), (16, 10682), (18, 10724), (38, 10835), (40, 10856), (47, 10976), (54, 11018), (65, 11084), (68, 11102), (72, 11123), (73, 11126), (76, 11144), (82, 11168), (95, 11252), (105, 11294), (107, 11309), (109, 11318), (135, 11486), (138, 11513), (155, 11630), (184, 11801), (189, 11831), (211, 12035), (219, 12080), (223, 12107), (224, 12119), (226, 12131), (240, 12209), (245, 12254), (250, 12281), (254, 12311), (267, 12398), (268, 12401), (272, 12440), (281, 12503), (283, 12512), (293, 12560), (297, 12602), (302, 12647), (304, 12653), (307, 12668), (313, 12722), (317, 12761), (320, 12782), (321, 12785), (324, 12803), (330, 12830), (335, 12851), (337, 12857), (341, 12878), (344, 12896), (345, 12905), (385, 13178), (405, 13232), (423, 13262), (424, 13265), (432, 13316), (445, 13397), (446, 13400), (452, 13433), (455, 13463), (457, 13487), (468, 13553), (505, 13820), (514, 13868), (516, 13901), (517, 13913), (518, 13916), (529, 13976), (530, 13985), (532, 13994), (542, 14045), (556, 14117), (561, 14135), (570, 14156), (581, 14255), (582, 14258), (591, 14291), (599, 14357), (600, 14375), (603, 14390), (610, 14423), (619, 14474), (627, 14525), (637, 14594), (664, 14768), (665, 14771), (675, 14843), (676, 14846), (685, 14912), (686, 14915), (690, 14933), (700, 14993), (706, 15050), (707, 15068), (720, 15149), (721, 15152), (725, 15167), (748, 15338), (758, 15392), (770, 15464), (773, 15473), (779, 15509), (787, 15569), (789, 15587), (793, 15605), (804, 15650), (808, 15683), (825, 15794), (830, 15863), (843, 15926), (845, 15944), (864, 16094),

Gene: BBQValindra_17 Start: 10583, Stop: 15709, Start Num: 25

Candidate Starts for BBQValindra_17:

(Start: 25 @10583 has 13 MA's), (Start: 28 @10592 has 33 MA's), (57, 10865), (59, 10874), (63, 10904), (76, 10970), (106, 11126), (109, 11144), (131, 11297), (138, 11339), (152, 11426), (182, 11618), (199, 11735), (204, 11774), (211, 11858), (214, 11867), (215, 11891), (218, 11900), (220, 11909), (224, 11942), (226, 11954), (229, 11978), (238, 12023), (240, 12032), (244, 12068), (250, 12104), (252, 12116), (254, 12134), (261, 12170), (276, 12293), (283, 12335), (289, 12359), (302, 12470), (303, 12473), (304, 12476), (307, 12491), (313, 12545), (317, 12584), (332, 12665), (337, 12680), (341, 12701), (343, 12716), (345, 12728), (346, 12764), (349, 12800), (374, 12962), (406, 13019), (413, 13031), (414, 13034), (424, 13067), (425, 13073), (427, 13085), (438, 13160), (440, 13166), (442, 13172), (444, 13193), (445, 13196), (446, 13199), (455, 13262), (459, 13298), (462, 13313), (467, 13337), (469, 13352), (470, 13355), (477, 13415), (489, 13514), (497, 13556), (510, 13634), (519, 13703), (525, 13721), (544, 13829), (546, 13832), (548, 13838), (551, 13856), (552, 13859), (557, 13880), (563, 13898), (564, 13901), (568, 13910), (583, 14015), (591, 14045), (593, 14063), (594, 14069), (602, 14129), (615, 14189), (623, 14237), (629, 14267), (638, 14315), (640, 14327), (652, 14387), (660, 14444), (664, 14462), (670, 14507), (676, 14534), (678, 14552), (683, 14582), (684, 14591), (692, 14630), (694, 14636), (697, 14645), (716, 14804), (722, 14846), (756, 15038), (757, 15041), (760, 15098), (764, 15107), (767, 15119), (774, 15140), (807, 15353), (814, 15392), (826, 15461), (829, 15515), (857, 15668), (859, 15692),

Gene: BENtherdunthat_18 Start: 9881, Stop: 15508, Start Num: 21

Candidate Starts for BENtherdunthat_18:

(Start: 21 @9881 has 11 MA's), (Start: 31 @9926 has 1 MA's), (33, 9947), (37, 9968), (41, 10013), (Start: 42 @10028 has 1 MA's), (48, 10112), (56, 10154), (57, 10166), (68, 10229), (71, 10244), (73, 10253), (76, 10271), (77, 10277), (88, 10325), (112, 10460), (134, 10610), (138, 10640), (189, 10964), (202, 11060), (211, 11168), (218, 11210), (219, 11213), (220, 11219), (223, 11240), (235, 11321), (245, 11387), (250, 11414), (252, 11426), (254, 11444), (255, 11456), (261, 11480), (264, 11492),

(267, 11531), (268, 11534), (269, 11543), (272, 11573), (290, 11678), (293, 11693), (296, 11723), (297, 11735), (302, 11780), (304, 11786), (307, 11801), (310, 11831), (312, 11852), (313, 11855), (321, 11918), (325, 11945), (326, 11948), (327, 11951), (328, 11957), (334, 11981), (335, 11984), (337, 11990), (339, 11996), (341, 12011), (344, 12029), (346, 12074), (355, 12158), (356, 12164), (360, 12191), (373, 12284), (374, 12293), (382, 12350), (383, 12362), (391, 12398), (392, 12404), (404, 12446), (407, 12458), (414, 12497), (416, 12503), (417, 12506), (422, 12524), (423, 12527), (424, 12530), (429, 12554), (440, 12629), (447, 12668), (451, 12692), (455, 12725), (465, 12836), (468, 12869), (473, 12932), (478, 12968), (482, 12998), (493, 13076), (494, 13079), (496, 13088), (500, 13112), (512, 13193), (514, 13199), (517, 13244), (518, 13247), (521, 13262), (529, 13307), (530, 13316), (532, 13325), (533, 13328), (554, 13433), (567, 13481), (568, 13484), (570, 13487), (581, 13586), (582, 13589), (588, 13601), (603, 13718), (610, 13751), (619, 13802), (625, 13832), (632, 13892), (644, 13973), (649, 13994), (654, 14027), (667, 14099), (668, 14108), (686, 14222), (693, 14252), (696, 14261), (701, 14300), (702, 14303), (705, 14333), (706, 14354), (734, 14552), (743, 14615), (746, 14621), (756, 14672), (781, 14858), (790, 14945), (795, 14972), (796, 14975), (810, 15050), (814, 15074), (820, 15113), (822, 15149), (827, 15170), (836, 15257), (841, 15299), (847, 15332), (849, 15344), (861, 15422), (865, 15488),

Gene: BackstagePass_17 Start: 10561, Stop: 15849, Start Num: 25

Candidate Starts for BackstagePass_17:

(Start: 25 @10561 has 13 MA's), (Start: 28 @10570 has 33 MA's), (57, 10843), (59, 10852), (63, 10882), (75, 10945), (78, 10957), (82, 10972), (87, 10999), (101, 11083), (106, 11104), (111, 11131), (113, 11143), (131, 11275), (138, 11317), (147, 11371), (152, 11404), (184, 11605), (194, 11683), (211, 11836), (215, 11869), (218, 11878), (220, 11887), (224, 11920), (226, 11932), (229, 11956), (238, 12001), (245, 12055), (249, 12079), (250, 12082), (252, 12094), (254, 12112), (261, 12148), (276, 12271), (283, 12313), (302, 12448), (304, 12454), (307, 12469), (316, 12559), (317, 12562), (321, 12586), (325, 12613), (333, 12646), (337, 12658), (341, 12679), (345, 12706), (349, 12778), (375, 12949), (376, 12952), (377, 12964), (379, 12973), (393, 13057), (407, 13102), (424, 13174), (427, 13192), (432, 13225), (434, 13237), (440, 13273), (446, 13306), (453, 13357), (459, 13405), (467, 13444), (469, 13459), (470, 13462), (471, 13468), (475, 13513), (489, 13621), (497, 13663), (510, 13741), (514, 13765), (519, 13810), (544, 13933), (546, 13936), (552, 13963), (557, 13984), (563, 14002), (564, 14005), (568, 14014), (583, 14119), (594, 14173), (630, 14398), (636, 14434), (652, 14524), (656, 14566), (670, 14647), (676, 14674), (678, 14692), (684, 14731), (692, 14770), (694, 14776), (697, 14785), (716, 14944), (722, 14986), (756, 15178), (757, 15181), (764, 15247), (767, 15259), (774, 15280), (776, 15283), (807, 15493), (814, 15532), (826, 15601), (829, 15655), (857, 15808),

Gene: Balloona_15 Start: 9534, Stop: 14471, Start Num: 46

Candidate Starts for Balloona_15:

(Start: 28 @9378 has 33 MA's), (46, 9534), (60, 9663), (64, 9693), (77, 9762), (80, 9774), (88, 9810), (94, 9861), (97, 9870), (105, 9906), (109, 9930), (118, 9990), (127, 10044), (131, 10083), (133, 10089), (136, 10104), (138, 10125), (164, 10296), (175, 10359), (182, 10404), (193, 10485), (211, 10644), (215, 10677), (219, 10689), (223, 10716), (230, 10773), (236, 10803), (239, 10815), (253, 10917), (254, 10920), (267, 11007), (274, 11055), (293, 11169), (304, 11262), (307, 11277), (309, 11298), (313, 11331), (315, 11361), (318, 11373), (324, 11412), (329, 11436), (330, 11439), (336, 11463), (341, 11487), (350, 11592), (363, 11670), (370, 11700), (371, 11703), (373, 11739), (379, 11781), (382, 11805), (384, 11820), (386, 11835), (390, 11850), (396, 11874), (408, 11913), (410, 11928), (411, 11934), (422, 11979), (424, 11985), (444, 12111), (450, 12141), (456, 12192), (461, 12228), (465, 12249), (466, 12252), (474, 12324), (481, 12369), (484, 12402), (486, 12423), (498, 12477), (509, 12552), (528, 12636), (543, 12723), (587, 12909), (607, 13041), (616, 13071), (638, 13209), (648, 13260), (653, 13290), (682, 13455), (686, 13485), (724, 13665), (730, 13716), (740, 13743), (747, 13764), (761, 13860), (773, 13908), (778, 13926), (792, 14049), (798, 14073), (800, 14088), (805, 14118), (809, 14145), (811, 14151), (816, 14184), (824, 14253), (826, 14256), (828, 14292), (842, 14382),

Gene: Barco_17 Start: 10274, Stop: 15796, Start Num: 8

Candidate Starts for Barco_17:

(Start: 8 @10274 has 37 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 1 MA's), (15, 10334), (16, 10337), (18, 10379), (38, 10490), (40, 10511), (47, 10631), (54, 10673), (65, 10739), (68, 10757), (72, 10778), (73, 10781), (76, 10799), (82, 10823), (95, 10907), (96, 10910), (105, 10949), (107, 10964), (109, 10973), (135, 11141), (138, 11168), (155, 11285), (184, 11456), (189, 11486), (211, 11690), (219, 11735), (223, 11762), (224, 11774), (240, 11864), (245, 11909), (250, 11936), (254, 11966), (267, 12053), (268, 12056), (272, 12095), (285, 12179), (293, 12215), (297, 12257), (302, 12302), (304, 12308), (306, 12320), (307, 12323), (313, 12377), (317, 12416), (320, 12437), (321, 12440), (324, 12458), (325, 12467), (330, 12485), (335, 12506), (337, 12512), (341, 12533), (345, 12560), (350, 12638), (389, 12827), (398, 12851), (404, 12863), (405, 12866), (418, 12881), (423, 12896), (424, 12899), (432, 12950), (445, 13031), (446, 13034), (452, 13067), (455, 13097), (457, 13121), (505, 13454), (514, 13502), (517, 13547), (518, 13550), (521, 13565), (529, 13610), (530, 13619), (532, 13628), (542, 13679), (556, 13751), (561, 13769), (570, 13790), (581, 13889), (582, 13892), (591, 13925), (599, 13991), (600, 14009), (603, 14024), (610, 14057), (619, 14108), (627, 14159), (633, 14207), (664, 14402), (665, 14405), (675, 14477), (676, 14480), (685, 14546), (686, 14549), (690, 14567), (700, 14627), (706, 14684), (707, 14702), (720, 14783), (721, 14786), (725, 14801), (758, 15014), (762, 15080), (776, 15134), (777, 15146), (778, 15152), (792, 15275), (798, 15299), (802, 15317), (805, 15341), (806, 15347), (809, 15368), (816, 15407), (830, 15548), (833, 15560), (843, 15611), (845, 15629), (864, 15779),

Gene: Bavilard_16 Start: 10158, Stop: 15257, Start Num: 28

Candidate Starts for Bavilard_16:

(Start: 28 @10158 has 33 MA's), (46, 10314), (60, 10443), (64, 10473), (72, 10515), (77, 10542), (88, 10590), (94, 10641), (97, 10650), (105, 10686), (109, 10710), (118, 10770), (127, 10824), (131, 10863), (133, 10869), (136, 10884), (138, 10905), (161, 11064), (164, 11076), (175, 11139), (182, 11184), (193, 11265), (211, 11424), (215, 11457), (219, 11469), (223, 11496), (230, 11553), (236, 11583), (239, 11595), (253, 11697), (254, 11700), (267, 11787), (273, 11832), (274, 11835), (293, 11949), (304, 12042), (307, 12057), (309, 12078), (313, 12111), (315, 12141), (318, 12153), (324, 12192), (329, 12216), (330, 12219), (336, 12243), (341, 12267), (350, 12372), (359, 12420), (363, 12450), (367, 12465), (370, 12480), (373, 12519), (379, 12561), (382, 12585), (384, 12600), (386, 12615), (390, 12630), (396, 12654), (408, 12693), (410, 12708), (411, 12714), (415, 12735), (422, 12759), (424, 12765), (444, 12891), (450, 12921), (454, 12957), (455, 12960), (461, 13008), (465, 13029), (466, 13032), (474, 13104), (481, 13149), (484, 13182), (486, 13203), (498, 13257), (509, 13332), (528, 13416), (543, 13503), (587, 13689), (607, 13821), (616, 13851), (638, 13989), (648, 14040), (653, 14070), (672, 14175), (682, 14226), (686, 14256), (724, 14436), (730, 14487), (740, 14529), (747, 14550), (761, 14646), (778, 14712), (792, 14835), (798, 14859), (800, 14874), (805, 14904), (809, 14931), (811, 14937), (816, 14970), (824, 15039), (826, 15042), (828, 15078), (842, 15168),

Gene: Begonia_18 Start: 10785, Stop: 16274, Start Num: 8

Candidate Starts for Begonia_18:

(Start: 8 @10785 has 37 MA's), (13, 10824), (Start: 14 @10836 has 1 MA's), (15, 10845), (16, 10848), (18, 10890), (38, 11001), (40, 11022), (47, 11142), (54, 11184), (65, 11250), (68, 11268), (71, 11283), (72, 11289), (73, 11292), (76, 11310), (82, 11334), (95, 11418), (105, 11460), (107, 11475), (109, 11484), (135, 11652), (138, 11679), (149, 11754), (155, 11796), (163, 11844), (184, 11967), (189, 11997), (211, 12201), (219, 12246), (223, 12273), (224, 12285), (240, 12375), (245, 12420), (250, 12447), (254, 12477), (267, 12564), (272, 12606), (293, 12726), (297, 12768), (302, 12813), (304, 12819), (306, 12831), (307, 12834), (313, 12888), (317, 12927), (320, 12948), (321, 12951), (324, 12969), (330, 12996), (337, 13023), (341, 13044), (345, 13071), (349, 13143), (385, 13344), (389, 13359), (398, 13383), (405, 13398), (423, 13428), (424, 13431), (432, 13482), (445, 13563), (446, 13566), (452, 13599), (455, 13629), (457, 13653), (468, 13719), (505, 13986), (514, 14034), (517,

14079), (518, 14082), (521, 14097), (529, 14142), (530, 14151), (532, 14160), (542, 14211), (556, 14283), (561, 14301), (570, 14322), (581, 14421), (582, 14424), (591, 14457), (599, 14523), (600, 14541), (603, 14556), (610, 14589), (619, 14640), (627, 14691), (664, 14934), (665, 14937), (676, 15012), (685, 15078), (686, 15081), (690, 15099), (700, 15159), (720, 15315), (721, 15318), (725, 15333), (758, 15552), (766, 15609), (770, 15624), (779, 15672), (784, 15717), (807, 15837), (808, 15846), (815, 15885), (825, 15957), (830, 16026), (833, 16038), (843, 16089), (845, 16107), (854, 16164), (864, 16257),

Gene: BigChungus_15 Start: 9403, Stop: 14511, Start Num: 28

Candidate Starts for BigChungus_15:

(Start: 28 @9403 has 33 MA's), (46, 9559), (60, 9688), (64, 9718), (77, 9787), (80, 9799), (88, 9835), (94, 9886), (97, 9895), (105, 9931), (109, 9955), (118, 10015), (127, 10069), (131, 10108), (133, 10114), (136, 10129), (138, 10150), (164, 10321), (175, 10384), (182, 10429), (193, 10510), (211, 10669), (215, 10702), (219, 10714), (223, 10741), (230, 10798), (236, 10828), (239, 10840), (253, 10942), (254, 10945), (267, 11032), (274, 11080), (293, 11194), (304, 11287), (307, 11302), (309, 11323), (313, 11356), (315, 11386), (318, 11398), (324, 11437), (329, 11461), (330, 11464), (336, 11488), (341, 11512), (350, 11617), (363, 11695), (370, 11725), (371, 11728), (373, 11764), (379, 11806), (382, 11830), (384, 11845), (386, 11860), (390, 11875), (396, 11899), (408, 11938), (410, 11953), (411, 11959), (422, 12004), (424, 12010), (444, 12136), (450, 12166), (454, 12202), (455, 12205), (461, 12253), (465, 12274), (466, 12277), (474, 12349), (481, 12394), (484, 12427), (486, 12448), (498, 12502), (509, 12577), (528, 12661), (543, 12748), (607, 13066), (616, 13096), (638, 13234), (648, 13285), (653, 13315), (682, 13480), (686, 13510), (724, 13690), (730, 13741), (740, 13783), (747, 13804), (761, 13900), (773, 13948), (778, 13966), (792, 14089), (798, 14113), (800, 14128), (805, 14158), (809, 14185), (811, 14191), (816, 14224), (824, 14293), (826, 14296), (828, 14332), (842, 14422),

Gene: BillDoor_18 Start: 9610, Stop: 14400, Start Num: 81

Candidate Starts for BillDoor_18:

(Start: 81 @9610 has 23 MA's), (Start: 86 @9637 has 2 MA's), (99, 9715), (108, 9766), (121, 9853), (124, 9868), (132, 9925), (136, 9943), (139, 9970), (140, 9973), (151, 10042), (158, 10099), (168, 10144), (171, 10162), (178, 10207), (187, 10243), (191, 10276), (199, 10324), (200, 10327), (205, 10375), (208, 10414), (210, 10429), (243, 10621), (246, 10639), (262, 10723), (286, 10870), (292, 10897), (302, 10990), (304, 10996), (307, 11011), (311, 11050), (312, 11062), (321, 11128), (337, 11200), (340, 11218), (341, 11221), (345, 11248), (357, 11383), (371, 11458), (373, 11494), (382, 11560), (390, 11605), (395, 11626), (396, 11629), (397, 11632), (408, 11668), (414, 11707), (416, 11713), (424, 11740), (445, 11869), (446, 11872), (448, 11890), (467, 12013), (469, 12028), (484, 12157), (486, 12178), (495, 12220), (501, 12247), (502, 12253), (524, 12385), (528, 12397), (543, 12484), (552, 12526), (562, 12562), (589, 12688), (595, 12727), (617, 12856), (629, 12913), (634, 12958), (651, 13051), (661, 13126), (673, 13189), (686, 13270), (691, 13291), (713, 13468), (715, 13474), (752, 13693), (759, 13771), (761, 13789), (763, 13795), (778, 13855), (780, 13873), (783, 13906), (792, 13978), (800, 14017), (805, 14047), (816, 14113), (821, 14161), (828, 14221), (842, 14311), (852, 14371),

Gene: Biskit_17 Start: 9616, Stop: 14415, Start Num: 81

Candidate Starts for Biskit_17:

(Start: 81 @9616 has 23 MA's), (Start: 86 @9643 has 2 MA's), (108, 9772), (124, 9874), (129, 9919), (132, 9931), (136, 9949), (139, 9976), (140, 9979), (142, 9994), (150, 10045), (151, 10048), (158, 10105), (159, 10108), (168, 10150), (171, 10168), (178, 10213), (187, 10249), (191, 10282), (196, 10315), (197, 10327), (205, 10381), (208, 10420), (210, 10435), (213, 10444), (217, 10471), (225, 10522), (233, 10564), (236, 10582), (239, 10591), (246, 10645), (258, 10708), (261, 10723), (269, 10786), (286, 10876), (292, 10903), (302, 10996), (304, 11002), (307, 11017), (311, 11056), (321, 11134), (327, 11167), (337, 11206), (340, 11224), (341, 11227), (345, 11254), (348, 11311), (350, 11332), (358, 11395), (363, 11431), (366, 11443), (371, 11464), (373, 11500), (379, 11542), (380,

11554), (382, 11566), (390, 11611), (391, 11614), (395, 11632), (396, 11635), (397, 11638), (414, 11713), (416, 11719), (424, 11746), (433, 11806), (436, 11821), (444, 11872), (445, 11875), (446, 11878), (448, 11896), (462, 11995), (465, 12010), (466, 12013), (484, 12163), (486, 12184), (495, 12226), (501, 12253), (502, 12259), (524, 12391), (528, 12403), (543, 12490), (552, 12532), (562, 12568), (579, 12643), (589, 12694), (595, 12733), (605, 12811), (617, 12862), (629, 12919), (651, 13057), (661, 13132), (686, 13276), (691, 13297), (713, 13474), (715, 13480), (761, 13804), (763, 13810), (778, 13870), (780, 13888), (783, 13921), (792, 13993), (800, 14032), (805, 14062), (816, 14128), (821, 14176), (828, 14236), (842, 14326), (852, 14386),

Gene: BlingBling_17 Start: 10274, Stop: 15796, Start Num: 8

Candidate Starts for BlingBling_17:

(Start: 8 @10274 has 37 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 1 MA's), (15, 10334), (16, 10337), (18, 10379), (38, 10490), (40, 10511), (47, 10631), (54, 10673), (65, 10739), (68, 10757), (72, 10778), (73, 10781), (76, 10799), (82, 10823), (95, 10907), (96, 10910), (105, 10949), (107, 10964), (109, 10973), (135, 11141), (138, 11168), (155, 11285), (184, 11456), (189, 11486), (211, 11690), (219, 11735), (223, 11762), (224, 11774), (240, 11864), (245, 11909), (250, 11936), (254, 11966), (267, 12053), (268, 12056), (272, 12095), (285, 12179), (293, 12215), (297, 12257), (302, 12302), (304, 12308), (306, 12320), (307, 12323), (313, 12377), (317, 12416), (320, 12437), (321, 12440), (324, 12458), (325, 12467), (330, 12485), (335, 12506), (337, 12512), (341, 12533), (345, 12560), (350, 12638), (389, 12827), (398, 12851), (404, 12863), (405, 12866), (418, 12881), (423, 12896), (424, 12899), (432, 12950), (445, 13031), (446, 13034), (452, 13067), (455, 13097), (457, 13121), (505, 13454), (514, 13502), (517, 13547), (518, 13550), (521, 13565), (529, 13610), (530, 13619), (532, 13628), (542, 13679), (556, 13751), (561, 13769), (570, 13790), (581, 13889), (582, 13892), (591, 13925), (599, 13991), (600, 14009), (603, 14024), (610, 14057), (619, 14108), (627, 14159), (633, 14207), (664, 14402), (665, 14405), (675, 14477), (676, 14480), (685, 14546), (686, 14549), (690, 14567), (700, 14627), (706, 14684), (707, 14702), (720, 14783), (721, 14786), (725, 14801), (758, 15014), (762, 15080), (776, 15134), (777, 15146), (778, 15152), (792, 15275), (798, 15299), (802, 15317), (805, 15341), (806, 15347), (809, 15368), (816, 15407), (830, 15548), (833, 15560), (843, 15611), (845, 15629), (864, 15779),

Gene: Blino_17 Start: 10173, Stop: 15764, Start Num: 8

Candidate Starts for Blino_17:

(Start: 8 @10173 has 37 MA's), (Start: 11 @10188 has 1 MA's), (Start: 14 @10224 has 1 MA's), (15, 10233), (16, 10236), (18, 10278), (38, 10389), (40, 10410), (47, 10530), (65, 10638), (68, 10656), (72, 10677), (73, 10680), (76, 10698), (97, 10812), (105, 10848), (107, 10863), (109, 10872), (135, 11040), (138, 11067), (155, 11184), (184, 11355), (189, 11385), (211, 11589), (219, 11634), (245, 11808), (250, 11835), (254, 11865), (267, 11952), (268, 11955), (272, 11994), (281, 12057), (293, 12114), (297, 12156), (302, 12201), (304, 12207), (306, 12219), (307, 12222), (313, 12276), (317, 12315), (320, 12336), (321, 12339), (324, 12357), (330, 12384), (335, 12405), (337, 12411), (341, 12432), (345, 12459), (347, 12507), (350, 12537), (374, 12693), (377, 12717), (379, 12726), (381, 12747), (399, 12828), (423, 12924), (424, 12927), (425, 12933), (431, 12975), (432, 12978), (435, 12999), (445, 13059), (446, 13062), (452, 13095), (455, 13125), (468, 13215), (505, 13482), (514, 13530), (517, 13575), (518, 13578), (521, 13593), (529, 13638), (530, 13647), (532, 13656), (542, 13707), (556, 13779), (561, 13797), (570, 13818), (581, 13917), (582, 13920), (591, 13953), (599, 14019), (600, 14037), (603, 14052), (610, 14085), (619, 14136), (627, 14187), (633, 14235), (664, 14430), (665, 14433), (675, 14505), (676, 14508), (685, 14574), (686, 14577), (690, 14595), (700, 14655), (707, 14730), (721, 14814), (725, 14829), (758, 15042), (766, 15099), (770, 15114), (779, 15162), (784, 15207), (807, 15327), (808, 15336), (815, 15375), (825, 15447), (830, 15516), (843, 15579), (845, 15597), (854, 15654), (864, 15747),

Gene: Blondies_17 Start: 9629, Stop: 14398, Start Num: 86

Candidate Starts for Blondies_17:

(Start: 81 @9602 has 23 MA's), (Start: 86 @9629 has 2 MA's), (88, 9635), (108, 9758), (124, 9860), (129, 9905), (132, 9917), (136, 9935), (139, 9962), (140, 9965), (142, 9980), (150, 10031), (151, 10034), (158, 10091), (159, 10094), (160, 10097), (168, 10136), (171, 10154), (178, 10199), (187, 10235), (191, 10268), (196, 10301), (197, 10313), (205, 10367), (208, 10406), (210, 10421), (213, 10430), (217, 10457), (225, 10508), (236, 10568), (239, 10577), (246, 10631), (258, 10694), (261, 10709), (269, 10772), (286, 10862), (292, 10889), (302, 10982), (304, 10988), (307, 11003), (311, 11042), (321, 11120), (327, 11153), (337, 11192), (340, 11210), (341, 11213), (345, 11240), (348, 11297), (350, 11318), (358, 11381), (366, 11429), (371, 11450), (373, 11486), (379, 11528), (382, 11552), (390, 11597), (391, 11600), (395, 11618), (396, 11621), (397, 11624), (414, 11699), (416, 11705), (424, 11732), (433, 11792), (444, 11858), (445, 11861), (446, 11864), (448, 11882), (462, 11981), (465, 11996), (466, 11999), (484, 12149), (486, 12170), (495, 12212), (501, 12239), (502, 12245), (524, 12377), (528, 12389), (543, 12476), (552, 12518), (562, 12554), (579, 12629), (589, 12680), (595, 12719), (617, 12848), (629, 12905), (651, 13043), (661, 13118), (686, 13262), (691, 13283), (713, 13457), (715, 13463), (761, 13787), (763, 13793), (778, 13853), (780, 13871), (783, 13904), (792, 13976), (800, 14015), (805, 14045), (816, 14111), (821, 14159), (828, 14219), (842, 14309), (852, 14369),

Gene: Blueberry_19 Start: 10619, Stop: 16108, Start Num: 8

Candidate Starts for Blueberry_19:

(Start: 8 @10619 has 37 MA's), (Start: 11 @10634 has 1 MA's), (Start: 12 @10640 has 1 MA's), (Start: 14 @10670 has 1 MA's), (15, 10679), (16, 10682), (18, 10724), (38, 10835), (40, 10856), (47, 10976), (54, 11018), (65, 11084), (68, 11102), (72, 11123), (73, 11126), (76, 11144), (82, 11168), (95, 11252), (105, 11294), (107, 11309), (109, 11318), (135, 11486), (138, 11513), (155, 11630), (184, 11801), (189, 11831), (211, 12035), (219, 12080), (223, 12107), (224, 12119), (226, 12131), (240, 12209), (245, 12254), (250, 12281), (254, 12311), (267, 12398), (268, 12401), (272, 12440), (281, 12503), (283, 12512), (293, 12560), (297, 12602), (302, 12647), (304, 12653), (307, 12668), (313, 12722), (317, 12761), (320, 12782), (321, 12785), (324, 12803), (330, 12830), (335, 12851), (337, 12857), (341, 12878), (344, 12896), (345, 12905), (385, 13178), (405, 13232), (423, 13262), (424, 13265), (432, 13316), (445, 13397), (446, 13400), (452, 13433), (455, 13463), (457, 13487), (468, 13553), (505, 13820), (514, 13868), (516, 13901), (517, 13913), (518, 13916), (529, 13976), (530, 13985), (532, 13994), (542, 14045), (556, 14117), (561, 14135), (570, 14156), (581, 14255), (582, 14258), (591, 14291), (599, 14357), (600, 14375), (603, 14390), (610, 14423), (619, 14474), (627, 14525), (637, 14594), (664, 14768), (665, 14771), (675, 14843), (676, 14846), (685, 14912), (686, 14915), (690, 14933), (700, 14993), (706, 15050), (707, 15068), (720, 15149), (721, 15152), (725, 15167), (748, 15338), (758, 15392), (770, 15464), (773, 15473), (779, 15509), (787, 15569), (789, 15587), (793, 15605), (804, 15650), (808, 15683), (825, 15794), (830, 15863), (843, 15926), (845, 15944), (864, 16094),

Gene: BotCity_18 Start: 9879, Stop: 15506, Start Num: 21

Candidate Starts for BotCity_18:

(Start: 21 @9879 has 11 MA's), (Start: 31 @9924 has 1 MA's), (33, 9945), (37, 9966), (41, 10011), (Start: 42 @10026 has 1 MA's), (48, 10110), (56, 10152), (57, 10164), (68, 10227), (71, 10242), (73, 10251), (76, 10269), (77, 10275), (88, 10323), (112, 10458), (134, 10608), (138, 10638), (189, 10962), (202, 11058), (211, 11166), (218, 11208), (219, 11211), (220, 11217), (223, 11238), (235, 11319), (245, 11385), (250, 11412), (252, 11424), (254, 11442), (255, 11454), (261, 11478), (264, 11490), (267, 11529), (268, 11532), (269, 11541), (272, 11571), (290, 11676), (293, 11691), (296, 11721), (297, 11733), (302, 11778), (304, 11784), (307, 11799), (310, 11829), (312, 11850), (313, 11853), (321, 11916), (325, 11943), (326, 11946), (327, 11949), (328, 11955), (334, 11979), (335, 11982), (337, 11988), (339, 11994), (341, 12009), (344, 12027), (346, 12072), (355, 12156), (356, 12162), (360, 12189), (373, 12282), (374, 12291), (382, 12348), (383, 12360), (391, 12396), (392, 12402), (404, 12444), (407, 12456), (414, 12495), (416, 12501), (417, 12504), (422, 12522), (423, 12525), (424, 12528), (429, 12552), (440, 12627), (447, 12666), (451, 12690), (455, 12723), (465, 12834), (468, 12867), (473, 12930), (478, 12966), (482, 12996), (493, 13074), (494, 13077), (496, 13086),

(500, 13110), (512, 13191), (514, 13197), (517, 13242), (518, 13245), (521, 13260), (529, 13305), (530, 13314), (532, 13323), (533, 13326), (554, 13431), (567, 13479), (568, 13482), (570, 13485), (581, 13584), (582, 13587), (588, 13599), (603, 13716), (610, 13749), (619, 13800), (625, 13830), (632, 13890), (644, 13971), (649, 13992), (654, 14025), (667, 14097), (668, 14106), (686, 14220), (693, 14250), (696, 14259), (701, 14298), (702, 14301), (705, 14331), (706, 14352), (734, 14550), (743, 14613), (746, 14619), (756, 14670), (781, 14856), (790, 14943), (795, 14970), (796, 14973), (810, 15048), (814, 15072), (820, 15111), (822, 15147), (827, 15168), (836, 15255), (841, 15297), (847, 15330), (849, 15342), (861, 15420), (865, 15486),

Gene: Bowser_17 Start: 10588, Stop: 15702, Start Num: 25

Candidate Starts for Bowser_17:

(Start: 25 @10588 has 13 MA's), (Start: 28 @10597 has 33 MA's), (57, 10870), (59, 10879), (63, 10909), (66, 10918), (76, 10975), (90, 11038), (101, 11110), (106, 11131), (109, 11149), (131, 11302), (138, 11344), (147, 11398), (183, 11626), (199, 11740), (204, 11779), (211, 11863), (215, 11896), (218, 11905), (220, 11914), (224, 11947), (226, 11959), (229, 11983), (238, 12028), (244, 12073), (250, 12109), (252, 12121), (254, 12139), (261, 12175), (276, 12298), (280, 12322), (283, 12340), (302, 12475), (304, 12481), (306, 12493), (307, 12496), (313, 12550), (317, 12589), (320, 12610), (321, 12613), (324, 12631), (325, 12640), (337, 12685), (341, 12706), (345, 12733), (350, 12811), (374, 12967), (406, 13024), (413, 13036), (414, 13039), (424, 13072), (427, 13090), (438, 13165), (440, 13171), (442, 13177), (444, 13198), (445, 13201), (446, 13204), (455, 13267), (459, 13303), (462, 13318), (467, 13342), (469, 13357), (470, 13360), (471, 13366), (475, 13411), (477, 13420), (489, 13519), (497, 13561), (511, 13645), (519, 13708), (525, 13726), (544, 13834), (548, 13843), (551, 13861), (552, 13864), (563, 13903), (564, 13906), (568, 13915), (591, 14050), (594, 14074), (615, 14194), (622, 14239), (629, 14272), (638, 14320), (640, 14332), (652, 14392), (670, 14512), (676, 14539), (678, 14557), (692, 14635), (694, 14641), (697, 14650), (708, 14770), (716, 14809), (722, 14851), (736, 14944), (756, 15037), (757, 15040), (760, 15097), (764, 15106), (767, 15118), (774, 15139), (788, 15244), (807, 15352), (814, 15391), (826, 15460), (829, 15514), (857, 15664),

Gene: Bubble_16 Start: 9629, Stop: 14767, Start Num: 28

Candidate Starts for Bubble_16:

(Start: 22 @9605 has 5 MA's), (Start: 28 @9629 has 33 MA's), (32, 9656), (46, 9785), (49, 9860), (77, 10013), (78, 10016), (94, 10112), (97, 10121), (103, 10151), (105, 10157), (107, 10172), (108, 10175), (112, 10196), (122, 10268), (125, 10289), (136, 10355), (138, 10376), (155, 10493), (182, 10655), (189, 10694), (198, 10769), (215, 10928), (219, 10940), (223, 10967), (228, 11012), (230, 11024), (245, 11114), (248, 11132), (252, 11153), (255, 11183), (261, 11207), (264, 11219), (267, 11258), (271, 11291), (288, 11393), (289, 11396), (293, 11420), (294, 11426), (304, 11513), (307, 11528), (311, 11567), (317, 11621), (333, 11705), (340, 11735), (341, 11738), (351, 11846), (352, 11849), (357, 11900), (371, 11975), (382, 12077), (390, 12122), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (428, 12278), (432, 12308), (440, 12356), (442, 12362), (446, 12389), (466, 12524), (481, 12641), (484, 12674), (486, 12695), (501, 12764), (502, 12770), (504, 12785), (526, 12905), (528, 12914), (543, 12998), (607, 13319), (646, 13538), (653, 13574), (691, 13787), (729, 13979), (740, 14027), (747, 14048), (761, 14156), (778, 14222), (780, 14240), (786, 14300), (792, 14345), (799, 14375), (800, 14384), (805, 14414), (816, 14480), (821, 14528), (828, 14588), (841, 14675), (852, 14738),

Gene: Budski_18 Start: 10015, Stop: 15501, Start Num: 42

Candidate Starts for Budski_18:

(Start: 21 @9868 has 11 MA's), (29, 9895), (Start: 31 @9913 has 1 MA's), (33, 9934), (37, 9955), (41, 10000), (Start: 42 @10015 has 1 MA's), (48, 10099), (56, 10141), (57, 10153), (68, 10216), (71, 10231), (73, 10240), (76, 10258), (77, 10264), (88, 10312), (112, 10447), (134, 10597), (138, 10627), (171, 10846), (184, 10921), (189, 10951), (211, 11155), (218, 11197), (219, 11200), (220, 11206), (223, 11227), (235, 11308), (245, 11374), (250, 11401), (252, 11413), (254, 11431), (255, 11443), (261, 11467), (264, 11479), (267, 11518), (268, 11521), (269, 11530), (272, 11560), (278, 11605),

(290, 11665), (293, 11680), (296, 11710), (297, 11722), (302, 11767), (304, 11773), (307, 11788), (310, 11818), (312, 11839), (313, 11842), (321, 11905), (325, 11932), (326, 11935), (327, 11938), (328, 11944), (334, 11968), (335, 11971), (337, 11977), (339, 11983), (341, 11998), (344, 12016), (349, 12097), (355, 12145), (356, 12151), (360, 12178), (382, 12337), (383, 12349), (391, 12385), (407, 12445), (414, 12484), (416, 12490), (417, 12493), (423, 12514), (424, 12517), (440, 12616), (447, 12655), (451, 12679), (455, 12712), (458, 12757), (464, 12811), (472, 12898), (473, 12919), (478, 12955), (482, 12985), (493, 13063), (494, 13066), (496, 13075), (500, 13099), (512, 13180), (514, 13186), (517, 13231), (518, 13234), (521, 13249), (529, 13294), (530, 13303), (532, 13312), (533, 13315), (554, 13420), (567, 13468), (570, 13474), (581, 13573), (582, 13576), (588, 13588), (603, 13705), (610, 13738), (619, 13789), (620, 13801), (625, 13819), (632, 13879), (644, 13960), (649, 13981), (654, 14014), (666, 14077), (668, 14095), (686, 14209), (693, 14239), (696, 14248), (701, 14287), (702, 14290), (705, 14320), (706, 14341), (726, 14494), (734, 14545), (743, 14608), (746, 14614), (756, 14665), (781, 14851), (790, 14938), (795, 14965), (796, 14968), (810, 15043), (814, 15067), (820, 15106), (822, 15142), (827, 15163), (836, 15250), (841, 15292), (847, 15325), (849, 15337), (861, 15415), (865, 15481),

Gene: Bunker_17 Start: 10580, Stop: 15829, Start Num: 25

Candidate Starts for Bunker_17:

(Start: 25 @10580 has 13 MA's), (Start: 28 @10589 has 33 MA's), (45, 10736), (57, 10862), (59, 10871), (70, 10934), (71, 10940), (72, 10946), (76, 10967), (82, 10991), (88, 11021), (90, 11030), (106, 11123), (108, 11135), (109, 11141), (131, 11294), (138, 11336), (147, 11390), (152, 11423), (184, 11624), (211, 11855), (215, 11888), (218, 11897), (220, 11906), (224, 11939), (226, 11951), (229, 11975), (238, 12020), (240, 12029), (250, 12101), (252, 12113), (254, 12131), (261, 12167), (276, 12290), (280, 12314), (299, 12431), (302, 12467), (304, 12473), (307, 12488), (313, 12542), (317, 12581), (320, 12602), (321, 12605), (324, 12623), (325, 12632), (337, 12677), (340, 12695), (341, 12698), (345, 12725), (350, 12803), (375, 12968), (377, 12983), (379, 12992), (393, 13076), (422, 13187), (424, 13193), (425, 13199), (432, 13244), (434, 13256), (440, 13292), (442, 13298), (444, 13319), (446, 13325), (447, 13331), (453, 13376), (455, 13388), (459, 13424), (467, 13463), (469, 13478), (470, 13481), (471, 13487), (475, 13532), (497, 13682), (510, 13760), (511, 13766), (519, 13832), (525, 13850), (544, 13958), (546, 13961), (551, 13985), (552, 13988), (563, 14027), (564, 14030), (568, 14039), (574, 14087), (591, 14174), (594, 14198), (602, 14258), (615, 14318), (629, 14396), (638, 14444), (640, 14456), (652, 14516), (670, 14633), (676, 14660), (692, 14756), (694, 14762), (697, 14771), (716, 14930), (722, 14972), (764, 15230), (767, 15242), (774, 15263), (776, 15266), (778, 15284), (807, 15476), (814, 15515), (829, 15638), (857, 15788), (859, 15812),

Gene: Burnsey_16 Start: 9630, Stop: 14768, Start Num: 28

Candidate Starts for Burnsey_16:

(Start: 22 @9606 has 5 MA's), (Start: 28 @9630 has 33 MA's), (32, 9657), (46, 9786), (49, 9861), (77, 10014), (78, 10017), (94, 10113), (97, 10122), (103, 10152), (105, 10158), (107, 10173), (108, 10176), (112, 10197), (125, 10290), (136, 10356), (138, 10377), (155, 10494), (182, 10656), (189, 10695), (198, 10770), (215, 10929), (219, 10941), (223, 10968), (228, 11013), (230, 11025), (245, 11115), (248, 11133), (252, 11154), (255, 11184), (261, 11208), (264, 11220), (267, 11259), (271, 11292), (288, 11394), (289, 11397), (293, 11421), (304, 11514), (307, 11529), (311, 11568), (324, 11664), (332, 11703), (333, 11706), (341, 11739), (351, 11847), (352, 11850), (357, 11901), (371, 11976), (382, 12078), (390, 12123), (395, 12144), (396, 12147), (397, 12150), (414, 12225), (424, 12258), (428, 12279), (432, 12309), (440, 12357), (442, 12363), (446, 12390), (466, 12525), (481, 12642), (484, 12675), (486, 12696), (487, 12699), (501, 12765), (502, 12771), (504, 12786), (526, 12906), (528, 12915), (543, 12999), (607, 13320), (646, 13539), (653, 13575), (691, 13788), (729, 13980), (740, 14028), (747, 14049), (761, 14157), (778, 14223), (780, 14241), (786, 14301), (792, 14346), (799, 14376), (800, 14385), (805, 14415), (816, 14481), (821, 14529), (828, 14589), (841, 14676), (852, 14739),

Gene: Button_17 Start: 9644, Stop: 13834, Start Num: 86

Candidate Starts for Button_17:

(Start: 81 @9617 has 23 MA's), (Start: 86 @9644 has 2 MA's), (126, 9890), (136, 9953), (143, 10010), (148, 10037), (153, 10079), (162, 10142), (166, 10157), (169, 10175), (171, 10193), (173, 10205), (177, 10238), (185, 10280), (188, 10295), (203, 10400), (205, 10424), (207, 10463), (214, 10487), (217, 10514), (222, 10544), (225, 10565), (235, 10619), (239, 10634), (259, 10763), (277, 10895), (279, 10904), (286, 10940), (307, 11081), (309, 11102), (313, 11135), (314, 11153), (316, 11171), (324, 11216), (337, 11270), (341, 11291), (352, 11354), (368, 11402), (370, 11414), (373, 11453), (402, 11507), (414, 11534), (416, 11540), (423, 11564), (424, 11567), (433, 11627), (438, 11660), (446, 11699), (448, 11717), (449, 11720), (455, 11762), (456, 11774), (460, 11807), (465, 11831), (469, 11855), (470, 11858), (483, 11972), (484, 11984), (488, 12014), (490, 12023), (492, 12029), (524, 12182), (535, 12242), (536, 12251), (538, 12257), (547, 12293), (586, 12425), (607, 12563), (613, 12587), (647, 12785), (648, 12788), (677, 12950), (681, 12974), (682, 12977), (717, 13079), (753, 13184), (766, 13256), (773, 13280), (777, 13292), (780, 13316), (782, 13328), (791, 13412), (792, 13418), (802, 13460), (805, 13481), (811, 13514), (816, 13547), (819, 13568), (821, 13595), (828, 13655), (830, 13682), (832, 13691), (834, 13703), (852, 13805),

Gene: Buttrmlkdreams_16 Start: 9601, Stop: 14397, Start Num: 81

Candidate Starts for Buttrmlkdreams_16:

(Start: 81 @9601 has 23 MA's), (Start: 86 @9628 has 2 MA's), (88, 9634), (108, 9757), (124, 9859), (129, 9904), (132, 9916), (136, 9934), (139, 9961), (140, 9964), (142, 9979), (150, 10030), (151, 10033), (158, 10090), (159, 10093), (168, 10135), (171, 10153), (178, 10198), (187, 10234), (191, 10267), (196, 10300), (197, 10312), (205, 10366), (208, 10405), (210, 10420), (213, 10429), (217, 10456), (225, 10507), (236, 10567), (239, 10576), (246, 10630), (258, 10693), (261, 10708), (286, 10861), (292, 10888), (300, 10969), (302, 10981), (304, 10987), (307, 11002), (310, 11032), (311, 11041), (321, 11119), (327, 11152), (337, 11191), (340, 11209), (341, 11212), (345, 11239), (348, 11296), (350, 11317), (358, 11380), (366, 11428), (371, 11449), (373, 11485), (379, 11527), (382, 11551), (390, 11596), (391, 11599), (395, 11617), (396, 11620), (397, 11623), (414, 11698), (416, 11704), (424, 11731), (433, 11791), (444, 11857), (445, 11860), (446, 11863), (448, 11881), (462, 11980), (465, 11995), (466, 11998), (484, 12148), (486, 12169), (495, 12211), (501, 12238), (502, 12244), (528, 12388), (543, 12475), (552, 12517), (562, 12553), (579, 12628), (589, 12679), (595, 12718), (617, 12847), (629, 12904), (651, 13042), (661, 13117), (686, 13261), (691, 13282), (713, 13456), (715, 13462), (761, 13786), (763, 13792), (778, 13852), (783, 13903), (792, 13975), (800, 14014), (805, 14044), (816, 14110), (821, 14158), (828, 14218), (842, 14308), (852, 14368),

Gene: CanesSauce_16 Start: 9646, Stop: 14433, Start Num: 81

Candidate Starts for CanesSauce_16:

(Start: 81 @9646 has 23 MA's), (Start: 86 @9673 has 2 MA's), (99, 9751), (108, 9802), (121, 9889), (124, 9904), (132, 9961), (136, 9979), (139, 10006), (140, 10009), (151, 10078), (158, 10135), (168, 10180), (171, 10198), (178, 10243), (187, 10279), (191, 10312), (199, 10360), (200, 10363), (205, 10411), (208, 10450), (210, 10465), (243, 10657), (246, 10675), (262, 10759), (286, 10906), (292, 10933), (302, 11026), (304, 11032), (307, 11047), (311, 11086), (312, 11098), (321, 11164), (337, 11236), (340, 11254), (341, 11257), (345, 11284), (373, 11530), (382, 11596), (390, 11641), (395, 11662), (396, 11665), (397, 11668), (408, 11704), (414, 11743), (416, 11749), (424, 11776), (445, 11905), (446, 11908), (448, 11926), (467, 12049), (469, 12064), (484, 12193), (486, 12214), (495, 12256), (501, 12283), (502, 12289), (524, 12421), (528, 12433), (543, 12520), (552, 12562), (562, 12598), (589, 12724), (595, 12763), (617, 12892), (629, 12949), (634, 12991), (651, 13084), (661, 13159), (673, 13222), (686, 13303), (691, 13324), (713, 13501), (715, 13507), (752, 13726), (759, 13804), (761, 13822), (763, 13828), (778, 13888), (780, 13906), (783, 13939), (792, 14011), (800, 14050), (805, 14080), (816, 14146), (821, 14194), (828, 14254), (842, 14344), (852, 14404),

Gene: CaptainKirk2_17 Start: 10277, Stop: 15820, Start Num: 8

Candidate Starts for CaptainKirk2_17:

(Start: 8 @10277 has 37 MA's), (Start: 11 @10292 has 1 MA's), (Start: 12 @10298 has 1 MA's), (Start: 14 @10328 has 1 MA's), (15, 10337), (16, 10340), (18, 10382), (38, 10493), (40, 10514), (65, 10742), (68, 10760), (71, 10775), (72, 10781), (73, 10784), (76, 10802), (82, 10826), (95, 10910), (96, 10913), (105, 10952), (107, 10967), (109, 10976), (135, 11144), (138, 11171), (189, 11489), (211, 11693), (219, 11738), (220, 11744), (223, 11765), (224, 11777), (240, 11867), (245, 11912), (250, 11939), (254, 11969), (267, 12056), (268, 12059), (272, 12098), (293, 12218), (297, 12260), (302, 12305), (304, 12311), (307, 12326), (313, 12380), (317, 12419), (320, 12440), (321, 12443), (324, 12461), (325, 12470), (335, 12509), (337, 12515), (341, 12536), (345, 12563), (370, 12770), (385, 12836), (398, 12875), (405, 12890), (423, 12920), (424, 12923), (432, 12974), (445, 13055), (446, 13058), (452, 13091), (455, 13121), (457, 13145), (505, 13478), (514, 13526), (517, 13571), (518, 13574), (521, 13589), (529, 13634), (530, 13643), (532, 13652), (542, 13703), (556, 13775), (561, 13793), (570, 13814), (581, 13913), (582, 13916), (591, 13949), (599, 14015), (600, 14033), (603, 14048), (610, 14081), (619, 14132), (627, 14183), (633, 14231), (664, 14426), (665, 14429), (675, 14501), (676, 14504), (685, 14570), (686, 14573), (690, 14591), (700, 14651), (706, 14708), (707, 14726), (720, 14807), (721, 14810), (725, 14825), (748, 14984), (758, 15038), (762, 15104), (776, 15158), (777, 15170), (778, 15176), (792, 15299), (798, 15323), (802, 15341), (805, 15365), (806, 15371), (809, 15392), (816, 15431), (830, 15572), (833, 15584), (843, 15635), (845, 15653), (864, 15803),

Gene: CaramellLatte_16 Start: 9646, Stop: 14433, Start Num: 81

Candidate Starts for CaramellLatte_16:

(Start: 81 @9646 has 23 MA's), (Start: 86 @9673 has 2 MA's), (99, 9751), (108, 9802), (121, 9889), (124, 9904), (132, 9961), (136, 9979), (139, 10006), (140, 10009), (151, 10078), (158, 10135), (168, 10180), (171, 10198), (178, 10243), (187, 10279), (191, 10312), (199, 10360), (200, 10363), (205, 10411), (208, 10450), (210, 10465), (243, 10657), (246, 10675), (262, 10759), (286, 10906), (292, 10933), (302, 11026), (304, 11032), (307, 11047), (311, 11086), (312, 11098), (321, 11164), (337, 11236), (340, 11254), (341, 11257), (345, 11284), (373, 11530), (382, 11596), (390, 11641), (395, 11662), (396, 11665), (397, 11668), (408, 11704), (414, 11743), (416, 11749), (424, 11776), (445, 11905), (446, 11908), (448, 11926), (467, 12049), (469, 12064), (484, 12193), (486, 12214), (495, 12256), (501, 12283), (502, 12289), (524, 12421), (528, 12433), (543, 12520), (552, 12562), (562, 12598), (589, 12724), (595, 12763), (617, 12892), (629, 12949), (634, 12991), (651, 13084), (661, 13159), (673, 13222), (686, 13303), (691, 13324), (713, 13501), (715, 13507), (752, 13726), (759, 13804), (761, 13822), (763, 13828), (778, 13888), (780, 13906), (783, 13939), (792, 14011), (800, 14050), (805, 14080), (816, 14146), (821, 14194), (828, 14254), (842, 14344), (852, 14404),

Gene: CarolAnn_17 Start: 10172, Stop: 15763, Start Num: 8

Candidate Starts for CarolAnn_17:

(Start: 8 @10172 has 37 MA's), (Start: 11 @10187 has 1 MA's), (Start: 14 @10223 has 1 MA's), (15, 10232), (16, 10235), (18, 10277), (38, 10388), (40, 10409), (47, 10529), (65, 10637), (68, 10655), (72, 10676), (73, 10679), (76, 10697), (97, 10811), (105, 10847), (107, 10862), (109, 10871), (135, 11039), (138, 11066), (155, 11183), (184, 11354), (189, 11384), (211, 11588), (219, 11633), (245, 11807), (250, 11834), (254, 11864), (258, 11885), (267, 11951), (268, 11954), (272, 11993), (281, 12056), (293, 12113), (297, 12155), (302, 12200), (304, 12206), (306, 12218), (307, 12221), (313, 12275), (317, 12314), (320, 12335), (321, 12338), (324, 12356), (330, 12383), (335, 12404), (337, 12410), (341, 12431), (345, 12458), (347, 12506), (350, 12536), (374, 12692), (377, 12716), (379, 12725), (381, 12746), (399, 12827), (423, 12923), (424, 12926), (425, 12932), (431, 12974), (432, 12977), (435, 12998), (445, 13058), (446, 13061), (452, 13094), (455, 13124), (468, 13214), (505, 13481), (514, 13529), (517, 13574), (518, 13577), (521, 13592), (529, 13637), (530, 13646), (532, 13655), (542, 13706), (556, 13778), (561, 13796), (570, 13817), (581, 13916), (582, 13919), (591, 13952), (599, 14018), (600, 14036), (603, 14051), (610, 14084), (619, 14135), (627, 14186), (633, 14234), (664, 14429), (665, 14432), (675, 14504), (676, 14507), (685, 14573), (686, 14576), (690, 14594), (700, 14654), (707, 14729), (721, 14813), (725, 14828), (758, 15041), (766, 15098), (770, 15113), (779, 15161), (784, 15206), (807, 15326), (808, 15335), (815, 15374), (825, 15446), (830, 15515), (843, 15578), (845, 15596), (854, 15653), (864, 15746),

Gene: Carsonalex_17 Start: 9687, Stop: 14825, Start Num: 28

Candidate Starts for Carsonalex_17:

(Start: 22 @9663 has 5 MA's), (Start: 28 @9687 has 33 MA's), (32, 9714), (46, 9843), (49, 9918), (77, 10071), (78, 10074), (94, 10170), (97, 10179), (103, 10209), (105, 10215), (107, 10230), (108, 10233), (112, 10254), (122, 10326), (125, 10347), (136, 10413), (138, 10434), (155, 10551), (182, 10713), (189, 10752), (198, 10827), (223, 11025), (241, 11133), (252, 11211), (254, 11229), (256, 11247), (267, 11316), (269, 11328), (273, 11361), (292, 11472), (293, 11478), (304, 11571), (307, 11586), (324, 11721), (331, 11754), (341, 11796), (351, 11904), (357, 11958), (370, 12030), (371, 12033), (382, 12135), (390, 12180), (392, 12189), (395, 12201), (396, 12204), (397, 12207), (414, 12282), (415, 12285), (416, 12288), (419, 12300), (422, 12309), (424, 12315), (430, 12357), (432, 12366), (440, 12414), (446, 12447), (466, 12582), (481, 12699), (484, 12732), (486, 12753), (501, 12822), (502, 12828), (526, 12963), (528, 12972), (543, 13056), (607, 13377), (646, 13596), (653, 13632), (691, 13845), (729, 14037), (740, 14085), (747, 14106), (761, 14214), (778, 14280), (780, 14298), (786, 14358), (792, 14403), (799, 14433), (800, 14442), (805, 14472), (816, 14538), (821, 14586), (828, 14646), (841, 14733), (852, 14796),

Gene: CheeseSpider_20 Start: 10667, Stop: 16162, Start Num: 14

Candidate Starts for CheeseSpider_20:

(Start: 8 @10616 has 37 MA's), (10, 10628), (Start: 11 @10631 has 1 MA's), (Start: 14 @10667 has 1 MA's), (15, 10676), (16, 10679), (18, 10721), (38, 10832), (40, 10853), (65, 11081), (68, 11099), (72, 11120), (73, 11123), (76, 11141), (82, 11165), (95, 11249), (97, 11255), (105, 11291), (107, 11306), (109, 11315), (135, 11483), (138, 11510), (155, 11627), (184, 11798), (189, 11828), (211, 12032), (219, 12077), (223, 12104), (224, 12116), (240, 12206), (245, 12251), (250, 12278), (254, 12308), (267, 12395), (272, 12437), (274, 12443), (293, 12557), (297, 12599), (302, 12644), (304, 12650), (307, 12665), (313, 12719), (317, 12758), (320, 12779), (321, 12782), (324, 12800), (330, 12827), (337, 12854), (341, 12875), (345, 12902), (385, 13175), (398, 13214), (405, 13229), (423, 13259), (424, 13262), (432, 13313), (446, 13397), (452, 13430), (455, 13460), (457, 13484), (468, 13550), (493, 13739), (505, 13817), (514, 13865), (516, 13898), (517, 13910), (518, 13913), (521, 13928), (522, 13937), (529, 13973), (530, 13982), (532, 13991), (542, 14042), (556, 14114), (561, 14132), (570, 14153), (581, 14252), (582, 14255), (591, 14288), (599, 14354), (600, 14372), (603, 14387), (610, 14420), (619, 14471), (627, 14522), (664, 14765), (665, 14768), (669, 14801), (675, 14840), (676, 14843), (685, 14909), (686, 14912), (700, 14990), (706, 15047), (707, 15065), (720, 15146), (725, 15164), (758, 15377), (762, 15443), (777, 15509), (778, 15515), (792, 15638), (798, 15662), (802, 15680), (805, 15704), (806, 15710), (809, 15731), (816, 15770), (830, 15911), (843, 15974), (854, 16052),

Gene: CheeseTouch_18 Start: 9868, Stop: 15501, Start Num: 21

Candidate Starts for CheeseTouch_18:

(Start: 21 @9868 has 11 MA's), (Start: 31 @9913 has 1 MA's), (33, 9934), (37, 9955), (41, 10000), (Start: 42 @10015 has 1 MA's), (48, 10099), (56, 10141), (57, 10153), (68, 10216), (71, 10231), (73, 10240), (76, 10258), (77, 10264), (88, 10312), (112, 10447), (134, 10597), (138, 10627), (184, 10921), (189, 10951), (208, 11134), (211, 11155), (219, 11200), (220, 11206), (223, 11227), (235, 11308), (245, 11374), (250, 11401), (252, 11413), (254, 11431), (255, 11443), (261, 11467), (264, 11479), (267, 11518), (269, 11530), (272, 11560), (278, 11605), (290, 11665), (293, 11680), (296, 11710), (297, 11722), (302, 11767), (304, 11773), (306, 11785), (307, 11788), (309, 11809), (312, 11839), (313, 11842), (321, 11905), (325, 11932), (326, 11935), (327, 11938), (328, 11944), (334, 11968), (335, 11971), (337, 11977), (339, 11983), (341, 11998), (344, 12016), (349, 12097), (355, 12145), (356, 12151), (360, 12178), (382, 12337), (383, 12349), (391, 12385), (392, 12391), (404, 12433), (407, 12445), (414, 12484), (416, 12490), (417, 12493), (422, 12511), (423, 12514), (424, 12517), (429, 12541), (440, 12616), (447, 12655), (451, 12679), (455, 12712), (465, 12823), (468, 12856), (473, 12919), (478, 12955), (482, 12985), (493, 13063), (494, 13066), (496, 13075), (500, 13099), (514, 13186), (517, 13231), (518, 13234), (521, 13249), (529, 13294), (530, 13303), (532, 13312),

(533, 13315), (554, 13420), (567, 13468), (570, 13474), (581, 13573), (582, 13576), (588, 13588), (603, 13705), (610, 13738), (619, 13789), (625, 13819), (632, 13879), (644, 13960), (649, 13981), (650, 13984), (654, 14014), (666, 14077), (667, 14086), (668, 14095), (686, 14209), (693, 14239), (701, 14287), (702, 14290), (705, 14320), (706, 14341), (734, 14539), (743, 14602), (746, 14608), (756, 14659), (781, 14851), (790, 14938), (795, 14965), (796, 14968), (810, 15043), (814, 15067), (820, 15106), (822, 15142), (827, 15163), (836, 15250), (841, 15292), (847, 15325), (849, 15337), (861, 15415), (865, 15481),

Gene: CherryonLim_17 Start: 10133, Stop: 15220, Start Num: 28

Candidate Starts for CherryonLim_17:

(Start: 28 @10133 has 33 MA's), (46, 10289), (60, 10418), (72, 10490), (77, 10517), (88, 10565), (90, 10574), (94, 10616), (96, 10622), (97, 10625), (105, 10661), (109, 10685), (114, 10712), (127, 10799), (131, 10838), (133, 10844), (136, 10859), (138, 10880), (147, 10934), (164, 11051), (175, 11114), (182, 11159), (193, 11240), (211, 11402), (214, 11411), (215, 11435), (219, 11447), (223, 11474), (224, 11486), (230, 11531), (236, 11561), (239, 11573), (253, 11675), (254, 11678), (267, 11765), (270, 11792), (284, 11882), (289, 11903), (293, 11927), (299, 11978), (304, 12020), (307, 12035), (308, 12044), (309, 12056), (313, 12089), (318, 12131), (328, 12191), (329, 12194), (330, 12197), (331, 12203), (336, 12221), (341, 12245), (346, 12308), (348, 12329), (350, 12350), (359, 12398), (363, 12428), (369, 12455), (370, 12458), (379, 12539), (380, 12551), (382, 12563), (384, 12578), (390, 12608), (395, 12629), (396, 12632), (411, 12692), (415, 12713), (422, 12737), (424, 12743), (437, 12827), (444, 12869), (450, 12899), (455, 12938), (461, 12986), (465, 13007), (466, 13010), (467, 13016), (474, 13082), (481, 13127), (484, 13160), (486, 13181), (498, 13235), (526, 13385), (528, 13394), (543, 13481), (585, 13658), (607, 13799), (616, 13829), (638, 13967), (653, 14048), (682, 14201), (686, 14231), (727, 14441), (729, 14450), (730, 14456), (740, 14492), (761, 14609), (763, 14615), (773, 14657), (778, 14675), (792, 14798), (798, 14822), (800, 14837), (805, 14867), (809, 14894), (811, 14900), (816, 14933), (824, 15002), (826, 15005), (828, 15041), (837, 15113), (842, 15131),

Gene: ChickenTender_18 Start: 9679, Stop: 14817, Start Num: 28

Candidate Starts for ChickenTender_18:

(Start: 28 @9679 has 33 MA's), (32, 9706), (46, 9835), (49, 9910), (77, 10063), (78, 10066), (94, 10162), (97, 10171), (103, 10201), (105, 10207), (107, 10222), (108, 10225), (112, 10246), (122, 10318), (125, 10339), (136, 10405), (138, 10426), (155, 10543), (182, 10705), (189, 10744), (215, 10978), (219, 10990), (223, 11017), (245, 11164), (252, 11203), (261, 11257), (264, 11269), (267, 11308), (271, 11341), (288, 11443), (289, 11446), (293, 11470), (299, 11521), (304, 11563), (307, 11578), (311, 11617), (324, 11713), (333, 11755), (341, 11788), (351, 11896), (357, 11950), (371, 12025), (382, 12127), (390, 12172), (396, 12196), (397, 12199), (411, 12256), (414, 12274), (424, 12307), (428, 12328), (432, 12358), (440, 12406), (442, 12412), (446, 12439), (466, 12574), (481, 12691), (484, 12724), (486, 12745), (501, 12814), (502, 12820), (528, 12964), (543, 13048), (607, 13369), (646, 13588), (650, 13603), (653, 13624), (688, 13825), (691, 13837), (740, 14077), (747, 14098), (761, 14206), (778, 14272), (780, 14290), (792, 14395), (798, 14419), (799, 14425), (800, 14434), (805, 14464), (816, 14530), (821, 14578), (828, 14638), (841, 14725), (852, 14788),

Gene: ChocoMunchkin_16 Start: 9646, Stop: 14433, Start Num: 81

Candidate Starts for ChocoMunchkin_16:

(Start: 81 @9646 has 23 MA's), (Start: 86 @9673 has 2 MA's), (99, 9751), (108, 9802), (121, 9889), (124, 9904), (132, 9961), (136, 9979), (139, 10006), (140, 10009), (151, 10078), (158, 10135), (168, 10180), (171, 10198), (178, 10243), (187, 10279), (191, 10312), (199, 10360), (200, 10363), (205, 10411), (208, 10450), (210, 10465), (243, 10657), (246, 10675), (262, 10759), (286, 10906), (292, 10933), (302, 11026), (304, 11032), (307, 11047), (311, 11086), (312, 11098), (321, 11164), (337, 11236), (340, 11254), (341, 11257), (345, 11284), (373, 11530), (382, 11596), (390, 11641), (395, 11662), (396, 11665), (397, 11668), (408, 11704), (414, 11743), (416, 11749), (424, 11776), (445, 11905), (446, 11908), (448, 11926), (467, 12049), (469, 12064), (484, 12193), (486, 12214), (495,

12256), (501, 12283), (502, 12289), (524, 12421), (528, 12433), (543, 12520), (552, 12562), (562, 12598), (589, 12724), (595, 12763), (617, 12892), (629, 12949), (634, 12991), (651, 13084), (661, 13159), (673, 13222), (686, 13303), (691, 13324), (713, 13501), (715, 13507), (752, 13726), (759, 13804), (761, 13822), (763, 13828), (778, 13888), (780, 13906), (783, 13939), (792, 14011), (800, 14050), (805, 14080), (816, 14146), (821, 14194), (828, 14254), (842, 14344), (852, 14404),

Gene: Cleo_16 Start: 9909, Stop: 15023, Start Num: 28

Candidate Starts for Cleo_16:

(23, 9888), (Start: 28 @9909 has 33 MA's), (32, 9936), (46, 10065), (51, 10149), (54, 10161), (62, 10212), (69, 10245), (74, 10269), (79, 10302), (94, 10392), (107, 10452), (108, 10455), (118, 10521), (123, 10557), (125, 10569), (134, 10626), (136, 10635), (138, 10656), (190, 10995), (199, 11052), (208, 11154), (219, 11220), (220, 11226), (223, 11247), (245, 11394), (254, 11451), (256, 11469), (260, 11484), (264, 11499), (267, 11538), (281, 11643), (286, 11667), (288, 11673), (301, 11784), (304, 11793), (307, 11808), (311, 11847), (324, 11943), (330, 11970), (331, 11976), (332, 11982), (340, 12015), (341, 12018), (351, 12126), (355, 12165), (360, 12198), (364, 12228), (365, 12231), (370, 12252), (371, 12255), (382, 12357), (390, 12402), (396, 12426), (397, 12429), (422, 12531), (423, 12534), (424, 12537), (432, 12588), (440, 12636), (442, 12642), (448, 12687), (466, 12804), (467, 12810), (473, 12867), (481, 12921), (483, 12942), (484, 12954), (486, 12975), (487, 12978), (501, 13044), (502, 13050), (526, 13185), (537, 13251), (543, 13278), (562, 13356), (607, 13596), (616, 13626), (642, 13800), (650, 13830), (653, 13851), (672, 13959), (679, 13995), (686, 14043), (740, 14280), (759, 14391), (761, 14409), (778, 14475), (783, 14526), (792, 14598), (799, 14628), (800, 14637), (801, 14640), (805, 14667), (809, 14694), (816, 14733), (821, 14781), (828, 14841), (831, 14877), (841, 14931),

Gene: CocoaPuff_15 Start: 9378, Stop: 14465, Start Num: 28

Candidate Starts for CocoaPuff_15:

(Start: 28 @9378 has 33 MA's), (46, 9534), (60, 9663), (64, 9693), (77, 9762), (80, 9774), (88, 9810), (90, 9819), (94, 9861), (97, 9870), (105, 9906), (109, 9930), (118, 9990), (127, 10044), (131, 10083), (133, 10089), (136, 10104), (138, 10125), (161, 10284), (164, 10296), (175, 10359), (182, 10404), (193, 10485), (211, 10644), (215, 10677), (219, 10689), (223, 10716), (230, 10773), (236, 10803), (239, 10815), (253, 10917), (254, 10920), (267, 11007), (274, 11055), (293, 11169), (304, 11262), (307, 11277), (309, 11298), (313, 11331), (315, 11361), (318, 11373), (324, 11412), (329, 11436), (330, 11439), (336, 11463), (341, 11487), (350, 11592), (359, 11640), (363, 11670), (367, 11685), (370, 11700), (373, 11739), (379, 11781), (382, 11805), (384, 11820), (386, 11835), (390, 11850), (396, 11874), (408, 11913), (410, 11928), (411, 11934), (415, 11955), (422, 11979), (424, 11985), (444, 12111), (450, 12141), (455, 12180), (461, 12228), (465, 12249), (466, 12252), (474, 12324), (481, 12369), (484, 12402), (486, 12423), (498, 12477), (509, 12552), (528, 12636), (543, 12723), (607, 13041), (616, 13071), (638, 13209), (648, 13260), (653, 13290), (682, 13449), (686, 13479), (724, 13659), (730, 13710), (740, 13737), (747, 13758), (761, 13854), (773, 13902), (778, 13920), (792, 14043), (798, 14067), (800, 14082), (805, 14112), (809, 14139), (811, 14145), (816, 14178), (824, 14247), (826, 14250), (828, 14286), (842, 14376),

Gene: Cozz_16 Start: 9630, Stop: 14768, Start Num: 28

Candidate Starts for Cozz_16:

(Start: 22 @9606 has 5 MA's), (Start: 28 @9630 has 33 MA's), (32, 9657), (46, 9786), (49, 9861), (77, 10014), (78, 10017), (94, 10113), (97, 10122), (103, 10152), (105, 10158), (107, 10173), (108, 10176), (112, 10197), (122, 10269), (125, 10290), (136, 10356), (138, 10377), (155, 10494), (182, 10656), (189, 10695), (198, 10770), (215, 10929), (219, 10941), (223, 10968), (228, 11013), (230, 11025), (245, 11115), (248, 11133), (252, 11154), (255, 11184), (261, 11208), (264, 11220), (267, 11259), (271, 11292), (288, 11394), (289, 11397), (293, 11421), (304, 11514), (307, 11529), (311, 11568), (324, 11664), (332, 11703), (333, 11706), (341, 11739), (351, 11847), (352, 11850), (357, 11901), (371, 11976), (382, 12078), (390, 12123), (395, 12144), (396, 12147), (397, 12150), (414, 12225), (424, 12258), (428, 12279), (440, 12357), (442, 12363), (446, 12390), (466, 12525), (481, 12642),

(484, 12675), (486, 12696), (501, 12765), (502, 12771), (504, 12786), (526, 12906), (528, 12915), (543, 12999), (607, 13320), (646, 13539), (653, 13575), (691, 13788), (729, 13980), (740, 14028), (747, 14049), (761, 14157), (778, 14223), (780, 14241), (786, 14301), (792, 14346), (799, 14376), (800, 14385), (805, 14415), (816, 14481), (821, 14529), (828, 14589), (841, 14676), (852, 14739),

Gene: Delian_17 Start: 10277, Stop: 15820, Start Num: 8

Candidate Starts for Delian_17:

(Start: 8 @10277 has 37 MA's), (Start: 11 @10292 has 1 MA's), (Start: 12 @10298 has 1 MA's), (Start: 14 @10328 has 1 MA's), (15, 10337), (16, 10340), (18, 10382), (38, 10493), (40, 10514), (65, 10742), (68, 10760), (71, 10775), (72, 10781), (73, 10784), (76, 10802), (82, 10826), (95, 10910), (96, 10913), (105, 10952), (107, 10967), (109, 10976), (135, 11144), (138, 11171), (189, 11489), (211, 11693), (219, 11738), (220, 11744), (223, 11765), (224, 11777), (240, 11867), (245, 11912), (250, 11939), (254, 11969), (267, 12056), (268, 12059), (272, 12098), (293, 12218), (297, 12260), (302, 12305), (304, 12311), (307, 12326), (313, 12380), (317, 12419), (320, 12440), (321, 12443), (324, 12461), (325, 12470), (335, 12509), (337, 12515), (341, 12536), (345, 12563), (370, 12770), (385, 12836), (398, 12875), (405, 12890), (423, 12920), (424, 12923), (432, 12974), (445, 13055), (446, 13058), (452, 13091), (455, 13121), (457, 13145), (505, 13478), (514, 13526), (517, 13571), (518, 13574), (521, 13589), (529, 13634), (530, 13643), (532, 13652), (542, 13703), (556, 13775), (561, 13793), (570, 13814), (581, 13913), (582, 13916), (591, 13949), (599, 14015), (600, 14033), (603, 14048), (610, 14081), (619, 14132), (627, 14183), (633, 14231), (664, 14426), (665, 14429), (675, 14501), (676, 14504), (685, 14570), (686, 14573), (690, 14591), (700, 14651), (706, 14708), (707, 14726), (720, 14807), (721, 14810), (725, 14825), (748, 14984), (758, 15038), (762, 15104), (776, 15158), (777, 15170), (778, 15176), (792, 15299), (798, 15323), (802, 15341), (805, 15365), (806, 15371), (809, 15392), (816, 15431), (830, 15572), (833, 15584), (843, 15635), (845, 15653), (864, 15803),

Gene: DirtyBoi_18 Start: 11005, Stop: 16017, Start Num: 25

Candidate Starts for DirtyBoi_18:

(Start: 25 @11005 has 13 MA's), (Start: 31 @11035 has 1 MA's), (33, 11056), (39, 11092), (59, 11296), (63, 11326), (78, 11401), (97, 11506), (109, 11566), (119, 11644), (120, 11647), (131, 11719), (138, 11761), (152, 11848), (211, 12277), (215, 12310), (220, 12328), (226, 12373), (229, 12397), (238, 12442), (240, 12451), (244, 12487), (245, 12496), (249, 12520), (252, 12535), (254, 12553), (267, 12640), (275, 12694), (276, 12712), (290, 12787), (295, 12817), (302, 12889), (304, 12895), (307, 12910), (313, 12964), (321, 13027), (324, 13045), (330, 13072), (332, 13084), (337, 13099), (341, 13120), (353, 13240), (355, 13267), (360, 13300), (367, 13339), (370, 13354), (374, 13402), (377, 13426), (381, 13456), (393, 13519), (407, 13564), (409, 13567), (424, 13636), (435, 13708), (438, 13729), (440, 13735), (442, 13741), (445, 13765), (446, 13768), (449, 13789), (453, 13819), (455, 13831), (459, 13867), (469, 13921), (470, 13924), (471, 13930), (475, 13975), (477, 13984), (497, 14125), (503, 14158), (510, 14203), (511, 14209), (512, 14221), (519, 14272), (541, 14356), (546, 14380), (551, 14404), (552, 14407), (568, 14458), (574, 14506), (591, 14593), (594, 14617), (596, 14629), (598, 14650), (602, 14677), (622, 14782), (629, 14815), (638, 14863), (640, 14875), (655, 14947), (658, 14956), (700, 15112), (710, 15142), (753, 15334), (774, 15454), (776, 15457), (797, 15601), (807, 15664), (829, 15826), (830, 15838), (844, 15895), (855, 15970), (857, 15976), (860, 16006), (862, 16009),

Gene: Dre3_16 Start: 9856, Stop: 14970, Start Num: 28

Candidate Starts for Dre3_16:

(23, 9835), (Start: 28 @9856 has 33 MA's), (32, 9883), (46, 10012), (51, 10096), (54, 10108), (62, 10159), (69, 10192), (74, 10216), (79, 10249), (94, 10339), (107, 10399), (108, 10402), (118, 10468), (123, 10504), (125, 10516), (134, 10573), (136, 10582), (138, 10603), (190, 10942), (199, 10999), (208, 11101), (219, 11167), (220, 11173), (223, 11194), (245, 11341), (254, 11398), (256, 11416), (260, 11431), (264, 11446), (267, 11485), (281, 11590), (286, 11614), (288, 11620), (301, 11731), (304, 11740), (307, 11755), (311, 11794), (324, 11890), (330, 11917), (331, 11923), (332, 11929), (340, 11962), (341, 11965), (351, 12073), (355, 12112), (360, 12145), (364, 12175), (365, 12178),

(370, 12199), (371, 12202), (382, 12304), (390, 12349), (396, 12373), (397, 12376), (415, 12454), (422, 12478), (423, 12481), (424, 12484), (432, 12535), (440, 12583), (442, 12589), (448, 12634), (466, 12751), (467, 12757), (473, 12814), (481, 12868), (483, 12889), (484, 12901), (486, 12922), (487, 12925), (501, 12991), (502, 12997), (526, 13132), (537, 13198), (543, 13225), (562, 13303), (607, 13543), (616, 13573), (642, 13747), (650, 13777), (653, 13798), (672, 13906), (686, 13990), (740, 14227), (759, 14338), (761, 14356), (778, 14422), (783, 14473), (792, 14545), (800, 14584), (801, 14587), (805, 14614), (809, 14641), (816, 14680), (821, 14728), (828, 14788), (831, 14824), (841, 14878),

Gene: ElJefes_15 Start: 10009, Stop: 14943, Start Num: 46

Candidate Starts for ElJefes_15:

(Start: 28 @9853 has 33 MA's), (46, 10009), (56, 10114), (60, 10138), (68, 10189), (77, 10237), (88, 10285), (90, 10294), (94, 10336), (96, 10342), (97, 10345), (105, 10381), (109, 10405), (114, 10432), (127, 10519), (131, 10558), (133, 10564), (136, 10579), (138, 10600), (147, 10654), (164, 10771), (175, 10834), (182, 10879), (189, 10918), (193, 10960), (211, 11122), (214, 11131), (215, 11155), (219, 11167), (223, 11194), (224, 11206), (230, 11251), (236, 11281), (239, 11293), (253, 11395), (254, 11398), (267, 11485), (270, 11512), (278, 11572), (284, 11602), (289, 11623), (293, 11647), (299, 11698), (304, 11740), (307, 11755), (308, 11764), (309, 11776), (313, 11809), (318, 11851), (328, 11911), (329, 11914), (330, 11917), (336, 11941), (341, 11965), (350, 12070), (359, 12118), (370, 12178), (371, 12181), (373, 12217), (382, 12283), (384, 12298), (386, 12313), (390, 12328), (395, 12349), (396, 12352), (408, 12391), (410, 12406), (411, 12412), (415, 12433), (422, 12457), (424, 12463), (444, 12589), (450, 12619), (455, 12658), (461, 12706), (465, 12727), (466, 12730), (467, 12736), (474, 12802), (481, 12847), (484, 12880), (486, 12901), (498, 12955), (526, 13105), (528, 13114), (543, 13201), (585, 13378), (607, 13519), (616, 13549), (638, 13687), (653, 13768), (682, 13921), (686, 13951), (727, 14173), (729, 14182), (730, 14188), (740, 14215), (761, 14332), (763, 14338), (773, 14380), (778, 14398), (792, 14521), (798, 14545), (800, 14560), (805, 14590), (809, 14617), (811, 14623), (816, 14656), (824, 14725), (826, 14728), (828, 14764), (837, 14836), (842, 14854),

Gene: Elinal_17 Start: 9384, Stop: 14468, Start Num: 28

Candidate Starts for Elinal_17:

(Start: 28 @9384 has 33 MA's), (46, 9540), (60, 9669), (64, 9699), (77, 9768), (80, 9780), (90, 9825), (94, 9867), (97, 9876), (105, 9912), (109, 9936), (127, 10050), (131, 10089), (133, 10095), (134, 10101), (136, 10110), (138, 10131), (164, 10302), (175, 10365), (182, 10410), (193, 10491), (211, 10650), (215, 10683), (219, 10695), (223, 10722), (230, 10779), (236, 10809), (239, 10821), (253, 10923), (254, 10926), (267, 11013), (274, 11061), (293, 11175), (304, 11268), (307, 11283), (309, 11304), (313, 11337), (315, 11367), (318, 11379), (324, 11418), (329, 11442), (330, 11445), (336, 11469), (341, 11493), (350, 11598), (359, 11646), (363, 11676), (367, 11691), (370, 11706), (373, 11745), (379, 11787), (380, 11799), (382, 11811), (384, 11826), (386, 11841), (390, 11856), (396, 11880), (408, 11919), (410, 11934), (411, 11940), (415, 11961), (422, 11985), (424, 11991), (444, 12117), (450, 12147), (456, 12198), (461, 12234), (465, 12255), (466, 12258), (474, 12330), (481, 12375), (484, 12408), (486, 12429), (498, 12483), (509, 12558), (528, 12642), (543, 12729), (587, 12915), (607, 13047), (616, 13077), (638, 13215), (648, 13266), (653, 13296), (682, 13452), (686, 13482), (724, 13662), (730, 13713), (740, 13740), (747, 13761), (761, 13857), (773, 13905), (778, 13923), (792, 14046), (798, 14070), (800, 14085), (805, 14115), (809, 14142), (811, 14148), (816, 14181), (824, 14250), (826, 14253), (828, 14289), (842, 14379),

Gene: Eliott_16 Start: 9629, Stop: 14767, Start Num: 28

Candidate Starts for Eliott_16:

(Start: 22 @9605 has 5 MA's), (Start: 28 @9629 has 33 MA's), (32, 9656), (46, 9785), (49, 9860), (77, 10013), (78, 10016), (94, 10112), (97, 10121), (103, 10151), (105, 10157), (107, 10172), (108, 10175), (112, 10196), (122, 10268), (125, 10289), (136, 10355), (138, 10376), (155, 10493), (182, 10655), (189, 10694), (198, 10769), (215, 10928), (219, 10940), (223, 10967), (228, 11012), (230, 11024),

(245, 11114), (248, 11132), (252, 11153), (255, 11183), (261, 11207), (264, 11219), (267, 11258), (271, 11291), (288, 11393), (289, 11396), (293, 11420), (304, 11513), (307, 11528), (311, 11567), (332, 11702), (333, 11705), (341, 11738), (351, 11846), (352, 11849), (357, 11900), (371, 11975), (382, 12077), (390, 12122), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (428, 12278), (432, 12308), (440, 12356), (442, 12362), (446, 12389), (466, 12524), (481, 12641), (484, 12674), (486, 12695), (501, 12764), (502, 12770), (504, 12785), (526, 12905), (528, 12914), (543, 12998), (607, 13319), (646, 13538), (653, 13574), (691, 13787), (729, 13979), (740, 14027), (747, 14048), (761, 14156), (778, 14222), (780, 14240), (792, 14345), (799, 14375), (800, 14384), (805, 14414), (816, 14480), (821, 14528), (828, 14588), (841, 14675), (852, 14738),

Gene: Emalyn_15 Start: 9356, Stop: 14068, Start Num: 81

Candidate Starts for Emalyn_15:

(Start: 81 @9356 has 23 MA's), (108, 9512), (121, 9599), (124, 9614), (129, 9659), (132, 9671), (136, 9689), (139, 9716), (151, 9788), (156, 9830), (158, 9845), (159, 9848), (165, 9872), (168, 9890), (171, 9908), (175, 9929), (178, 9953), (180, 9962), (187, 9989), (191, 10022), (192, 10031), (205, 10121), (208, 10160), (210, 10175), (223, 10244), (227, 10271), (243, 10367), (246, 10385), (258, 10448), (286, 10616), (288, 10622), (302, 10736), (304, 10742), (307, 10757), (337, 10946), (341, 10967), (344, 10985), (345, 10994), (357, 11129), (371, 11204), (373, 11240), (378, 11279), (379, 11282), (382, 11306), (386, 11336), (390, 11351), (396, 11375), (408, 11414), (414, 11453), (416, 11459), (446, 11618), (480, 11867), (481, 11870), (484, 11903), (486, 11924), (501, 11993), (502, 11999), (543, 12230), (574, 12365), (607, 12557), (624, 12626), (628, 12650), (651, 12791), (686, 13004), (691, 13025), (699, 13079), (755, 13382), (759, 13439), (761, 13457), (778, 13523), (785, 13595), (792, 13646), (798, 13670), (799, 13676), (800, 13685), (805, 13715), (816, 13781), (821, 13829), (828, 13889), (842, 13979), (852, 14039),

Gene: Eyes_17 Start: 10596, Stop: 15716, Start Num: 25

Candidate Starts for Eyes_17:

(Start: 25 @10596 has 13 MA's), (Start: 28 @10605 has 33 MA's), (52, 10848), (57, 10878), (59, 10887), (63, 10917), (71, 10956), (76, 10983), (106, 11139), (109, 11157), (131, 11310), (138, 11352), (147, 11406), (182, 11631), (183, 11634), (189, 11670), (199, 11748), (204, 11787), (211, 11871), (215, 11904), (218, 11913), (220, 11922), (224, 11955), (226, 11967), (229, 11991), (238, 12036), (240, 12045), (244, 12081), (250, 12117), (252, 12129), (254, 12147), (261, 12183), (263, 12192), (276, 12306), (283, 12348), (302, 12483), (303, 12486), (304, 12489), (307, 12504), (313, 12558), (317, 12597), (332, 12678), (337, 12693), (341, 12714), (346, 12777), (349, 12813), (374, 12975), (406, 13032), (413, 13044), (414, 13047), (424, 13080), (427, 13098), (438, 13173), (440, 13179), (442, 13185), (444, 13206), (445, 13209), (446, 13212), (455, 13275), (459, 13311), (462, 13326), (467, 13350), (469, 13365), (470, 13368), (471, 13374), (477, 13428), (489, 13527), (497, 13569), (510, 13647), (519, 13716), (525, 13734), (544, 13842), (546, 13845), (551, 13869), (552, 13872), (557, 13893), (564, 13914), (568, 13923), (591, 14058), (594, 14082), (602, 14142), (615, 14202), (622, 14247), (629, 14280), (638, 14328), (640, 14340), (652, 14400), (676, 14550), (678, 14568), (692, 14646), (694, 14652), (697, 14661), (698, 14688), (708, 14781), (716, 14820), (722, 14862), (749, 15015), (756, 15048), (757, 15051), (760, 15108), (764, 15117), (767, 15129), (774, 15150), (778, 15171), (807, 15363), (814, 15402), (826, 15471), (829, 15525), (857, 15678),

Gene: Fairfaxidum_17 Start: 10343, Stop: 15964, Start Num: 8

Candidate Starts for Fairfaxidum_17:

(Start: 7 @10307 has 1 MA's), (Start: 8 @10343 has 37 MA's), (Start: 12 @10364 has 1 MA's), (13, 10382), (16, 10406), (18, 10448), (36, 10547), (38, 10559), (40, 10580), (45, 10637), (48, 10709), (51, 10730), (56, 10751), (59, 10772), (60, 10775), (67, 10823), (68, 10826), (73, 10850), (76, 10868), (88, 10922), (97, 10982), (105, 11018), (106, 11024), (138, 11237), (167, 11423), (184, 11525), (186, 11540), (189, 11555), (195, 11612), (219, 11804), (238, 11924), (250, 12005), (254, 12035), (261, 12071), (267, 12122), (272, 12164), (293, 12284), (299, 12335), (302, 12371), (304, 12377), (307, 12392), (313, 12446), (317, 12485), (321, 12509), (324, 12527), (331, 12560), (335, 12575), (337,

12581), (340, 12599), (341, 12602), (345, 12629), (346, 12665), (379, 12896), (383, 12932), (384, 12935), (391, 12968), (415, 13070), (424, 13103), (434, 13166), (440, 13202), (446, 13238), (450, 13262), (453, 13289), (465, 13370), (473, 13436), (476, 13454), (489, 13559), (496, 13592), (505, 13658), (506, 13667), (514, 13706), (516, 13739), (517, 13751), (518, 13754), (521, 13769), (522, 13778), (529, 13814), (530, 13823), (532, 13832), (551, 13928), (567, 13988), (568, 13991), (570, 13994), (571, 14015), (582, 14096), (592, 14138), (603, 14225), (610, 14258), (612, 14267), (619, 14309), (637, 14423), (664, 14597), (675, 14672), (676, 14675), (680, 14705), (681, 14708), (684, 14732), (685, 14741), (686, 14744), (700, 14822), (706, 14879), (725, 14996), (731, 15047), (758, 15185), (762, 15251), (777, 15317), (778, 15323), (780, 15341), (790, 15434), (792, 15446), (803, 15494), (805, 15512), (806, 15518), (809, 15539), (816, 15578), (830, 15719), (843, 15782), (854, 15857), (864, 15950),

Gene: Feastonyeet_15 Start: 9403, Stop: 14511, Start Num: 28

Candidate Starts for Feastonyeet_15:

(Start: 28 @9403 has 33 MA's), (46, 9559), (60, 9688), (64, 9718), (77, 9787), (80, 9799), (88, 9835), (94, 9886), (97, 9895), (105, 9931), (109, 9955), (118, 10015), (127, 10069), (131, 10108), (133, 10114), (136, 10129), (138, 10150), (164, 10321), (175, 10384), (182, 10429), (193, 10510), (211, 10669), (215, 10702), (219, 10714), (223, 10741), (230, 10798), (236, 10828), (239, 10840), (253, 10942), (254, 10945), (267, 11032), (274, 11080), (293, 11194), (304, 11287), (307, 11302), (309, 11323), (313, 11356), (315, 11386), (318, 11398), (324, 11437), (329, 11461), (330, 11464), (336, 11488), (341, 11512), (350, 11617), (363, 11695), (370, 11725), (371, 11728), (373, 11764), (379, 11806), (382, 11830), (384, 11845), (386, 11860), (390, 11875), (396, 11899), (408, 11938), (410, 11953), (411, 11959), (422, 12004), (424, 12010), (444, 12136), (450, 12166), (454, 12202), (455, 12205), (461, 12253), (465, 12274), (466, 12277), (474, 12349), (481, 12394), (484, 12427), (486, 12448), (498, 12502), (509, 12577), (528, 12661), (543, 12748), (607, 13066), (616, 13096), (638, 13234), (648, 13285), (653, 13315), (682, 13480), (686, 13510), (724, 13690), (730, 13741), (740, 13783), (747, 13804), (761, 13900), (773, 13948), (778, 13966), (792, 14089), (798, 14113), (800, 14128), (805, 14158), (809, 14185), (811, 14191), (816, 14224), (824, 14293), (826, 14296), (828, 14332), (842, 14422),

Gene: Fenry_16 Start: 10023, Stop: 15515, Start Num: 8

Candidate Starts for Fenry_16:

(Start: 8 @10023 has 37 MA's), (Start: 11 @10038 has 1 MA's), (Start: 12 @10044 has 1 MA's), (Start: 14 @10074 has 1 MA's), (15, 10083), (16, 10086), (18, 10128), (38, 10239), (40, 10260), (47, 10380), (65, 10488), (68, 10506), (71, 10521), (72, 10527), (73, 10530), (76, 10548), (82, 10572), (95, 10656), (97, 10662), (105, 10698), (107, 10713), (109, 10722), (135, 10890), (138, 10917), (171, 11130), (189, 11235), (211, 11439), (219, 11484), (223, 11511), (224, 11523), (240, 11613), (245, 11658), (250, 11685), (254, 11715), (267, 11802), (268, 11805), (272, 11844), (293, 11964), (297, 12006), (302, 12051), (304, 12057), (306, 12069), (307, 12072), (313, 12126), (317, 12165), (320, 12186), (321, 12189), (324, 12207), (335, 12255), (337, 12261), (341, 12282), (345, 12309), (349, 12381), (370, 12516), (387, 12588), (389, 12597), (393, 12609), (398, 12621), (405, 12636), (423, 12666), (424, 12669), (432, 12720), (445, 12801), (446, 12804), (452, 12837), (455, 12867), (457, 12891), (468, 12957), (499, 13173), (505, 13224), (514, 13272), (517, 13317), (518, 13320), (521, 13335), (529, 13380), (530, 13389), (532, 13398), (542, 13449), (556, 13521), (561, 13539), (570, 13560), (581, 13659), (582, 13662), (591, 13695), (599, 13761), (600, 13779), (603, 13794), (610, 13827), (619, 13878), (627, 13929), (664, 14172), (665, 14175), (675, 14247), (676, 14250), (685, 14316), (686, 14319), (690, 14337), (700, 14397), (720, 14553), (721, 14556), (725, 14571), (748, 14742), (758, 14796), (766, 14853), (770, 14868), (779, 14916), (784, 14961), (807, 15081), (808, 15090), (815, 15129), (825, 15201), (830, 15270), (833, 15282), (843, 15333), (845, 15351), (864, 15501),

Gene: Fribs8_17 Start: 10424, Stop: 15559, Start Num: 28

Candidate Starts for Fribs8_17:

(Start: 28 @10424 has 33 MA's), (32, 10451), (46, 10580), (54, 10676), (62, 10727), (69, 10760), (74, 10784), (79, 10817), (94, 10907), (107, 10967), (108, 10970), (116, 11030), (118, 11036), (125, 11084), (136, 11150), (138, 11171), (145, 11207), (199, 11567), (208, 11669), (215, 11723), (216, 11726), (219, 11735), (220, 11741), (223, 11762), (245, 11909), (254, 11966), (256, 11984), (261, 12002), (264, 12014), (267, 12053), (274, 12101), (281, 12158), (286, 12182), (288, 12188), (301, 12299), (304, 12308), (307, 12323), (311, 12362), (320, 12437), (330, 12485), (331, 12491), (341, 12533), (351, 12641), (355, 12680), (360, 12713), (382, 12872), (390, 12917), (396, 12941), (415, 13022), (422, 13046), (423, 13049), (424, 13052), (427, 13070), (432, 13103), (438, 13145), (446, 13184), (453, 13235), (466, 13319), (467, 13325), (473, 13382), (475, 13394), (481, 13436), (483, 13457), (484, 13469), (486, 13490), (487, 13493), (501, 13559), (504, 13580), (526, 13700), (537, 13766), (543, 13793), (553, 13838), (555, 13859), (565, 13880), (607, 14123), (616, 14153), (624, 14192), (642, 14327), (650, 14357), (653, 14378), (686, 14570), (729, 14783), (733, 14801), (740, 14816), (759, 14927), (761, 14945), (778, 15011), (783, 15062), (790, 15122), (792, 15134), (800, 15173), (801, 15176), (805, 15203), (811, 15236), (816, 15269), (841, 15467), (843, 15473), (852, 15530),

Gene: Frickyeah_18 Start: 9926, Stop: 15508, Start Num: 31

Candidate Starts for Frickyeah_18:

(Start: 21 @9881 has 11 MA's), (Start: 31 @9926 has 1 MA's), (33, 9947), (37, 9968), (41, 10013), (Start: 42 @10028 has 1 MA's), (48, 10112), (56, 10154), (57, 10166), (68, 10229), (71, 10244), (73, 10253), (76, 10271), (77, 10277), (88, 10325), (112, 10460), (134, 10610), (138, 10640), (189, 10964), (202, 11060), (211, 11168), (219, 11213), (220, 11219), (223, 11240), (235, 11321), (245, 11387), (250, 11414), (252, 11426), (254, 11444), (255, 11456), (261, 11480), (264, 11492), (267, 11531), (268, 11534), (269, 11543), (272, 11573), (278, 11618), (290, 11678), (293, 11693), (296, 11723), (297, 11735), (302, 11780), (304, 11786), (307, 11801), (310, 11831), (312, 11852), (313, 11855), (321, 11918), (325, 11945), (326, 11948), (327, 11951), (328, 11957), (334, 11981), (335, 11984), (337, 11990), (339, 11996), (341, 12011), (344, 12029), (346, 12074), (355, 12158), (356, 12164), (360, 12191), (373, 12284), (374, 12293), (382, 12350), (383, 12362), (391, 12398), (392, 12404), (404, 12446), (407, 12458), (414, 12497), (416, 12503), (417, 12506), (422, 12524), (423, 12527), (424, 12530), (429, 12554), (440, 12629), (447, 12668), (451, 12692), (455, 12725), (465, 12836), (468, 12869), (473, 12932), (478, 12968), (482, 12998), (493, 13076), (494, 13079), (496, 13088), (500, 13112), (512, 13193), (514, 13199), (517, 13244), (518, 13247), (521, 13262), (529, 13307), (530, 13316), (532, 13325), (533, 13328), (554, 13433), (567, 13481), (568, 13484), (570, 13487), (581, 13586), (582, 13589), (588, 13601), (603, 13718), (610, 13751), (619, 13802), (625, 13832), (632, 13892), (644, 13973), (649, 13994), (654, 14027), (667, 14099), (668, 14108), (686, 14222), (693, 14252), (696, 14261), (701, 14300), (702, 14303), (705, 14333), (706, 14354), (734, 14552), (743, 14615), (746, 14621), (756, 14672), (781, 14858), (790, 14945), (795, 14972), (796, 14975), (810, 15050), (814, 15074), (820, 15113), (822, 15149), (827, 15170), (836, 15257), (841, 15299), (847, 15332), (849, 15344), (861, 15422), (865, 15488),

Gene: Frokostdame_17 Start: 10288, Stop: 15762, Start Num: 11

Candidate Starts for Frokostdame_17:

(Start: 8 @10273 has 37 MA's), (10, 10285), (Start: 11 @10288 has 1 MA's), (Start: 12 @10294 has 1 MA's), (Start: 14 @10324 has 1 MA's), (15, 10333), (18, 10378), (38, 10489), (40, 10510), (47, 10630), (54, 10672), (65, 10738), (68, 10756), (72, 10777), (73, 10780), (76, 10798), (82, 10822), (95, 10906), (105, 10948), (107, 10963), (109, 10972), (135, 11140), (138, 11167), (155, 11284), (164, 11338), (171, 11380), (189, 11485), (211, 11689), (219, 11734), (220, 11740), (223, 11761), (224, 11773), (240, 11863), (245, 11908), (250, 11935), (254, 11965), (267, 12052), (268, 12055), (272, 12094), (281, 12157), (283, 12166), (293, 12214), (297, 12256), (304, 12307), (307, 12322), (313, 12376), (317, 12415), (320, 12436), (321, 12439), (324, 12457), (330, 12484), (335, 12505), (337, 12511), (341, 12532), (344, 12550), (345, 12559), (385, 12832), (393, 12859), (398, 12871), (405, 12886), (423, 12916), (424, 12919), (432, 12970), (438, 13012), (445, 13051), (446, 13054), (452, 13087), (455, 13117), (457, 13141), (468, 13207), (505, 13474), (514, 13522), (516, 13555), (517, 13567),

(518, 13570), (521, 13585), (529, 13630), (530, 13639), (532, 13648), (542, 13699), (556, 13771), (561, 13789), (570, 13810), (581, 13909), (582, 13912), (591, 13945), (599, 14011), (600, 14029), (603, 14044), (610, 14077), (619, 14128), (627, 14179), (664, 14422), (665, 14425), (675, 14497), (676, 14500), (685, 14566), (686, 14569), (690, 14587), (700, 14647), (706, 14704), (707, 14722), (720, 14803), (721, 14806), (725, 14821), (748, 14992), (758, 15046), (770, 15118), (773, 15127), (779, 15163), (787, 15223), (789, 15241), (793, 15259), (804, 15304), (808, 15337), (825, 15448), (830, 15517), (843, 15580), (845, 15598), (864, 15748),

Gene: GEazy_17 Start: 10605, Stop: 15728, Start Num: 25

Candidate Starts for GEazy_17:

(Start: 25 @10605 has 13 MA's), (Start: 28 @10614 has 33 MA's), (57, 10887), (59, 10896), (63, 10926), (90, 11055), (109, 11166), (117, 11223), (138, 11361), (147, 11415), (152, 11448), (184, 11649), (189, 11679), (199, 11757), (202, 11775), (204, 11796), (211, 11880), (215, 11913), (218, 11922), (220, 11931), (224, 11964), (226, 11976), (229, 12000), (238, 12045), (240, 12054), (244, 12090), (245, 12099), (250, 12126), (252, 12138), (254, 12156), (261, 12192), (276, 12315), (283, 12357), (302, 12492), (303, 12495), (304, 12498), (307, 12513), (313, 12567), (317, 12606), (332, 12687), (337, 12702), (341, 12723), (343, 12738), (345, 12750), (346, 12786), (349, 12822), (374, 12984), (406, 13041), (413, 13053), (414, 13056), (424, 13089), (427, 13107), (438, 13182), (440, 13188), (442, 13194), (444, 13215), (445, 13218), (446, 13221), (455, 13284), (459, 13320), (462, 13335), (467, 13359), (469, 13374), (470, 13377), (477, 13437), (489, 13536), (497, 13578), (510, 13656), (519, 13725), (525, 13743), (544, 13851), (551, 13878), (552, 13881), (563, 13920), (564, 13923), (568, 13932), (574, 13980), (591, 14067), (594, 14091), (602, 14151), (615, 14211), (629, 14289), (638, 14337), (640, 14349), (652, 14409), (656, 14451), (670, 14532), (676, 14559), (678, 14577), (683, 14607), (692, 14655), (694, 14661), (697, 14670), (703, 14718), (708, 14790), (716, 14829), (722, 14871), (756, 15057), (757, 15060), (760, 15117), (764, 15126), (767, 15138), (774, 15159), (807, 15372), (814, 15411), (826, 15480), (829, 15534), (844, 15606), (857, 15687), (859, 15711),

Gene: GTE2_14 Start: 9463, Stop: 14106, Start Num: 108

Candidate Starts for GTE2_14:

(Start: 81 @9307 has 23 MA's), (Start: 86 @9334 has 2 MA's), (99, 9412), (108, 9463), (121, 9550), (124, 9565), (132, 9622), (136, 9640), (139, 9667), (140, 9670), (151, 9739), (158, 9796), (168, 9841), (171, 9859), (178, 9904), (187, 9940), (191, 9973), (199, 10021), (200, 10024), (205, 10072), (208, 10111), (210, 10126), (243, 10318), (246, 10336), (262, 10420), (286, 10567), (292, 10594), (302, 10687), (304, 10693), (307, 10708), (311, 10747), (321, 10825), (337, 10897), (340, 10915), (341, 10918), (357, 11080), (371, 11155), (373, 11191), (382, 11257), (390, 11302), (395, 11323), (396, 11326), (397, 11329), (408, 11365), (414, 11404), (416, 11410), (422, 11431), (424, 11437), (433, 11497), (445, 11566), (446, 11569), (448, 11587), (467, 11710), (469, 11725), (484, 11854), (486, 11875), (493, 11908), (501, 11944), (502, 11950), (524, 12082), (528, 12094), (543, 12181), (579, 12334), (589, 12385), (595, 12424), (617, 12553), (629, 12610), (634, 12655), (651, 12748), (661, 12823), (673, 12886), (686, 12967), (691, 12988), (713, 13174), (715, 13180), (752, 13399), (759, 13477), (761, 13495), (763, 13501), (778, 13561), (780, 13579), (783, 13612), (792, 13684), (800, 13723), (805, 13753), (816, 13819), (821, 13867), (828, 13927), (842, 14017), (852, 14077),

Gene: Gambino_19 Start: 10619, Stop: 16108, Start Num: 8

Candidate Starts for Gambino_19:

(Start: 8 @10619 has 37 MA's), (Start: 11 @10634 has 1 MA's), (Start: 12 @10640 has 1 MA's), (Start: 14 @10670 has 1 MA's), (15, 10679), (16, 10682), (18, 10724), (38, 10835), (40, 10856), (47, 10976), (54, 11018), (65, 11084), (68, 11102), (72, 11123), (73, 11126), (76, 11144), (82, 11168), (95, 11252), (105, 11294), (107, 11309), (109, 11318), (135, 11486), (138, 11513), (155, 11630), (184, 11801), (189, 11831), (211, 12035), (219, 12080), (223, 12107), (224, 12119), (226, 12131), (240, 12209), (245, 12254), (250, 12281), (254, 12311), (267, 12398), (268, 12401), (272, 12440), (281, 12503), (283, 12512), (293, 12560), (297, 12602), (302, 12647), (304, 12653), (307, 12668), (313, 12722),

(317, 12761), (320, 12782), (321, 12785), (324, 12803), (330, 12830), (335, 12851), (337, 12857), (341, 12878), (344, 12896), (345, 12905), (385, 13178), (405, 13232), (423, 13262), (424, 13265), (432, 13316), (445, 13397), (446, 13400), (452, 13433), (455, 13463), (457, 13487), (468, 13553), (505, 13820), (514, 13868), (516, 13901), (517, 13913), (518, 13916), (529, 13976), (530, 13985), (532, 13994), (542, 14045), (556, 14117), (561, 14135), (570, 14156), (581, 14255), (582, 14258), (591, 14291), (599, 14357), (600, 14375), (603, 14390), (610, 14423), (619, 14474), (627, 14525), (637, 14594), (664, 14768), (665, 14771), (675, 14843), (676, 14846), (685, 14912), (686, 14915), (690, 14933), (700, 14993), (706, 15050), (707, 15068), (720, 15149), (721, 15152), (725, 15167), (748, 15338), (758, 15392), (770, 15464), (773, 15473), (779, 15509), (787, 15569), (789, 15587), (793, 15605), (804, 15650), (808, 15683), (825, 15794), (830, 15863), (843, 15926), (845, 15944), (864, 16094),

Gene: Getalong_19 Start: 10672, Stop: 16305, Start Num: 22

Candidate Starts for Getalong_19:

(Start: 22 @10672 has 5 MA's), (Start: 31 @10717 has 1 MA's), (33, 10738), (37, 10759), (41, 10804), (Start: 42 @10819 has 1 MA's), (48, 10903), (56, 10945), (57, 10957), (68, 11020), (71, 11035), (73, 11044), (76, 11062), (77, 11068), (88, 11116), (112, 11251), (134, 11401), (138, 11431), (171, 11650), (184, 11725), (189, 11755), (211, 11959), (219, 12004), (220, 12010), (223, 12031), (226, 12055), (235, 12112), (245, 12178), (250, 12205), (252, 12217), (254, 12235), (255, 12247), (261, 12271), (264, 12283), (267, 12322), (268, 12325), (269, 12334), (272, 12364), (278, 12409), (290, 12469), (293, 12484), (296, 12514), (297, 12526), (302, 12571), (304, 12577), (307, 12592), (310, 12622), (312, 12643), (313, 12646), (321, 12709), (325, 12736), (326, 12739), (327, 12742), (328, 12748), (334, 12772), (335, 12775), (337, 12781), (339, 12787), (341, 12802), (344, 12820), (346, 12865), (355, 12949), (356, 12955), (360, 12982), (373, 13075), (374, 13084), (382, 13141), (383, 13153), (391, 13189), (392, 13195), (404, 13237), (407, 13249), (414, 13288), (416, 13294), (417, 13297), (422, 13315), (423, 13318), (424, 13321), (440, 13420), (447, 13459), (451, 13483), (455, 13516), (465, 13627), (468, 13660), (473, 13723), (478, 13759), (482, 13789), (493, 13867), (494, 13870), (496, 13879), (500, 13903), (514, 13990), (517, 14035), (518, 14038), (521, 14053), (529, 14098), (530, 14107), (532, 14116), (533, 14119), (554, 14224), (567, 14272), (570, 14278), (581, 14377), (582, 14380), (588, 14392), (603, 14509), (610, 14542), (619, 14593), (625, 14623), (632, 14683), (644, 14764), (649, 14785), (650, 14788), (654, 14818), (666, 14881), (667, 14890), (668, 14899), (686, 15013), (693, 15043), (701, 15091), (702, 15094), (705, 15124), (706, 15145), (734, 15343), (743, 15406), (746, 15412), (756, 15463), (781, 15655), (790, 15742), (795, 15769), (796, 15772), (810, 15847), (814, 15871), (820, 15910), (822, 15946), (827, 15967), (836, 16054), (841, 16096), (847, 16129), (849, 16141), (865, 16285),

Gene: GiKK_19 Start: 9920, Stop: 14137, Start Num: 81

Candidate Starts for GiKK_19:

(Start: 81 @9920 has 23 MA's), (Start: 86 @9947 has 2 MA's), (126, 10193), (136, 10256), (143, 10313), (148, 10340), (153, 10382), (162, 10445), (166, 10460), (169, 10478), (171, 10496), (173, 10508), (177, 10541), (185, 10583), (188, 10598), (202, 10694), (203, 10703), (207, 10766), (209, 10781), (217, 10817), (225, 10868), (231, 10901), (233, 10910), (247, 10991), (257, 11057), (259, 11066), (260, 11075), (265, 11096), (284, 11231), (286, 11243), (307, 11384), (309, 11405), (313, 11438), (314, 11456), (316, 11474), (324, 11519), (337, 11573), (339, 11579), (341, 11594), (352, 11657), (368, 11705), (371, 11720), (373, 11756), (402, 11810), (414, 11837), (415, 11840), (416, 11843), (423, 11867), (424, 11870), (433, 11930), (445, 11999), (446, 12002), (448, 12020), (453, 12053), (459, 12104), (465, 12134), (469, 12158), (470, 12161), (484, 12287), (486, 12308), (488, 12317), (490, 12326), (492, 12332), (524, 12485), (536, 12554), (538, 12560), (547, 12596), (585, 12725), (607, 12866), (613, 12890), (624, 12935), (647, 13088), (648, 13091), (682, 13283), (686, 13313), (753, 13487), (766, 13559), (777, 13595), (780, 13619), (782, 13631), (785, 13673), (791, 13715), (792, 13721), (798, 13745), (802, 13763), (805, 13784), (809, 13811), (811, 13817), (816, 13850), (819, 13871), (821, 13898), (826, 13922), (828, 13958), (834, 14006), (852, 14108),

Gene: Gibbous_16 Start: 9856, Stop: 14970, Start Num: 28

Candidate Starts for Gibbous_16:

(23, 9835), (Start: 28 @9856 has 33 MA's), (32, 9883), (46, 10012), (51, 10096), (54, 10108), (62, 10159), (69, 10192), (74, 10216), (79, 10249), (94, 10339), (107, 10399), (108, 10402), (118, 10468), (123, 10504), (125, 10516), (134, 10573), (136, 10582), (138, 10603), (190, 10942), (199, 10999), (208, 11101), (219, 11167), (220, 11173), (223, 11194), (245, 11341), (254, 11398), (256, 11416), (260, 11431), (264, 11446), (267, 11485), (281, 11590), (286, 11614), (288, 11620), (301, 11731), (304, 11740), (307, 11755), (311, 11794), (324, 11890), (330, 11917), (331, 11923), (332, 11929), (340, 11962), (341, 11965), (351, 12073), (355, 12112), (360, 12145), (364, 12175), (365, 12178), (370, 12199), (371, 12202), (382, 12304), (390, 12349), (396, 12373), (397, 12376), (415, 12454), (422, 12478), (423, 12481), (424, 12484), (432, 12535), (440, 12583), (442, 12589), (448, 12634), (466, 12751), (467, 12757), (473, 12814), (481, 12868), (483, 12889), (484, 12901), (486, 12922), (487, 12925), (501, 12991), (502, 12997), (526, 13132), (537, 13198), (543, 13225), (562, 13303), (607, 13543), (616, 13573), (642, 13747), (650, 13777), (653, 13798), (672, 13906), (686, 13990), (740, 14227), (759, 14338), (761, 14356), (778, 14422), (783, 14473), (792, 14545), (800, 14584), (801, 14587), (805, 14614), (809, 14641), (816, 14680), (821, 14728), (828, 14788), (831, 14824), (841, 14878),

Gene: GoldHunter_17 Start: 9630, Stop: 14768, Start Num: 28

Candidate Starts for GoldHunter_17:

(Start: 22 @9606 has 5 MA's), (Start: 28 @9630 has 33 MA's), (32, 9657), (46, 9786), (49, 9861), (77, 10014), (78, 10017), (94, 10113), (97, 10122), (103, 10152), (105, 10158), (107, 10173), (108, 10176), (112, 10197), (122, 10269), (125, 10290), (136, 10356), (138, 10377), (155, 10494), (182, 10656), (189, 10695), (198, 10770), (215, 10929), (219, 10941), (223, 10968), (228, 11013), (230, 11025), (245, 11115), (248, 11133), (252, 11154), (255, 11184), (261, 11208), (264, 11220), (267, 11259), (271, 11292), (288, 11394), (289, 11397), (293, 11421), (304, 11514), (307, 11529), (311, 11568), (317, 11622), (324, 11664), (333, 11706), (340, 11736), (341, 11739), (351, 11847), (352, 11850), (357, 11901), (371, 11976), (380, 12066), (382, 12078), (390, 12123), (395, 12144), (396, 12147), (397, 12150), (414, 12225), (424, 12258), (428, 12279), (432, 12309), (440, 12357), (442, 12363), (446, 12390), (466, 12525), (481, 12642), (484, 12675), (486, 12696), (487, 12699), (501, 12765), (502, 12771), (504, 12786), (526, 12906), (528, 12915), (543, 12999), (607, 13320), (646, 13539), (653, 13575), (691, 13788), (729, 13980), (740, 14028), (747, 14049), (761, 14157), (778, 14223), (780, 14241), (786, 14301), (792, 14346), (799, 14376), (800, 14385), (805, 14415), (816, 14481), (821, 14529), (828, 14589), (841, 14676), (852, 14739),

Gene: Guacamole_17 Start: 10278, Stop: 15800, Start Num: 8

Candidate Starts for Guacamole_17:

(Start: 8 @10278 has 37 MA's), (Start: 11 @10293 has 1 MA's), (Start: 12 @10299 has 1 MA's), (Start: 14 @10329 has 1 MA's), (15, 10338), (16, 10341), (18, 10383), (38, 10494), (40, 10515), (47, 10635), (54, 10677), (65, 10743), (68, 10761), (72, 10782), (73, 10785), (76, 10803), (82, 10827), (95, 10911), (96, 10914), (105, 10953), (107, 10968), (109, 10977), (135, 11145), (138, 11172), (155, 11289), (163, 11337), (184, 11460), (189, 11490), (211, 11694), (219, 11739), (223, 11766), (224, 11778), (240, 11868), (245, 11913), (250, 11940), (254, 11970), (267, 12057), (268, 12060), (272, 12099), (285, 12183), (293, 12219), (297, 12261), (302, 12306), (304, 12312), (306, 12324), (307, 12327), (313, 12381), (317, 12420), (320, 12441), (321, 12444), (324, 12462), (325, 12471), (330, 12489), (335, 12510), (337, 12516), (341, 12537), (345, 12564), (350, 12642), (389, 12831), (398, 12855), (404, 12867), (405, 12870), (418, 12885), (423, 12900), (424, 12903), (432, 12954), (445, 13035), (446, 13038), (452, 13071), (455, 13101), (457, 13125), (479, 13284), (505, 13458), (514, 13506), (517, 13551), (518, 13554), (521, 13569), (529, 13614), (530, 13623), (532, 13632), (542, 13683), (556, 13755), (561, 13773), (570, 13794), (581, 13893), (582, 13896), (591, 13929), (599, 13995), (600, 14013), (603, 14028), (610, 14061), (619, 14112), (627, 14163), (633, 14211), (664, 14406), (665, 14409), (675, 14481), (676, 14484), (685, 14550), (686, 14553), (690, 14571), (700, 14631), (706, 14688), (707, 14706), (720, 14787), (721, 14790), (725, 14805), (758, 15018), (762, 15084), (776,

15138), (777, 15150), (778, 15156), (792, 15279), (798, 15303), (802, 15321), (805, 15345), (806, 15351), (809, 15372), (816, 15411), (830, 15552), (833, 15564), (843, 15615), (845, 15633), (864, 15783),

Gene: HannahD_17 Start: 10605, Stop: 15728, Start Num: 25

Candidate Starts for HannahD_17:

(Start: 25 @10605 has 13 MA's), (Start: 28 @10614 has 33 MA's), (57, 10887), (59, 10896), (63, 10926), (90, 11055), (109, 11166), (117, 11223), (138, 11361), (147, 11415), (152, 11448), (184, 11649), (189, 11679), (199, 11757), (202, 11775), (204, 11796), (211, 11880), (215, 11913), (218, 11922), (220, 11931), (224, 11964), (226, 11976), (229, 12000), (238, 12045), (240, 12054), (244, 12090), (245, 12099), (250, 12126), (252, 12138), (254, 12156), (261, 12192), (276, 12315), (283, 12357), (302, 12492), (303, 12495), (304, 12498), (307, 12513), (313, 12567), (317, 12606), (332, 12687), (337, 12702), (341, 12723), (343, 12738), (345, 12750), (346, 12786), (349, 12822), (374, 12984), (406, 13041), (413, 13053), (414, 13056), (424, 13089), (427, 13107), (438, 13182), (440, 13188), (442, 13194), (444, 13215), (445, 13218), (446, 13221), (455, 13284), (459, 13320), (462, 13335), (467, 13359), (469, 13374), (470, 13377), (477, 13437), (489, 13536), (497, 13578), (510, 13656), (519, 13725), (525, 13743), (544, 13851), (551, 13878), (552, 13881), (563, 13920), (564, 13923), (568, 13932), (574, 13980), (591, 14067), (594, 14091), (602, 14151), (615, 14211), (629, 14289), (638, 14337), (640, 14349), (652, 14409), (656, 14451), (670, 14532), (676, 14559), (678, 14577), (683, 14607), (692, 14655), (694, 14661), (697, 14670), (703, 14718), (708, 14790), (716, 14829), (722, 14871), (756, 15057), (757, 15060), (760, 15117), (764, 15126), (767, 15138), (774, 15159), (807, 15372), (814, 15411), (826, 15480), (829, 15534), (844, 15606), (857, 15687), (859, 15711),

Gene: Hedwig_18 Start: 11001, Stop: 16013, Start Num: 25

Candidate Starts for Hedwig_18:

(Start: 25 @11001 has 13 MA's), (Start: 31 @11031 has 1 MA's), (33, 11052), (39, 11088), (59, 11292), (63, 11322), (78, 11397), (97, 11502), (109, 11562), (119, 11640), (120, 11643), (131, 11715), (138, 11757), (152, 11844), (211, 12273), (214, 12282), (215, 12306), (220, 12324), (226, 12369), (229, 12393), (238, 12438), (240, 12447), (244, 12483), (245, 12492), (249, 12516), (252, 12531), (254, 12549), (259, 12573), (267, 12636), (275, 12690), (276, 12708), (290, 12783), (295, 12813), (302, 12885), (304, 12891), (307, 12906), (309, 12927), (313, 12960), (321, 13023), (324, 13041), (330, 13068), (332, 13080), (337, 13095), (341, 13116), (353, 13236), (355, 13263), (360, 13296), (367, 13335), (370, 13350), (374, 13398), (377, 13422), (381, 13452), (393, 13515), (407, 13560), (409, 13563), (424, 13632), (435, 13704), (438, 13725), (440, 13731), (442, 13737), (445, 13761), (446, 13764), (449, 13785), (453, 13815), (455, 13827), (459, 13863), (469, 13917), (470, 13920), (471, 13926), (475, 13971), (477, 13980), (497, 14121), (503, 14154), (510, 14199), (511, 14205), (512, 14217), (519, 14268), (541, 14352), (546, 14376), (551, 14400), (552, 14403), (568, 14454), (574, 14502), (591, 14589), (594, 14613), (596, 14625), (598, 14646), (602, 14673), (622, 14778), (629, 14811), (638, 14859), (640, 14871), (655, 14943), (658, 14952), (700, 15108), (710, 15138), (753, 15330), (774, 15450), (776, 15453), (797, 15597), (807, 15660), (829, 15822), (830, 15834), (844, 15891), (855, 15966), (857, 15972), (860, 16002), (862, 16005),

Gene: Hexbug_18 Start: 10603, Stop: 14823, Start Num: 81

Candidate Starts for Hexbug_18:

(Start: 81 @10603 has 23 MA's), (Start: 86 @10630 has 2 MA's), (136, 10939), (143, 10996), (147, 11020), (153, 11065), (154, 11068), (157, 11110), (162, 11128), (166, 11143), (169, 11161), (170, 11170), (177, 11224), (188, 11281), (200, 11362), (205, 11410), (207, 11449), (209, 11464), (214, 11473), (217, 11500), (222, 11530), (223, 11533), (225, 11551), (247, 11674), (257, 11740), (266, 11803), (279, 11890), (293, 11959), (306, 12064), (307, 12067), (309, 12088), (313, 12121), (314, 12139), (316, 12157), (320, 12181), (324, 12202), (325, 12211), (337, 12256), (338, 12259), (341, 12277), (368, 12388), (370, 12400), (371, 12403), (373, 12439), (389, 12481), (402, 12493), (414, 12520), (424, 12553), (436, 12628), (445, 12682), (446, 12685), (448, 12703), (455, 12748), (459,

12787), (460, 12793), (465, 12817), (468, 12838), (469, 12841), (470, 12844), (484, 12970), (486, 12991), (488, 13000), (490, 13009), (492, 13015), (524, 13168), (531, 13213), (536, 13237), (538, 13243), (547, 13279), (554, 13312), (559, 13336), (578, 13387), (586, 13432), (607, 13570), (616, 13600), (682, 13981), (753, 14173), (766, 14245), (777, 14281), (780, 14305), (782, 14317), (785, 14359), (792, 14407), (805, 14470), (811, 14503), (816, 14536), (819, 14557), (821, 14584), (826, 14608), (828, 14644), (830, 14671), (832, 14680), (834, 14692), (852, 14794),

Gene: HippoPololi_18 Start: 10513, Stop: 15630, Start Num: 28

Candidate Starts for HippoPololi_18:

(23, 10492), (Start: 28 @10513 has 33 MA's), (32, 10540), (46, 10669), (51, 10753), (58, 10792), (62, 10816), (74, 10873), (78, 10900), (79, 10906), (94, 10996), (107, 11056), (108, 11059), (118, 11125), (125, 11173), (136, 11239), (138, 11260), (190, 11599), (198, 11653), (199, 11656), (208, 11758), (216, 11815), (218, 11821), (219, 11824), (220, 11830), (223, 11851), (240, 11953), (254, 12055), (256, 12073), (267, 12142), (274, 12190), (281, 12247), (286, 12271), (288, 12277), (304, 12397), (307, 12412), (311, 12451), (320, 12526), (324, 12547), (330, 12574), (331, 12580), (340, 12619), (341, 12622), (351, 12730), (360, 12802), (370, 12856), (382, 12961), (390, 13006), (396, 13030), (415, 13111), (423, 13138), (424, 13141), (432, 13192), (440, 13240), (442, 13246), (448, 13291), (466, 13408), (467, 13414), (473, 13471), (481, 13525), (483, 13546), (484, 13558), (486, 13579), (487, 13582), (501, 13648), (502, 13654), (526, 13789), (528, 13798), (537, 13855), (543, 13882), (569, 13975), (607, 14203), (612, 14224), (616, 14233), (642, 14407), (650, 14437), (653, 14458), (686, 14650), (712, 14740), (740, 14887), (747, 14908), (761, 15016), (768, 15049), (778, 15082), (783, 15133), (792, 15205), (800, 15244), (801, 15247), (805, 15274), (811, 15307), (816, 15340), (819, 15361), (821, 15388), (831, 15484), (841, 15538),

Gene: Hitter_17 Start: 10274, Stop: 15796, Start Num: 8

Candidate Starts for Hitter_17:

(Start: 8 @10274 has 37 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 1 MA's), (15, 10334), (16, 10337), (18, 10379), (38, 10490), (40, 10511), (65, 10739), (68, 10757), (71, 10772), (72, 10778), (73, 10781), (76, 10799), (82, 10823), (95, 10907), (97, 10913), (105, 10949), (107, 10964), (109, 10973), (135, 11141), (138, 11168), (155, 11285), (184, 11456), (189, 11486), (211, 11690), (219, 11735), (245, 11909), (250, 11936), (254, 11966), (267, 12053), (272, 12095), (285, 12179), (293, 12215), (297, 12257), (302, 12302), (304, 12308), (306, 12320), (307, 12323), (313, 12377), (317, 12416), (320, 12437), (321, 12440), (324, 12458), (325, 12467), (330, 12485), (335, 12506), (337, 12512), (341, 12533), (345, 12560), (350, 12638), (389, 12827), (398, 12851), (404, 12863), (405, 12866), (418, 12881), (423, 12896), (424, 12899), (432, 12950), (445, 13031), (446, 13034), (452, 13067), (455, 13097), (457, 13121), (505, 13454), (514, 13502), (517, 13547), (518, 13550), (521, 13565), (529, 13610), (530, 13619), (532, 13628), (542, 13679), (556, 13751), (561, 13769), (570, 13790), (581, 13889), (582, 13892), (591, 13925), (599, 13991), (600, 14009), (603, 14024), (610, 14057), (619, 14108), (627, 14159), (664, 14402), (665, 14405), (675, 14477), (676, 14480), (685, 14546), (686, 14549), (690, 14567), (700, 14627), (706, 14684), (707, 14702), (720, 14783), (721, 14786), (725, 14801), (758, 15014), (762, 15080), (763, 15086), (777, 15146), (778, 15152), (792, 15275), (798, 15299), (802, 15317), (805, 15341), (806, 15347), (809, 15368), (816, 15407), (830, 15548), (833, 15560), (843, 15611), (845, 15629), (864, 15779),

Gene: Holliday_18 Start: 9868, Stop: 15501, Start Num: 21

Candidate Starts for Holliday_18:

(Start: 21 @9868 has 11 MA's), (29, 9895), (Start: 31 @9913 has 1 MA's), (33, 9934), (37, 9955), (41, 10000), (Start: 42 @10015 has 1 MA's), (48, 10099), (56, 10141), (57, 10153), (68, 10216), (71, 10231), (73, 10240), (76, 10258), (77, 10264), (88, 10312), (112, 10447), (134, 10597), (138, 10627), (171, 10846), (184, 10921), (189, 10951), (211, 11155), (218, 11197), (219, 11200), (220, 11206), (223, 11227), (235, 11308), (245, 11374), (250, 11401), (252, 11413), (254, 11431), (255, 11443), (261, 11467), (264, 11479), (267, 11518), (268, 11521), (269, 11530), (272, 11560), (278, 11605), (290, 11665), (293, 11680), (296, 11710), (297, 11722), (302, 11767), (304, 11773), (307, 11788),

(310, 11818), (312, 11839), (313, 11842), (321, 11905), (325, 11932), (326, 11935), (327, 11938), (328, 11944), (334, 11968), (335, 11971), (337, 11977), (339, 11983), (341, 11998), (344, 12016), (349, 12097), (355, 12145), (356, 12151), (360, 12178), (382, 12337), (383, 12349), (391, 12385), (407, 12445), (414, 12484), (416, 12490), (417, 12493), (423, 12514), (424, 12517), (440, 12616), (447, 12655), (451, 12679), (455, 12712), (458, 12757), (464, 12811), (472, 12898), (473, 12919), (478, 12955), (482, 12985), (493, 13063), (494, 13066), (496, 13075), (500, 13099), (512, 13180), (514, 13186), (517, 13231), (518, 13234), (521, 13249), (529, 13294), (530, 13303), (532, 13312), (533, 13315), (554, 13420), (567, 13468), (570, 13474), (581, 13573), (582, 13576), (588, 13588), (603, 13705), (610, 13738), (619, 13789), (620, 13801), (625, 13819), (632, 13879), (644, 13960), (649, 13981), (654, 14014), (666, 14077), (668, 14095), (686, 14209), (693, 14239), (696, 14248), (701, 14287), (702, 14290), (705, 14320), (706, 14341), (726, 14494), (734, 14545), (743, 14608), (746, 14614), (756, 14665), (781, 14851), (790, 14938), (795, 14965), (796, 14968), (810, 15043), (814, 15067), (820, 15106), (822, 15142), (827, 15163), (836, 15250), (841, 15292), (847, 15325), (849, 15337), (861, 15415), (865, 15481),

Gene: Horseradish_17 Start: 9515, Stop: 14311, Start Num: 81

Candidate Starts for Horseradish_17:

(Start: 81 @9515 has 23 MA's), (Start: 86 @9542 has 2 MA's), (88, 9548), (108, 9671), (124, 9773), (129, 9818), (132, 9830), (136, 9848), (139, 9875), (140, 9878), (142, 9893), (150, 9944), (151, 9947), (158, 10004), (159, 10007), (160, 10010), (168, 10049), (171, 10067), (178, 10112), (187, 10148), (191, 10181), (196, 10214), (197, 10226), (205, 10280), (208, 10319), (210, 10334), (213, 10343), (217, 10370), (225, 10421), (236, 10481), (239, 10490), (246, 10544), (258, 10607), (261, 10622), (269, 10685), (286, 10775), (292, 10802), (302, 10895), (304, 10901), (307, 10916), (311, 10955), (321, 11033), (327, 11066), (337, 11105), (340, 11123), (341, 11126), (345, 11153), (348, 11210), (350, 11231), (366, 11342), (371, 11363), (373, 11399), (379, 11441), (380, 11453), (382, 11465), (390, 11510), (391, 11513), (395, 11531), (396, 11534), (397, 11537), (414, 11612), (424, 11645), (433, 11705), (444, 11771), (445, 11774), (446, 11777), (448, 11795), (462, 11894), (465, 11909), (466, 11912), (484, 12062), (486, 12083), (495, 12125), (501, 12152), (502, 12158), (524, 12290), (528, 12302), (543, 12389), (552, 12431), (562, 12467), (572, 12503), (579, 12542), (589, 12593), (595, 12632), (605, 12710), (617, 12761), (629, 12818), (651, 12956), (661, 13028), (686, 13172), (691, 13193), (713, 13370), (715, 13376), (761, 13700), (763, 13706), (778, 13766), (780, 13784), (783, 13817), (792, 13889), (800, 13928), (805, 13958), (816, 14024), (818, 14042), (821, 14072), (828, 14132), (842, 14222), (852, 14282),

Gene: Horus_18 Start: 9926, Stop: 15514, Start Num: 31

Candidate Starts for Horus_18:

(Start: 21 @9881 has 11 MA's), (Start: 31 @9926 has 1 MA's), (33, 9947), (37, 9968), (41, 10013), (Start: 42 @10028 has 1 MA's), (48, 10112), (56, 10154), (57, 10166), (68, 10229), (71, 10244), (73, 10253), (76, 10271), (77, 10277), (88, 10325), (112, 10460), (134, 10610), (138, 10640), (189, 10964), (202, 11060), (211, 11168), (218, 11210), (219, 11213), (220, 11219), (223, 11240), (235, 11321), (245, 11387), (250, 11414), (252, 11426), (254, 11444), (255, 11456), (261, 11480), (264, 11492), (267, 11531), (268, 11534), (269, 11543), (272, 11573), (290, 11678), (293, 11693), (296, 11723), (297, 11735), (302, 11780), (304, 11786), (307, 11801), (310, 11831), (312, 11852), (313, 11855), (321, 11918), (325, 11945), (326, 11948), (327, 11951), (328, 11957), (334, 11981), (335, 11984), (337, 11990), (339, 11996), (341, 12011), (344, 12029), (346, 12074), (355, 12158), (356, 12164), (360, 12191), (373, 12284), (374, 12293), (382, 12350), (383, 12362), (391, 12398), (404, 12446), (407, 12458), (414, 12497), (416, 12503), (417, 12506), (422, 12524), (423, 12527), (424, 12530), (429, 12554), (440, 12629), (451, 12692), (455, 12725), (459, 12800), (464, 12824), (465, 12836), (468, 12869), (473, 12932), (478, 12968), (482, 12998), (493, 13076), (494, 13079), (496, 13088), (514, 13199), (517, 13244), (518, 13247), (521, 13262), (529, 13307), (530, 13316), (532, 13325), (533, 13328), (554, 13433), (567, 13481), (570, 13487), (581, 13586), (582, 13589), (588, 13601), (603, 13718), (610, 13751), (619, 13802), (625, 13832), (632, 13892), (644, 13973), (649, 13994), (650, 13997), (654, 14027), (666, 14090), (667, 14099), (668, 14108), (686, 14222), (693, 14252),

(701, 14300), (702, 14303), (705, 14333), (706, 14354), (734, 14552), (743, 14615), (746, 14621), (756, 14672), (781, 14864), (790, 14951), (795, 14978), (796, 14981), (810, 15056), (814, 15080), (820, 15119), (822, 15155), (827, 15176), (836, 15263), (841, 15305), (847, 15338), (849, 15350), (865, 15494),

Gene: Jalammah_19 Start: 11050, Stop: 16590, Start Num: 8

Candidate Starts for Jalammah_19:

(Start: 8 @11050 has 37 MA's), (Start: 14 @11101 has 1 MA's), (15, 11110), (16, 11113), (18, 11155), (38, 11266), (40, 11287), (47, 11407), (54, 11449), (65, 11515), (68, 11533), (72, 11554), (73, 11557), (76, 11575), (82, 11599), (95, 11683), (105, 11725), (107, 11740), (109, 11749), (135, 11917), (138, 11944), (155, 12061), (184, 12232), (189, 12262), (211, 12466), (219, 12511), (223, 12538), (224, 12550), (240, 12640), (245, 12685), (250, 12712), (254, 12742), (267, 12829), (268, 12832), (272, 12871), (285, 12955), (293, 12991), (297, 13033), (302, 13078), (304, 13084), (306, 13096), (307, 13099), (313, 13153), (317, 13192), (320, 13213), (321, 13216), (324, 13234), (330, 13261), (335, 13282), (337, 13288), (341, 13309), (345, 13336), (371, 13546), (389, 13624), (398, 13648), (404, 13660), (405, 13663), (418, 13678), (423, 13693), (424, 13696), (432, 13747), (445, 13828), (446, 13831), (452, 13864), (455, 13894), (457, 13918), (468, 13984), (505, 14251), (514, 14299), (517, 14344), (518, 14347), (521, 14362), (529, 14407), (530, 14416), (532, 14425), (542, 14476), (556, 14548), (561, 14566), (570, 14587), (581, 14686), (582, 14689), (591, 14722), (599, 14788), (600, 14806), (603, 14821), (610, 14854), (619, 14905), (627, 14956), (664, 15199), (665, 15202), (675, 15274), (676, 15277), (685, 15343), (686, 15346), (690, 15364), (700, 15424), (706, 15481), (707, 15499), (720, 15580), (721, 15583), (725, 15598), (748, 15757), (758, 15811), (762, 15877), (763, 15883), (777, 15943), (778, 15949), (782, 15979), (792, 16072), (798, 16096), (802, 16114), (805, 16138), (806, 16144), (809, 16165), (816, 16204), (830, 16345), (833, 16357), (843, 16408), (845, 16426), (864, 16576),

Gene: Jamzy_19 Start: 9930, Stop: 14147, Start Num: 81

Candidate Starts for Jamzy_19:

(Start: 81 @9930 has 23 MA's), (Start: 86 @9957 has 2 MA's), (126, 10203), (136, 10266), (143, 10323), (148, 10350), (153, 10392), (162, 10455), (166, 10470), (169, 10488), (171, 10506), (173, 10518), (177, 10551), (185, 10593), (188, 10608), (202, 10704), (203, 10713), (207, 10776), (209, 10791), (217, 10827), (225, 10878), (231, 10911), (233, 10920), (247, 11001), (257, 11067), (259, 11076), (260, 11085), (265, 11106), (284, 11241), (286, 11253), (307, 11394), (309, 11415), (313, 11448), (314, 11466), (316, 11484), (324, 11529), (337, 11583), (341, 11604), (352, 11667), (368, 11715), (371, 11730), (373, 11766), (402, 11820), (414, 11847), (416, 11853), (423, 11877), (424, 11880), (433, 11940), (438, 11973), (446, 12012), (448, 12030), (449, 12033), (455, 12075), (456, 12087), (460, 12120), (461, 12123), (465, 12144), (469, 12168), (470, 12171), (481, 12264), (483, 12285), (484, 12297), (486, 12318), (488, 12327), (490, 12336), (492, 12342), (524, 12495), (535, 12555), (536, 12564), (538, 12570), (547, 12606), (586, 12738), (607, 12876), (613, 12900), (647, 13098), (648, 13101), (677, 13263), (681, 13287), (682, 13290), (717, 13392), (753, 13497), (766, 13569), (773, 13593), (777, 13605), (780, 13629), (782, 13641), (791, 13725), (792, 13731), (802, 13773), (805, 13794), (811, 13827), (816, 13860), (819, 13881), (821, 13908), (828, 13968), (830, 13995), (832, 14004), (834, 14016), (852, 14118),

Gene: JasperJr_17 Start: 10278, Stop: 15800, Start Num: 8

Candidate Starts for JasperJr_17:

(Start: 8 @10278 has 37 MA's), (Start: 11 @10293 has 1 MA's), (Start: 12 @10299 has 1 MA's), (Start: 14 @10329 has 1 MA's), (15, 10338), (16, 10341), (18, 10383), (38, 10494), (40, 10515), (47, 10635), (54, 10677), (65, 10743), (68, 10761), (72, 10782), (73, 10785), (76, 10803), (82, 10827), (95, 10911), (96, 10914), (105, 10953), (107, 10968), (109, 10977), (135, 11145), (138, 11172), (155, 11289), (163, 11337), (184, 11460), (189, 11490), (211, 11694), (219, 11739), (223, 11766), (224, 11778), (240, 11868), (245, 11913), (250, 11940), (254, 11970), (267, 12057), (268, 12060), (272, 12099), (285, 12183), (293, 12219), (297, 12261), (302, 12306), (304, 12312), (306, 12324), (307, 12327), (313,

12381), (317, 12420), (320, 12441), (321, 12444), (324, 12462), (325, 12471), (330, 12489), (335, 12510), (337, 12516), (341, 12537), (345, 12564), (350, 12642), (389, 12831), (398, 12855), (404, 12867), (405, 12870), (418, 12885), (423, 12900), (424, 12903), (432, 12954), (445, 13035), (446, 13038), (452, 13071), (455, 13101), (457, 13125), (479, 13284), (505, 13458), (514, 13506), (517, 13551), (518, 13554), (521, 13569), (529, 13614), (530, 13623), (532, 13632), (542, 13683), (556, 13755), (561, 13773), (570, 13794), (581, 13893), (582, 13896), (591, 13929), (599, 13995), (600, 14013), (603, 14028), (610, 14061), (619, 14112), (627, 14163), (633, 14211), (664, 14406), (665, 14409), (675, 14481), (676, 14484), (685, 14550), (686, 14553), (690, 14571), (700, 14631), (706, 14688), (707, 14706), (720, 14787), (721, 14790), (725, 14805), (758, 15018), (762, 15084), (776, 15138), (777, 15150), (778, 15156), (792, 15279), (798, 15303), (802, 15321), (805, 15345), (806, 15351), (809, 15372), (816, 15411), (830, 15552), (833, 15564), (843, 15615), (845, 15633), (864, 15783),

Gene: JuJu_17 Start: 10202, Stop: 15721, Start Num: 8

Candidate Starts for JuJu_17:

(Start: 8 @10202 has 37 MA's), (Start: 11 @10217 has 1 MA's), (Start: 12 @10223 has 1 MA's), (Start: 14 @10253 has 1 MA's), (15, 10262), (16, 10265), (18, 10307), (38, 10418), (40, 10439), (68, 10685), (72, 10706), (73, 10709), (76, 10727), (82, 10751), (95, 10835), (97, 10841), (105, 10877), (107, 10892), (109, 10901), (112, 10916), (118, 10961), (135, 11069), (138, 11096), (144, 11129), (189, 11414), (211, 11618), (219, 11663), (245, 11837), (250, 11864), (254, 11894), (267, 11981), (272, 12023), (283, 12095), (293, 12143), (297, 12185), (302, 12230), (304, 12236), (306, 12248), (307, 12251), (313, 12305), (317, 12344), (320, 12365), (321, 12368), (324, 12386), (325, 12395), (330, 12413), (335, 12434), (337, 12440), (341, 12461), (345, 12488), (350, 12566), (370, 12674), (385, 12740), (398, 12779), (423, 12824), (424, 12827), (432, 12878), (445, 12959), (446, 12962), (452, 12995), (455, 13025), (468, 13115), (478, 13196), (496, 13316), (505, 13382), (514, 13430), (517, 13475), (518, 13478), (521, 13493), (522, 13502), (529, 13538), (530, 13547), (532, 13556), (556, 13679), (570, 13718), (581, 13817), (582, 13820), (599, 13919), (600, 13937), (603, 13952), (610, 13985), (619, 14036), (627, 14087), (637, 14156), (664, 14330), (665, 14333), (674, 14399), (675, 14405), (676, 14408), (685, 14474), (686, 14477), (690, 14495), (700, 14555), (706, 14612), (707, 14630), (720, 14711), (725, 14729), (731, 14780), (748, 14888), (758, 14942), (762, 15008), (776, 15062), (777, 15074), (778, 15080), (782, 15110), (792, 15203), (798, 15227), (802, 15245), (805, 15269), (806, 15275), (809, 15296), (816, 15335), (830, 15476), (843, 15539), (845, 15557), (854, 15614), (864, 15707),

Gene: Kamaru_18 Start: 9868, Stop: 15501, Start Num: 21

Candidate Starts for Kamaru_18:

(Start: 21 @9868 has 11 MA's), (29, 9895), (Start: 31 @9913 has 1 MA's), (33, 9934), (37, 9955), (41, 10000), (Start: 42 @10015 has 1 MA's), (48, 10099), (56, 10141), (57, 10153), (68, 10216), (71, 10231), (73, 10240), (76, 10258), (77, 10264), (88, 10312), (112, 10447), (134, 10597), (138, 10627), (171, 10846), (184, 10921), (189, 10951), (211, 11155), (218, 11197), (219, 11200), (220, 11206), (223, 11227), (235, 11308), (245, 11374), (250, 11401), (252, 11413), (254, 11431), (255, 11443), (261, 11467), (264, 11479), (267, 11518), (268, 11521), (269, 11530), (272, 11560), (278, 11605), (290, 11665), (293, 11680), (296, 11710), (297, 11722), (302, 11767), (304, 11773), (307, 11788), (310, 11818), (312, 11839), (313, 11842), (321, 11905), (325, 11932), (326, 11935), (327, 11938), (328, 11944), (334, 11968), (335, 11971), (337, 11977), (339, 11983), (341, 11998), (344, 12016), (349, 12097), (355, 12145), (356, 12151), (360, 12178), (382, 12337), (383, 12349), (391, 12385), (407, 12445), (414, 12484), (416, 12490), (417, 12493), (423, 12514), (424, 12517), (440, 12616), (447, 12655), (451, 12679), (455, 12712), (458, 12757), (464, 12811), (472, 12898), (473, 12919), (478, 12955), (482, 12985), (493, 13063), (494, 13066), (496, 13075), (500, 13099), (512, 13180), (514, 13186), (517, 13231), (518, 13234), (521, 13249), (529, 13294), (530, 13303), (532, 13312), (533, 13315), (554, 13420), (567, 13468), (570, 13474), (581, 13573), (582, 13576), (588, 13588), (603, 13705), (610, 13738), (619, 13789), (620, 13801), (625, 13819), (632, 13879), (644, 13960), (649, 13981), (654, 14014), (666, 14077), (668, 14095), (686, 14209), (693, 14239), (696, 14248),

(701, 14287), (702, 14290), (705, 14320), (706, 14341), (726, 14494), (734, 14545), (743, 14608), (746, 14614), (756, 14665), (781, 14851), (790, 14938), (795, 14965), (796, 14968), (810, 15043), (814, 15067), (820, 15106), (822, 15142), (827, 15163), (836, 15250), (841, 15292), (847, 15325), (849, 15337), (861, 15415), (865, 15481),

Gene: KappaFarmDelta_17 Start: 10424, Stop: 15964, Start Num: 8

Candidate Starts for KappaFarmDelta_17:

(Start: 8 @10424 has 37 MA's), (Start: 11 @10439 has 1 MA's), (Start: 12 @10445 has 1 MA's), (Start: 14 @10475 has 1 MA's), (15, 10484), (16, 10487), (18, 10529), (38, 10640), (40, 10661), (65, 10889), (68, 10907), (72, 10928), (73, 10931), (76, 10949), (82, 10973), (95, 11057), (97, 11063), (105, 11099), (107, 11114), (109, 11123), (135, 11291), (138, 11318), (155, 11435), (184, 11606), (189, 11636), (211, 11840), (219, 11885), (223, 11912), (245, 12059), (250, 12086), (254, 12116), (267, 12203), (268, 12206), (272, 12245), (274, 12251), (293, 12365), (297, 12407), (302, 12452), (304, 12458), (306, 12470), (307, 12473), (313, 12527), (317, 12566), (320, 12587), (321, 12590), (324, 12608), (330, 12635), (335, 12656), (337, 12662), (341, 12683), (345, 12710), (349, 12782), (385, 12983), (389, 12998), (398, 13022), (405, 13037), (423, 13067), (424, 13070), (432, 13121), (446, 13205), (452, 13238), (457, 13292), (493, 13547), (505, 13625), (514, 13673), (516, 13706), (517, 13718), (518, 13721), (521, 13736), (522, 13745), (529, 13781), (530, 13790), (532, 13799), (554, 13907), (567, 13955), (568, 13958), (570, 13961), (571, 13982), (582, 14063), (583, 14066), (603, 14192), (610, 14225), (618, 14273), (619, 14276), (621, 14291), (627, 14327), (664, 14570), (665, 14573), (675, 14645), (676, 14648), (685, 14714), (686, 14717), (690, 14735), (700, 14795), (706, 14852), (707, 14870), (720, 14951), (725, 14969), (758, 15182), (762, 15248), (777, 15314), (778, 15320), (782, 15350), (792, 15443), (798, 15467), (805, 15509), (809, 15536), (816, 15575), (830, 15716), (843, 15779), (845, 15797), (854, 15854),

Gene: KayGee_16 Start: 9384, Stop: 14468, Start Num: 28

Candidate Starts for KayGee_16:

(Start: 28 @9384 has 33 MA's), (46, 9540), (60, 9669), (64, 9699), (77, 9768), (80, 9780), (90, 9825), (94, 9867), (97, 9876), (105, 9912), (109, 9936), (127, 10050), (131, 10089), (133, 10095), (134, 10101), (136, 10110), (138, 10131), (164, 10302), (175, 10365), (182, 10410), (193, 10491), (211, 10650), (215, 10683), (219, 10695), (223, 10722), (230, 10779), (236, 10809), (239, 10821), (253, 10923), (254, 10926), (267, 11013), (274, 11061), (293, 11175), (304, 11268), (307, 11283), (309, 11304), (313, 11337), (315, 11367), (318, 11379), (324, 11418), (329, 11442), (330, 11445), (336, 11469), (341, 11493), (350, 11598), (359, 11646), (363, 11676), (367, 11691), (370, 11706), (373, 11745), (379, 11787), (380, 11799), (382, 11811), (384, 11826), (386, 11841), (390, 11856), (396, 11880), (408, 11919), (410, 11934), (411, 11940), (415, 11961), (422, 11985), (424, 11991), (444, 12117), (450, 12147), (456, 12198), (461, 12234), (465, 12255), (466, 12258), (474, 12330), (481, 12375), (484, 12408), (486, 12429), (498, 12483), (509, 12558), (528, 12642), (543, 12729), (587, 12915), (607, 13047), (616, 13077), (638, 13215), (648, 13266), (653, 13296), (682, 13452), (686, 13482), (724, 13662), (730, 13713), (740, 13740), (747, 13761), (761, 13857), (773, 13905), (778, 13923), (792, 14046), (798, 14070), (800, 14085), (805, 14115), (809, 14142), (811, 14148), (816, 14181), (824, 14250), (826, 14253), (828, 14289), (842, 14379),

Gene: Kenna_17 Start: 9881, Stop: 15508, Start Num: 21

Candidate Starts for Kenna_17:

(Start: 21 @9881 has 11 MA's), (29, 9908), (Start: 31 @9926 has 1 MA's), (33, 9947), (37, 9968), (41, 10013), (Start: 42 @10028 has 1 MA's), (48, 10112), (56, 10154), (57, 10166), (68, 10229), (71, 10244), (73, 10253), (76, 10271), (77, 10277), (88, 10325), (112, 10460), (134, 10610), (138, 10640), (189, 10964), (202, 11060), (211, 11168), (219, 11213), (220, 11219), (223, 11240), (226, 11264), (235, 11321), (245, 11387), (250, 11414), (252, 11426), (254, 11444), (255, 11456), (261, 11480), (264, 11492), (267, 11531), (268, 11534), (269, 11543), (272, 11573), (278, 11618), (290, 11678), (293, 11693), (296, 11723), (297, 11735), (302, 11780), (304, 11786), (307, 11801), (310, 11831), (312, 11852), (313, 11855), (321, 11918), (325, 11945), (326, 11948), (327, 11951), (328, 11957),

(334, 11981), (335, 11984), (337, 11990), (339, 11996), (341, 12011), (344, 12029), (346, 12074), (355, 12158), (356, 12164), (360, 12191), (373, 12284), (374, 12293), (382, 12350), (383, 12362), (391, 12398), (392, 12404), (404, 12446), (407, 12458), (414, 12497), (416, 12503), (417, 12506), (422, 12524), (423, 12527), (424, 12530), (429, 12554), (440, 12629), (447, 12668), (451, 12692), (455, 12725), (465, 12836), (468, 12869), (473, 12932), (478, 12968), (482, 12998), (493, 13076), (494, 13079), (496, 13088), (500, 13112), (512, 13193), (514, 13199), (517, 13244), (518, 13247), (521, 13262), (529, 13307), (530, 13316), (532, 13325), (533, 13328), (554, 13433), (567, 13481), (568, 13484), (570, 13487), (581, 13586), (582, 13589), (588, 13601), (603, 13718), (610, 13751), (619, 13802), (625, 13832), (632, 13892), (644, 13973), (649, 13994), (654, 14027), (667, 14099), (668, 14108), (686, 14222), (693, 14252), (696, 14261), (701, 14300), (702, 14303), (705, 14333), (706, 14354), (734, 14552), (743, 14615), (746, 14621), (756, 14672), (781, 14858), (790, 14945), (795, 14972), (796, 14975), (810, 15050), (814, 15074), (820, 15113), (822, 15149), (827, 15170), (836, 15257), (841, 15299), (847, 15332), (849, 15344), (861, 15422), (865, 15488),

Gene: Kiko_18 Start: 10875, Stop: 15764, Start Num: 25

Candidate Starts for Kiko_18:

(Start: 25 @10875 has 13 MA's), (30, 10899), (39, 10962), (43, 11019), (49, 11115), (52, 11127), (55, 11142), (59, 11166), (63, 11196), (85, 11307), (87, 11313), (88, 11316), (89, 11322), (90, 11325), (91, 11337), (97, 11376), (106, 11418), (108, 11430), (116, 11490), (122, 11523), (131, 11589), (136, 11610), (138, 11631), (147, 11685), (152, 11718), (170, 11835), (182, 11910), (184, 11919), (189, 11949), (199, 12027), (211, 12147), (218, 12189), (220, 12198), (224, 12231), (226, 12243), (229, 12267), (230, 12276), (240, 12321), (244, 12357), (245, 12366), (248, 12384), (254, 12423), (261, 12459), (263, 12468), (267, 12510), (276, 12582), (288, 12645), (299, 12723), (301, 12756), (302, 12759), (304, 12765), (307, 12780), (309, 12801), (312, 12831), (313, 12834), (318, 12876), (325, 12924), (330, 12942), (331, 12948), (335, 12963), (337, 12969), (340, 12987), (341, 12990), (345, 13017), (347, 13065), (348, 13074), (353, 13110), (354, 13113), (360, 13170), (364, 13200), (370, 13224), (374, 13272), (377, 13296), (379, 13305), (381, 13326), (403, 13416), (422, 13500), (424, 13506), (453, 13557), (459, 13605), (462, 13620), (467, 13644), (468, 13656), (469, 13659), (470, 13662), (471, 13668), (475, 13713), (477, 13722), (497, 13863), (503, 13896), (510, 13941), (544, 14136), (546, 14139), (548, 14145), (563, 14205), (568, 14217), (583, 14322), (594, 14376), (599, 14412), (602, 14436), (639, 14637), (659, 14727), (689, 14844), (700, 14886), (754, 15093), (757, 15102), (764, 15168), (774, 15201), (807, 15411), (829, 15573), (830, 15585), (844, 15642), (858, 15726), (860, 15753),

Gene: Lauer_15 Start: 9433, Stop: 14517, Start Num: 28

Candidate Starts for Lauer_15:

(Start: 28 @9433 has 33 MA's), (46, 9589), (60, 9718), (64, 9748), (77, 9817), (80, 9829), (94, 9916), (97, 9925), (105, 9961), (109, 9985), (118, 10045), (127, 10099), (131, 10138), (133, 10144), (136, 10159), (138, 10180), (164, 10351), (175, 10414), (182, 10459), (193, 10540), (211, 10699), (215, 10732), (219, 10744), (223, 10771), (230, 10828), (236, 10858), (239, 10870), (253, 10972), (254, 10975), (267, 11062), (274, 11110), (293, 11224), (304, 11317), (307, 11332), (309, 11353), (313, 11386), (315, 11416), (318, 11428), (324, 11467), (329, 11491), (330, 11494), (336, 11518), (341, 11542), (350, 11647), (363, 11725), (370, 11755), (371, 11758), (373, 11794), (379, 11836), (382, 11860), (384, 11875), (386, 11890), (390, 11905), (396, 11929), (408, 11968), (410, 11983), (411, 11989), (415, 12010), (422, 12034), (424, 12040), (444, 12166), (450, 12196), (455, 12235), (461, 12283), (465, 12304), (466, 12307), (474, 12379), (481, 12424), (484, 12457), (486, 12478), (498, 12532), (509, 12607), (528, 12691), (543, 12778), (587, 12964), (607, 13096), (616, 13126), (638, 13264), (648, 13315), (653, 13345), (682, 13501), (686, 13531), (724, 13711), (730, 13762), (740, 13789), (747, 13810), (761, 13906), (773, 13954), (778, 13972), (792, 14095), (798, 14119), (800, 14134), (805, 14164), (809, 14191), (811, 14197), (816, 14230), (824, 14299), (826, 14302), (828, 14338), (842, 14428),

Gene: Leroy_18 Start: 9882, Stop: 15515, Start Num: 21

Candidate Starts for Leroy_18:

(Start: 21 @9882 has 11 MA's), (Start: 31 @9927 has 1 MA's), (33, 9948), (37, 9969), (41, 10014), (Start: 42 @10029 has 1 MA's), (48, 10113), (56, 10155), (57, 10167), (68, 10230), (71, 10245), (73, 10254), (76, 10272), (77, 10278), (88, 10326), (112, 10461), (134, 10611), (138, 10641), (184, 10935), (189, 10965), (211, 11169), (218, 11211), (219, 11214), (220, 11220), (223, 11241), (226, 11265), (235, 11322), (245, 11388), (250, 11415), (252, 11427), (254, 11445), (255, 11457), (261, 11481), (264, 11493), (267, 11532), (268, 11535), (269, 11544), (272, 11574), (274, 11580), (290, 11679), (293, 11694), (296, 11724), (297, 11736), (302, 11781), (304, 11787), (307, 11802), (310, 11832), (312, 11853), (313, 11856), (321, 11919), (325, 11946), (327, 11952), (334, 11982), (335, 11985), (337, 11991), (339, 11997), (341, 12012), (344, 12030), (349, 12111), (355, 12159), (356, 12165), (358, 12180), (360, 12192), (382, 12351), (383, 12363), (391, 12399), (392, 12405), (407, 12459), (414, 12498), (416, 12504), (417, 12507), (422, 12525), (423, 12528), (424, 12531), (429, 12555), (440, 12630), (451, 12693), (455, 12726), (458, 12771), (464, 12825), (465, 12837), (472, 12912), (473, 12933), (478, 12969), (482, 12999), (494, 13080), (496, 13089), (500, 13113), (514, 13200), (517, 13245), (518, 13248), (529, 13308), (530, 13317), (532, 13326), (554, 13434), (567, 13482), (570, 13488), (581, 13587), (582, 13590), (588, 13602), (603, 13719), (610, 13752), (619, 13803), (625, 13833), (632, 13893), (644, 13974), (649, 13995), (654, 14028), (667, 14100), (668, 14109), (686, 14223), (693, 14253), (696, 14262), (701, 14301), (702, 14304), (705, 14334), (706, 14355), (734, 14553), (743, 14616), (746, 14622), (756, 14673), (781, 14865), (790, 14952), (795, 14979), (796, 14982), (810, 15057), (814, 15081), (820, 15120), (822, 15156), (827, 15177), (836, 15264), (841, 15306), (847, 15339), (849, 15351), (865, 15495),

Gene: LitninMcQueen_18 Start: 9869, Stop: 15502, Start Num: 21

Candidate Starts for LitninMcQueen_18:

(Start: 21 @9869 has 11 MA's), (29, 9896), (Start: 31 @9914 has 1 MA's), (33, 9935), (37, 9956), (41, 10001), (Start: 42 @10016 has 1 MA's), (48, 10100), (56, 10142), (57, 10154), (68, 10217), (71, 10232), (73, 10241), (76, 10259), (77, 10265), (88, 10313), (112, 10448), (134, 10598), (138, 10628), (171, 10847), (184, 10922), (189, 10952), (211, 11156), (218, 11198), (219, 11201), (220, 11207), (223, 11228), (235, 11309), (245, 11375), (250, 11402), (252, 11414), (254, 11432), (255, 11444), (261, 11468), (264, 11480), (267, 11519), (268, 11522), (269, 11531), (272, 11561), (278, 11606), (290, 11666), (293, 11681), (296, 11711), (297, 11723), (302, 11768), (304, 11774), (307, 11789), (310, 11819), (312, 11840), (313, 11843), (321, 11906), (325, 11933), (326, 11936), (327, 11939), (328, 11945), (334, 11969), (335, 11972), (337, 11978), (339, 11984), (341, 11999), (344, 12017), (349, 12098), (355, 12146), (356, 12152), (360, 12179), (382, 12338), (383, 12350), (391, 12386), (407, 12446), (414, 12485), (416, 12491), (417, 12494), (423, 12515), (424, 12518), (440, 12617), (447, 12656), (451, 12680), (455, 12713), (458, 12758), (464, 12812), (472, 12899), (473, 12920), (478, 12956), (482, 12986), (493, 13064), (494, 13067), (496, 13076), (500, 13100), (512, 13181), (514, 13187), (517, 13232), (518, 13235), (521, 13250), (529, 13295), (530, 13304), (532, 13313), (533, 13316), (554, 13421), (567, 13469), (570, 13475), (581, 13574), (582, 13577), (588, 13589), (603, 13706), (610, 13739), (619, 13790), (625, 13820), (632, 13880), (644, 13961), (649, 13982), (654, 14015), (666, 14078), (668, 14096), (686, 14210), (693, 14240), (696, 14249), (701, 14288), (702, 14291), (705, 14321), (706, 14342), (726, 14495), (734, 14546), (743, 14609), (746, 14615), (756, 14666), (781, 14852), (790, 14939), (795, 14966), (796, 14969), (810, 15044), (814, 15068), (820, 15107), (822, 15143), (827, 15164), (836, 15251), (841, 15293), (847, 15326), (849, 15338), (861, 15416), (865, 15482),

Gene: Lutum_18 Start: 9881, Stop: 15508, Start Num: 21

Candidate Starts for Lutum_18:

(Start: 21 @9881 has 11 MA's), (29, 9908), (Start: 31 @9926 has 1 MA's), (33, 9947), (37, 9968), (41, 10013), (Start: 42 @10028 has 1 MA's), (48, 10112), (56, 10154), (57, 10166), (68, 10229), (71, 10244), (73, 10253), (76, 10271), (77, 10277), (88, 10325), (112, 10460), (134, 10610), (138, 10640), (189, 10964), (202, 11060), (211, 11168), (219, 11213), (220, 11219), (223, 11240), (226, 11264), (235, 11321), (245, 11387), (250, 11414), (252, 11426), (254, 11444), (255, 11456), (261, 11480),

(264, 11492), (267, 11531), (268, 11534), (269, 11543), (272, 11573), (278, 11618), (290, 11678),
(293, 11693), (296, 11723), (297, 11735), (302, 11780), (304, 11786), (307, 11801), (310, 11831),
(312, 11852), (313, 11855), (321, 11918), (325, 11945), (326, 11948), (327, 11951), (328, 11957),
(334, 11981), (335, 11984), (337, 11990), (339, 11996), (341, 12011), (344, 12029), (346, 12074),
(355, 12158), (356, 12164), (360, 12191), (373, 12284), (374, 12293), (382, 12350), (383, 12362),
(391, 12398), (392, 12404), (404, 12446), (407, 12458), (414, 12497), (416, 12503), (417, 12506),
(422, 12524), (423, 12527), (424, 12530), (429, 12554), (440, 12629), (447, 12668), (451, 12692),
(455, 12725), (465, 12836), (468, 12869), (473, 12932), (478, 12968), (482, 12998), (493, 13076),
(494, 13079), (496, 13088), (500, 13112), (512, 13193), (514, 13199), (517, 13244), (518, 13247),
(521, 13262), (529, 13307), (530, 13316), (532, 13325), (533, 13328), (554, 13433), (567, 13481),
(568, 13484), (570, 13487), (581, 13586), (582, 13589), (588, 13601), (603, 13718), (610, 13751),
(619, 13802), (625, 13832), (632, 13892), (644, 13973), (649, 13994), (654, 14027), (667, 14099),
(668, 14108), (686, 14222), (693, 14252), (696, 14261), (701, 14300), (702, 14303), (705, 14333),
(706, 14354), (734, 14552), (743, 14615), (746, 14621), (756, 14672), (781, 14858), (790, 14945),
(795, 14972), (796, 14975), (810, 15050), (814, 15074), (820, 15113), (822, 15149), (827, 15170),
(836, 15257), (841, 15299), (847, 15332), (849, 15344), (861, 15422), (865, 15488),

Gene: Lysidious_18 Start: 10777, Stop: 16320, Start Num: 8

Candidate Starts for Lysidious_18:

(Start: 8 @10777 has 37 MA's), (Start: 14 @10828 has 1 MA's), (15, 10837), (16, 10840), (18, 10882),
(38, 10993), (40, 11014), (47, 11134), (54, 11176), (65, 11242), (68, 11260), (72, 11281), (73, 11284),
(76, 11302), (82, 11326), (95, 11410), (97, 11416), (105, 11452), (107, 11467), (109, 11476), (135,
11644), (138, 11671), (155, 11788), (184, 11959), (189, 11989), (211, 12193), (219, 12238), (223,
12265), (224, 12277), (240, 12367), (245, 12412), (250, 12439), (254, 12469), (267, 12556), (268,
12559), (272, 12598), (293, 12718), (297, 12760), (302, 12805), (304, 12811), (306, 12823), (307,
12826), (313, 12880), (317, 12919), (320, 12940), (321, 12943), (324, 12961), (325, 12970), (330,
12988), (335, 13009), (337, 13015), (341, 13036), (345, 13063), (370, 13270), (389, 13351), (398,
13375), (404, 13387), (405, 13390), (418, 13405), (423, 13420), (424, 13423), (432, 13474), (445,
13555), (446, 13558), (452, 13591), (455, 13621), (457, 13645), (468, 13711), (505, 13978), (514,
14026), (517, 14071), (518, 14074), (521, 14089), (529, 14134), (530, 14143), (532, 14152), (542,
14203), (556, 14275), (561, 14293), (570, 14314), (581, 14413), (582, 14416), (591, 14449), (599,
14515), (600, 14533), (603, 14548), (610, 14581), (619, 14632), (627, 14683), (664, 14926), (665,
14929), (675, 15001), (676, 15004), (685, 15070), (686, 15073), (690, 15091), (700, 15151), (706,
15208), (707, 15226), (720, 15307), (721, 15310), (725, 15325), (748, 15484), (758, 15538), (762,
15604), (763, 15610), (777, 15670), (778, 15676), (792, 15799), (798, 15823), (802, 15841), (805,
15865), (806, 15871), (809, 15892), (816, 15931), (830, 16072), (833, 16084), (843, 16135), (845,
16153), (854, 16210), (864, 16303),

Gene: MAnor_16 Start: 9376, Stop: 14475, Start Num: 28

Candidate Starts for MAnor_16:

(Start: 28 @9376 has 33 MA's), (46, 9532), (56, 9637), (60, 9661), (68, 9712), (77, 9760), (88, 9808),
(90, 9817), (94, 9859), (96, 9865), (97, 9868), (105, 9904), (109, 9928), (114, 9955), (127, 10042),
(131, 10081), (133, 10087), (136, 10102), (138, 10123), (164, 10294), (175, 10357), (182, 10402),
(189, 10441), (193, 10483), (211, 10645), (214, 10654), (215, 10678), (219, 10690), (223, 10717),
(224, 10729), (230, 10774), (236, 10804), (239, 10816), (253, 10918), (254, 10921), (267, 11008),
(270, 11035), (278, 11095), (284, 11125), (289, 11146), (293, 11170), (304, 11263), (307, 11278),
(308, 11287), (309, 11299), (313, 11332), (318, 11374), (328, 11434), (329, 11437), (330, 11440),
(331, 11446), (336, 11464), (341, 11488), (350, 11593), (370, 11701), (371, 11704), (373, 11740),
(382, 11806), (384, 11821), (386, 11836), (390, 11851), (395, 11872), (396, 11875), (397, 11878),
(408, 11914), (410, 11929), (411, 11935), (415, 11956), (422, 11980), (424, 11986), (444, 12112),
(450, 12142), (455, 12181), (461, 12229), (465, 12250), (466, 12253), (467, 12259), (474, 12325),
(481, 12370), (484, 12403), (486, 12424), (498, 12478), (526, 12628), (528, 12637), (543, 12724),
(585, 12901), (607, 13042), (616, 13072), (638, 13210), (653, 13291), (682, 13444), (686, 13474),

(727, 13696), (729, 13705), (730, 13711), (740, 13747), (761, 13864), (773, 13912), (778, 13930), (792, 14053), (798, 14077), (800, 14092), (805, 14122), (809, 14149), (811, 14155), (816, 14188), (824, 14257), (826, 14260), (828, 14296), (837, 14368), (838, 14371), (842, 14386),

Gene: MScarn_18 Start: 9601, Stop: 14400, Start Num: 81

Candidate Starts for MScarn_18:

(Start: 81 @9601 has 23 MA's), (Start: 86 @9628 has 2 MA's), (88, 9634), (108, 9757), (124, 9859), (129, 9904), (132, 9916), (136, 9934), (139, 9961), (140, 9964), (142, 9979), (150, 10030), (151, 10033), (158, 10090), (159, 10093), (168, 10135), (171, 10153), (178, 10198), (187, 10234), (191, 10267), (196, 10300), (197, 10312), (205, 10366), (208, 10405), (210, 10420), (213, 10429), (217, 10456), (225, 10507), (236, 10567), (239, 10576), (246, 10630), (258, 10693), (261, 10708), (286, 10861), (292, 10888), (302, 10981), (304, 10987), (307, 11002), (311, 11041), (321, 11119), (327, 11152), (337, 11191), (340, 11209), (341, 11212), (345, 11239), (348, 11296), (350, 11317), (366, 11428), (371, 11449), (373, 11485), (379, 11527), (380, 11539), (382, 11551), (390, 11596), (391, 11599), (395, 11617), (396, 11620), (397, 11623), (414, 11698), (424, 11731), (433, 11791), (444, 11857), (445, 11860), (446, 11863), (448, 11881), (462, 11980), (465, 11995), (466, 11998), (484, 12148), (486, 12169), (495, 12211), (501, 12238), (502, 12244), (528, 12388), (543, 12475), (552, 12517), (562, 12553), (579, 12628), (589, 12679), (595, 12718), (597, 12742), (617, 12847), (629, 12904), (651, 13042), (661, 13117), (686, 13261), (691, 13282), (713, 13459), (715, 13465), (761, 13789), (763, 13795), (778, 13855), (783, 13906), (792, 13978), (800, 14017), (805, 14047), (816, 14113), (821, 14161), (828, 14221), (842, 14311), (852, 14371),

Gene: MaVan_18 Start: 10619, Stop: 15748, Start Num: 28

Candidate Starts for MaVan_18:

(23, 10598), (Start: 28 @10619 has 33 MA's), (32, 10646), (46, 10775), (54, 10871), (62, 10922), (74, 10979), (79, 11012), (80, 11015), (94, 11102), (98, 11114), (107, 11162), (108, 11165), (109, 11171), (116, 11225), (118, 11231), (125, 11279), (136, 11345), (138, 11366), (198, 11759), (199, 11762), (208, 11864), (219, 11930), (220, 11936), (223, 11957), (254, 12161), (256, 12179), (261, 12197), (264, 12209), (267, 12248), (269, 12260), (274, 12296), (281, 12353), (286, 12377), (288, 12383), (304, 12503), (307, 12518), (311, 12557), (320, 12632), (326, 12665), (330, 12680), (331, 12686), (332, 12692), (341, 12728), (351, 12836), (360, 12908), (370, 12962), (372, 12968), (390, 13112), (396, 13136), (411, 13196), (412, 13208), (414, 13214), (422, 13241), (423, 13244), (424, 13247), (438, 13340), (440, 13346), (448, 13397), (457, 13466), (463, 13499), (466, 13514), (467, 13520), (473, 13577), (475, 13589), (480, 13628), (481, 13631), (483, 13652), (484, 13664), (486, 13685), (487, 13688), (495, 13727), (498, 13739), (501, 13754), (526, 13895), (543, 13991), (555, 14057), (565, 14078), (569, 14084), (607, 14321), (616, 14351), (624, 14390), (642, 14525), (650, 14555), (653, 14576), (682, 14735), (686, 14768), (729, 14981), (737, 14999), (740, 15005), (761, 15134), (778, 15200), (783, 15251), (792, 15323), (800, 15362), (805, 15392), (811, 15425), (816, 15458), (826, 15530), (831, 15602), (841, 15656), (843, 15662), (852, 15719),

Gene: MagicMan_17 Start: 10932, Stop: 16046, Start Num: 25

Candidate Starts for MagicMan_17:

(Start: 25 @10932 has 13 MA's), (Start: 28 @10941 has 33 MA's), (57, 11214), (59, 11223), (63, 11253), (66, 11262), (76, 11319), (90, 11382), (101, 11454), (106, 11475), (109, 11493), (131, 11646), (138, 11688), (147, 11742), (152, 11775), (182, 11967), (183, 11970), (189, 12006), (199, 12084), (204, 12123), (211, 12207), (215, 12240), (218, 12249), (220, 12258), (224, 12291), (226, 12303), (229, 12327), (238, 12372), (240, 12381), (244, 12417), (245, 12426), (250, 12453), (252, 12465), (254, 12483), (261, 12519), (276, 12642), (283, 12684), (302, 12819), (303, 12822), (304, 12825), (307, 12840), (313, 12894), (317, 12933), (330, 13002), (332, 13014), (337, 13029), (341, 13050), (343, 13065), (345, 13077), (346, 13113), (349, 13149), (374, 13311), (406, 13368), (413, 13380), (414, 13383), (424, 13416), (438, 13509), (440, 13515), (442, 13521), (444, 13542), (445, 13545), (446, 13548), (455, 13611), (459, 13647), (462, 13662), (467, 13686), (469, 13701), (470, 13704), (471, 13710), (477, 13764), (489, 13863), (497, 13905), (510, 13983), (514, 14007), (519, 14052),

(544, 14178), (548, 14187), (551, 14205), (552, 14208), (563, 14247), (564, 14250), (568, 14259), (594, 14418), (615, 14538), (629, 14616), (638, 14664), (640, 14676), (652, 14736), (670, 14853), (676, 14880), (678, 14898), (692, 14976), (694, 14982), (697, 14991), (698, 15018), (708, 15111), (716, 15150), (722, 15192), (749, 15345), (756, 15378), (757, 15381), (760, 15438), (764, 15447), (767, 15459), (774, 15480), (778, 15501), (807, 15693), (814, 15732), (826, 15801), (829, 15855), (857, 16008),

Gene: Malachai_18 Start: 10785, Stop: 16274, Start Num: 8

Candidate Starts for Malachai_18:

(Start: 8 @10785 has 37 MA's), (13, 10824), (Start: 14 @10836 has 1 MA's), (15, 10845), (16, 10848), (18, 10890), (38, 11001), (40, 11022), (47, 11142), (54, 11184), (65, 11250), (68, 11268), (71, 11283), (72, 11289), (73, 11292), (76, 11310), (82, 11334), (95, 11418), (105, 11460), (107, 11475), (109, 11484), (135, 11652), (138, 11679), (149, 11754), (155, 11796), (163, 11844), (184, 11967), (189, 11997), (211, 12201), (219, 12246), (223, 12273), (224, 12285), (240, 12375), (245, 12420), (250, 12447), (254, 12477), (267, 12564), (272, 12606), (293, 12726), (297, 12768), (302, 12813), (304, 12819), (306, 12831), (307, 12834), (313, 12888), (317, 12927), (320, 12948), (321, 12951), (324, 12969), (330, 12996), (337, 13023), (341, 13044), (345, 13071), (349, 13143), (385, 13344), (389, 13359), (398, 13383), (405, 13398), (423, 13428), (424, 13431), (432, 13482), (445, 13563), (446, 13566), (452, 13599), (455, 13629), (457, 13653), (468, 13719), (505, 13986), (514, 14034), (517, 14079), (518, 14082), (521, 14097), (529, 14142), (530, 14151), (532, 14160), (542, 14211), (556, 14283), (561, 14301), (570, 14322), (581, 14421), (582, 14424), (591, 14457), (599, 14523), (600, 14541), (603, 14556), (610, 14589), (619, 14640), (627, 14691), (664, 14934), (665, 14937), (676, 15012), (685, 15078), (686, 15081), (690, 15099), (700, 15159), (720, 15315), (721, 15318), (725, 15333), (758, 15552), (766, 15609), (770, 15624), (779, 15672), (784, 15717), (807, 15837), (808, 15846), (815, 15885), (825, 15957), (830, 16026), (833, 16038), (843, 16089), (845, 16107), (854, 16164), (864, 16257),

Gene: Malisha_19 Start: 11668, Stop: 17280, Start Num: 22

Candidate Starts for Malisha_19:

(Start: 22 @11668 has 5 MA's), (26, 11686), (29, 11695), (Start: 31 @11713 has 1 MA's), (33, 11734), (35, 11746), (41, 11800), (Start: 42 @11815 has 1 MA's), (63, 11992), (68, 12016), (73, 12040), (76, 12058), (85, 12103), (96, 12169), (97, 12172), (109, 12232), (134, 12397), (138, 12427), (159, 12583), (184, 12721), (202, 12847), (211, 12955), (215, 12988), (219, 13000), (223, 13027), (245, 13174), (250, 13201), (254, 13231), (261, 13267), (267, 13318), (268, 13321), (269, 13330), (274, 13366), (283, 13432), (293, 13480), (295, 13495), (296, 13510), (301, 13564), (302, 13567), (304, 13573), (306, 13585), (307, 13588), (312, 13639), (313, 13642), (317, 13681), (337, 13777), (341, 13798), (363, 14002), (370, 14032), (379, 14113), (382, 14137), (383, 14149), (391, 14185), (407, 14245), (414, 14284), (417, 14293), (423, 14314), (424, 14317), (440, 14416), (447, 14455), (451, 14479), (455, 14512), (458, 14557), (464, 14611), (465, 14623), (472, 14698), (473, 14719), (478, 14755), (482, 14785), (494, 14866), (496, 14875), (500, 14899), (512, 14980), (514, 14986), (517, 15031), (518, 15034), (529, 15094), (530, 15103), (532, 15112), (554, 15220), (567, 15268), (570, 15274), (581, 15373), (582, 15376), (588, 15388), (603, 15505), (610, 15538), (618, 15586), (619, 15589), (625, 15619), (632, 15679), (644, 15760), (649, 15781), (650, 15784), (666, 15877), (667, 15886), (683, 15988), (686, 16009), (693, 16039), (696, 16048), (701, 16087), (702, 16090), (703, 16093), (705, 16120), (711, 16174), (726, 16291), (739, 16375), (741, 16387), (743, 16399), (746, 16405), (751, 16432), (756, 16456), (781, 16633), (790, 16720), (794, 16738), (795, 16747), (810, 16825), (812, 16840), (814, 16849), (822, 16924), (823, 16933), (827, 16945), (836, 17032), (841, 17074), (847, 17107), (849, 17119), (861, 17194), (865, 17260),

Gene: Margaret_19 Start: 10311, Stop: 14516, Start Num: 81

Candidate Starts for Margaret_19:

(Start: 81 @10311 has 23 MA's), (Start: 86 @10338 has 2 MA's), (131, 10626), (136, 10647), (137, 10653), (141, 10686), (143, 10704), (147, 10728), (157, 10818), (160, 10827), (162, 10836), (169,

10869), (172, 10896), (174, 10905), (176, 10929), (203, 11082), (207, 11145), (209, 11160), (217, 11196), (222, 11226), (225, 11247), (233, 11289), (247, 11370), (259, 11445), (260, 11454), (265, 11475), (286, 11622), (307, 11763), (309, 11784), (313, 11817), (314, 11835), (317, 11856), (320, 11877), (324, 11898), (336, 11949), (337, 11952), (338, 11955), (341, 11973), (361, 12054), (368, 12084), (373, 12135), (402, 12189), (414, 12216), (424, 12249), (433, 12309), (445, 12378), (446, 12381), (459, 12483), (460, 12489), (465, 12513), (469, 12537), (470, 12540), (481, 12633), (484, 12666), (486, 12687), (488, 12696), (490, 12705), (492, 12711), (524, 12864), (536, 12933), (538, 12939), (547, 12975), (585, 13104), (607, 13245), (613, 13269), (624, 13314), (647, 13467), (648, 13470), (682, 13659), (686, 13689), (753, 13866), (766, 13938), (773, 13962), (777, 13974), (780, 13998), (782, 14010), (791, 14094), (792, 14100), (802, 14142), (805, 14163), (811, 14196), (816, 14229), (819, 14250), (821, 14277), (826, 14301), (828, 14337), (834, 14385), (852, 14487),

Gene: Mayweather_17 Start: 10006, Stop: 15090, Start Num: 28

Candidate Starts for Mayweather_17:

(Start: 28 @10006 has 33 MA's), (46, 10162), (60, 10291), (64, 10321), (77, 10390), (80, 10402), (83, 10417), (88, 10438), (90, 10447), (94, 10489), (97, 10498), (105, 10534), (109, 10558), (118, 10618), (127, 10672), (131, 10711), (133, 10717), (136, 10732), (138, 10753), (164, 10924), (175, 10987), (182, 11032), (193, 11113), (211, 11272), (215, 11305), (219, 11317), (223, 11344), (230, 11401), (236, 11431), (239, 11443), (253, 11545), (254, 11548), (267, 11635), (274, 11683), (293, 11797), (304, 11890), (307, 11905), (309, 11926), (313, 11959), (318, 12001), (324, 12040), (329, 12064), (330, 12067), (331, 12073), (336, 12091), (341, 12115), (350, 12220), (359, 12268), (370, 12328), (371, 12331), (373, 12367), (382, 12433), (384, 12448), (390, 12478), (395, 12499), (396, 12502), (408, 12541), (411, 12562), (415, 12583), (422, 12607), (424, 12613), (444, 12739), (450, 12769), (455, 12808), (461, 12856), (465, 12877), (466, 12880), (474, 12952), (481, 12997), (484, 13030), (486, 13051), (498, 13105), (509, 13180), (528, 13264), (543, 13351), (607, 13669), (616, 13699), (638, 13837), (648, 13888), (653, 13918), (682, 14071), (686, 14101), (727, 14311), (729, 14320), (730, 14326), (740, 14362), (761, 14479), (763, 14485), (773, 14527), (778, 14545), (792, 14668), (798, 14692), (800, 14707), (805, 14737), (809, 14764), (811, 14770), (816, 14803), (824, 14872), (826, 14875), (828, 14911), (837, 14983), (842, 15001),

Gene: McDazzle_15 Start: 10003, Stop: 14937, Start Num: 46

Candidate Starts for McDazzle_15:

(Start: 28 @9847 has 33 MA's), (46, 10003), (56, 10108), (60, 10132), (68, 10183), (77, 10231), (88, 10279), (90, 10288), (94, 10330), (96, 10336), (97, 10339), (105, 10375), (109, 10399), (114, 10426), (127, 10513), (131, 10552), (133, 10558), (136, 10573), (138, 10594), (147, 10648), (164, 10765), (175, 10828), (182, 10873), (189, 10912), (193, 10954), (211, 11116), (214, 11125), (215, 11149), (219, 11161), (223, 11188), (224, 11200), (230, 11245), (236, 11275), (239, 11287), (253, 11389), (254, 11392), (267, 11479), (270, 11506), (278, 11566), (284, 11596), (289, 11617), (293, 11641), (299, 11692), (304, 11734), (307, 11749), (308, 11758), (309, 11770), (313, 11803), (318, 11845), (328, 11905), (329, 11908), (330, 11911), (336, 11935), (341, 11959), (350, 12064), (359, 12112), (370, 12172), (371, 12175), (373, 12211), (382, 12277), (384, 12292), (386, 12307), (390, 12322), (395, 12343), (396, 12346), (408, 12385), (410, 12400), (411, 12406), (415, 12427), (422, 12451), (424, 12457), (444, 12583), (450, 12613), (455, 12652), (461, 12700), (465, 12721), (466, 12724), (467, 12730), (474, 12796), (481, 12841), (484, 12874), (486, 12895), (498, 12949), (526, 13099), (528, 13108), (543, 13195), (585, 13372), (607, 13513), (616, 13543), (638, 13681), (653, 13762), (682, 13915), (686, 13945), (727, 14167), (729, 14176), (730, 14182), (740, 14209), (761, 14326), (763, 14332), (773, 14374), (778, 14392), (792, 14515), (798, 14539), (800, 14554), (805, 14584), (809, 14611), (811, 14617), (816, 14650), (824, 14719), (826, 14722), (828, 14758), (837, 14830), (842, 14848),

Gene: Melba_17 Start: 10274, Stop: 15796, Start Num: 8

Candidate Starts for Melba_17:

(Start: 8 @10274 has 37 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 1 MA's), (15, 10334), (16, 10337), (18, 10379), (38, 10490), (40, 10511), (47, 10631), (54, 10673), (65, 10739), (68, 10757), (72, 10778), (73, 10781), (76, 10799), (82, 10823), (95, 10907), (96, 10910), (105, 10949), (107, 10964), (109, 10973), (135, 11141), (138, 11168), (155, 11285), (184, 11456), (189, 11486), (211, 11690), (219, 11735), (223, 11762), (224, 11774), (240, 11864), (245, 11909), (250, 11936), (254, 11966), (267, 12053), (268, 12056), (272, 12095), (285, 12179), (293, 12215), (297, 12257), (302, 12302), (304, 12308), (306, 12320), (307, 12323), (313, 12377), (317, 12416), (320, 12437), (321, 12440), (324, 12458), (325, 12467), (330, 12485), (335, 12506), (337, 12512), (341, 12533), (345, 12560), (350, 12638), (389, 12827), (398, 12851), (404, 12863), (405, 12866), (418, 12881), (423, 12896), (424, 12899), (432, 12950), (445, 13031), (446, 13034), (452, 13067), (455, 13097), (457, 13121), (505, 13454), (514, 13502), (517, 13547), (518, 13550), (521, 13565), (529, 13610), (530, 13619), (532, 13628), (542, 13679), (556, 13751), (561, 13769), (570, 13790), (581, 13889), (582, 13892), (591, 13925), (599, 13991), (600, 14009), (603, 14024), (610, 14057), (619, 14108), (627, 14159), (633, 14207), (664, 14402), (665, 14405), (675, 14477), (676, 14480), (685, 14546), (686, 14549), (690, 14567), (700, 14627), (706, 14684), (707, 14702), (720, 14783), (721, 14786), (725, 14801), (758, 15014), (762, 15080), (776, 15134), (777, 15146), (778, 15152), (792, 15275), (798, 15299), (802, 15317), (805, 15341), (806, 15347), (809, 15368), (816, 15407), (830, 15548), (833, 15560), (843, 15611), (845, 15629), (864, 15779),

Gene: Mellie_16 Start: 10014, Stop: 15557, Start Num: 8

Candidate Starts for Mellie_16:

(Start: 8 @10014 has 37 MA's), (Start: 11 @10029 has 1 MA's), (Start: 12 @10035 has 1 MA's), (Start: 14 @10065 has 1 MA's), (15, 10074), (16, 10077), (18, 10119), (38, 10230), (40, 10251), (65, 10479), (68, 10497), (71, 10512), (72, 10518), (73, 10521), (76, 10539), (82, 10563), (95, 10647), (97, 10653), (105, 10689), (107, 10704), (109, 10713), (135, 10881), (138, 10908), (155, 11025), (184, 11196), (189, 11226), (211, 11430), (219, 11475), (223, 11502), (224, 11514), (240, 11604), (250, 11676), (254, 11706), (267, 11793), (268, 11796), (272, 11835), (293, 11955), (297, 11997), (302, 12042), (304, 12048), (306, 12060), (307, 12063), (313, 12117), (317, 12156), (320, 12177), (321, 12180), (324, 12198), (335, 12246), (337, 12252), (341, 12273), (345, 12300), (349, 12372), (370, 12507), (389, 12588), (398, 12612), (405, 12627), (423, 12657), (424, 12660), (432, 12711), (445, 12792), (446, 12795), (452, 12828), (455, 12858), (457, 12882), (468, 12948), (505, 13215), (508, 13233), (514, 13263), (517, 13308), (518, 13311), (521, 13326), (522, 13335), (529, 13371), (530, 13380), (532, 13389), (542, 13440), (556, 13512), (561, 13530), (570, 13551), (581, 13650), (582, 13653), (591, 13686), (599, 13752), (600, 13770), (603, 13785), (610, 13818), (619, 13869), (627, 13920), (664, 14163), (665, 14166), (675, 14238), (676, 14241), (685, 14307), (686, 14310), (690, 14328), (700, 14388), (706, 14445), (707, 14463), (720, 14544), (721, 14547), (725, 14562), (758, 14775), (762, 14841), (763, 14847), (777, 14907), (778, 14913), (792, 15036), (798, 15060), (802, 15078), (805, 15102), (806, 15108), (809, 15129), (816, 15168), (830, 15309), (833, 15321), (843, 15372), (845, 15390), (864, 15540),

Gene: MintFen_17 Start: 10274, Stop: 15796, Start Num: 8

Candidate Starts for MintFen_17:

(Start: 8 @10274 has 37 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 1 MA's), (15, 10334), (16, 10337), (18, 10379), (38, 10490), (40, 10511), (47, 10631), (54, 10673), (65, 10739), (68, 10757), (72, 10778), (73, 10781), (76, 10799), (82, 10823), (95, 10907), (96, 10910), (105, 10949), (107, 10964), (109, 10973), (135, 11141), (138, 11168), (155, 11285), (184, 11456), (189, 11486), (211, 11690), (219, 11735), (223, 11762), (224, 11774), (240, 11864), (245, 11909), (250, 11936), (254, 11966), (267, 12053), (268, 12056), (272, 12095), (285, 12179), (293, 12215), (297, 12257), (302, 12302), (304, 12308), (306, 12320), (307, 12323), (313, 12377), (317, 12416), (320, 12437), (321, 12440), (324, 12458), (325, 12467), (330, 12485), (335, 12506), (337, 12512), (341, 12533), (345, 12560), (350, 12638), (389, 12827), (398, 12851), (404, 12863), (405, 12866), (418, 12881), (423, 12896), (424, 12899), (432, 12950), (445, 13031), (446, 13034), (452, 13067), (455, 13097), (457, 13121), (505, 13454), (514, 13502), (517, 13547), (518, 13550), (521,

13565), (529, 13610), (530, 13619), (532, 13628), (542, 13679), (556, 13751), (561, 13769), (570, 13790), (581, 13889), (582, 13892), (591, 13925), (599, 13991), (600, 14009), (603, 14024), (610, 14057), (619, 14108), (627, 14159), (633, 14207), (664, 14402), (665, 14405), (675, 14477), (676, 14480), (685, 14546), (686, 14549), (690, 14567), (700, 14627), (706, 14684), (707, 14702), (720, 14783), (721, 14786), (725, 14801), (758, 15014), (762, 15080), (776, 15134), (777, 15146), (778, 15152), (792, 15275), (798, 15299), (802, 15317), (805, 15341), (806, 15347), (809, 15368), (816, 15407), (830, 15548), (833, 15560), (843, 15611), (845, 15629), (864, 15779),

Gene: MissRona_19 Start: 10619, Stop: 16108, Start Num: 8

Candidate Starts for MissRona_19:

(Start: 8 @10619 has 37 MA's), (Start: 11 @10634 has 1 MA's), (Start: 12 @10640 has 1 MA's), (Start: 14 @10670 has 1 MA's), (15, 10679), (16, 10682), (18, 10724), (38, 10835), (40, 10856), (47, 10976), (54, 11018), (65, 11084), (68, 11102), (72, 11123), (73, 11126), (76, 11144), (82, 11168), (95, 11252), (105, 11294), (107, 11309), (109, 11318), (135, 11486), (138, 11513), (155, 11630), (184, 11801), (189, 11831), (211, 12035), (219, 12080), (223, 12107), (224, 12119), (226, 12131), (240, 12209), (245, 12254), (250, 12281), (254, 12311), (267, 12398), (268, 12401), (272, 12440), (281, 12503), (283, 12512), (293, 12560), (297, 12602), (302, 12647), (304, 12653), (307, 12668), (313, 12722), (317, 12761), (320, 12782), (321, 12785), (324, 12803), (330, 12830), (335, 12851), (337, 12857), (341, 12878), (344, 12896), (345, 12905), (385, 13178), (405, 13232), (423, 13262), (424, 13265), (432, 13316), (445, 13397), (446, 13400), (452, 13433), (455, 13463), (457, 13487), (468, 13553), (505, 13820), (514, 13868), (516, 13901), (517, 13913), (518, 13916), (529, 13976), (530, 13985), (532, 13994), (542, 14045), (556, 14117), (561, 14135), (570, 14156), (581, 14255), (582, 14258), (591, 14291), (599, 14357), (600, 14375), (603, 14390), (610, 14423), (619, 14474), (627, 14525), (637, 14594), (664, 14768), (665, 14771), (675, 14843), (676, 14846), (685, 14912), (686, 14915), (690, 14933), (700, 14993), (706, 15050), (707, 15068), (720, 15149), (721, 15152), (725, 15167), (748, 15338), (758, 15392), (770, 15464), (773, 15473), (779, 15509), (787, 15569), (789, 15587), (793, 15605), (804, 15650), (808, 15683), (825, 15794), (830, 15863), (843, 15926), (845, 15944), (864, 16094),

Gene: MunkgeeRoachy_16 Start: 9677, Stop: 14815, Start Num: 28

Candidate Starts for MunkgeeRoachy_16:

(Start: 22 @9653 has 5 MA's), (Start: 28 @9677 has 33 MA's), (32, 9704), (46, 9833), (49, 9908), (77, 10061), (78, 10064), (94, 10160), (97, 10169), (103, 10199), (105, 10205), (107, 10220), (108, 10223), (112, 10244), (122, 10316), (125, 10337), (136, 10403), (138, 10424), (155, 10541), (182, 10703), (189, 10742), (198, 10817), (215, 10976), (219, 10988), (223, 11015), (228, 11060), (230, 11072), (248, 11180), (252, 11201), (255, 11231), (261, 11255), (264, 11267), (267, 11306), (271, 11339), (288, 11441), (289, 11444), (292, 11462), (293, 11468), (304, 11561), (307, 11576), (311, 11615), (317, 11669), (324, 11711), (333, 11753), (340, 11783), (341, 11786), (351, 11894), (352, 11897), (357, 11948), (371, 12023), (380, 12113), (382, 12125), (390, 12170), (395, 12191), (396, 12194), (397, 12197), (414, 12272), (424, 12305), (428, 12326), (432, 12356), (440, 12404), (442, 12410), (446, 12437), (466, 12572), (481, 12689), (484, 12722), (486, 12743), (487, 12746), (501, 12812), (502, 12818), (504, 12833), (526, 12953), (528, 12962), (543, 13046), (607, 13367), (646, 13586), (653, 13622), (691, 13835), (729, 14027), (740, 14075), (747, 14096), (761, 14204), (778, 14270), (780, 14288), (792, 14393), (799, 14423), (800, 14432), (805, 14462), (816, 14528), (821, 14576), (828, 14636), (841, 14723), (852, 14786),

Gene: Murp_17 Start: 10264, Stop: 15864, Start Num: 8

Candidate Starts for Murp_17:

(Start: 8 @10264 has 37 MA's), (Start: 11 @10279 has 1 MA's), (Start: 12 @10285 has 1 MA's), (Start: 14 @10315 has 1 MA's), (15, 10324), (16, 10327), (18, 10369), (38, 10480), (40, 10501), (47, 10621), (55, 10669), (65, 10729), (68, 10747), (72, 10768), (73, 10771), (76, 10789), (95, 10897), (97, 10903), (105, 10939), (107, 10954), (109, 10963), (135, 11131), (138, 11158), (155, 11275), (184, 11446), (189, 11476), (202, 11572), (211, 11680), (219, 11725), (223, 11752), (224, 11764), (240, 11854),

(245, 11899), (250, 11926), (254, 11956), (267, 12043), (272, 12085), (274, 12091), (293, 12205), (297, 12247), (302, 12292), (304, 12298), (307, 12313), (313, 12367), (317, 12406), (320, 12427), (321, 12430), (324, 12448), (325, 12457), (330, 12475), (335, 12496), (337, 12502), (341, 12523), (345, 12550), (347, 12598), (350, 12628), (385, 12802), (398, 12841), (405, 12856), (423, 12886), (424, 12889), (432, 12940), (445, 13021), (446, 13024), (452, 13057), (455, 13087), (457, 13111), (467, 13165), (468, 13177), (493, 13366), (505, 13444), (512, 13486), (517, 13537), (518, 13540), (521, 13555), (523, 13567), (529, 13600), (530, 13609), (549, 13723), (558, 13777), (560, 13795), (576, 13879), (577, 13885), (580, 13921), (629, 14245), (635, 14293), (637, 14305), (645, 14368), (657, 14437), (662, 14467), (663, 14470), (664, 14479), (665, 14482), (669, 14515), (675, 14554), (676, 14557), (685, 14623), (686, 14626), (690, 14644), (700, 14704), (706, 14761), (707, 14779), (720, 14860), (725, 14878), (758, 15079), (762, 15145), (777, 15211), (778, 15217), (792, 15343), (798, 15367), (802, 15385), (805, 15409), (806, 15415), (809, 15436), (816, 15475), (830, 15616), (843, 15679), (845, 15697), (854, 15757), (864, 15850),

Gene: Nibbles_18 Start: 10619, Stop: 15748, Start Num: 28

Candidate Starts for Nibbles_18:

(23, 10598), (Start: 28 @10619 has 33 MA's), (32, 10646), (46, 10775), (54, 10871), (62, 10922), (74, 10979), (79, 11012), (80, 11015), (94, 11102), (98, 11114), (107, 11162), (108, 11165), (109, 11171), (116, 11225), (118, 11231), (125, 11279), (136, 11345), (138, 11366), (198, 11759), (199, 11762), (208, 11864), (219, 11930), (220, 11936), (223, 11957), (254, 12161), (256, 12179), (259, 12185), (261, 12197), (264, 12209), (267, 12248), (269, 12260), (274, 12296), (281, 12353), (286, 12377), (304, 12503), (307, 12518), (311, 12557), (320, 12632), (326, 12665), (330, 12680), (331, 12686), (332, 12692), (341, 12728), (351, 12836), (360, 12908), (370, 12962), (390, 13112), (396, 13136), (411, 13196), (412, 13208), (414, 13214), (422, 13241), (423, 13244), (424, 13247), (438, 13340), (440, 13346), (448, 13397), (457, 13466), (463, 13499), (466, 13514), (467, 13520), (473, 13577), (475, 13589), (480, 13628), (481, 13631), (483, 13652), (484, 13664), (486, 13685), (487, 13688), (495, 13727), (498, 13739), (501, 13754), (526, 13895), (543, 13991), (555, 14057), (565, 14078), (569, 14084), (607, 14321), (616, 14351), (624, 14390), (642, 14525), (650, 14555), (653, 14576), (682, 14735), (686, 14768), (729, 14981), (737, 14999), (740, 15005), (761, 15134), (778, 15200), (783, 15251), (792, 15323), (800, 15362), (805, 15392), (811, 15425), (816, 15458), (826, 15530), (831, 15602), (841, 15656), (843, 15662), (852, 15719),

Gene: Nina_17 Start: 10662, Stop: 15809, Start Num: 28

Candidate Starts for Nina_17:

(Start: 22 @10638 has 5 MA's), (Start: 28 @10662 has 33 MA's), (32, 10689), (46, 10818), (51, 10911), (52, 10914), (67, 11004), (72, 11028), (82, 11073), (83, 11082), (94, 11154), (96, 11160), (97, 11163), (102, 11190), (104, 11196), (107, 11214), (108, 11217), (112, 11238), (122, 11310), (125, 11331), (136, 11397), (138, 11418), (155, 11535), (182, 11697), (189, 11736), (198, 11811), (215, 11970), (219, 11982), (223, 12009), (228, 12054), (230, 12066), (245, 12156), (248, 12174), (252, 12195), (255, 12225), (261, 12249), (264, 12261), (267, 12300), (271, 12333), (288, 12435), (289, 12438), (293, 12462), (304, 12555), (307, 12570), (311, 12609), (317, 12663), (324, 12705), (326, 12717), (333, 12747), (340, 12777), (341, 12780), (351, 12888), (352, 12891), (357, 12942), (358, 12948), (371, 13017), (380, 13107), (382, 13119), (390, 13164), (395, 13185), (396, 13188), (397, 13191), (414, 13266), (424, 13299), (428, 13320), (432, 13350), (440, 13398), (442, 13404), (446, 13431), (466, 13566), (481, 13683), (484, 13716), (486, 13737), (501, 13806), (502, 13812), (504, 13827), (526, 13947), (528, 13956), (543, 14040), (607, 14361), (612, 14382), (646, 14580), (653, 14616), (691, 14829), (729, 15021), (740, 15069), (747, 15090), (761, 15198), (778, 15264), (780, 15282), (792, 15387), (799, 15417), (800, 15426), (805, 15456), (816, 15522), (821, 15570), (828, 15630), (841, 15717), (852, 15780),

Gene: Nodigi_18 Start: 10594, Stop: 14802, Start Num: 81

Candidate Starts for Nodigi_18:

(Start: 81 @10594 has 23 MA's), (Start: 86 @10621 has 2 MA's), (136, 10930), (143, 10987), (147, 11011), (153, 11056), (157, 11101), (162, 11119), (166, 11134), (169, 11152), (170, 11161), (177, 11215), (188, 11272), (200, 11353), (205, 11401), (207, 11440), (209, 11455), (214, 11464), (217, 11491), (222, 11521), (225, 11542), (247, 11665), (257, 11731), (266, 11794), (279, 11881), (293, 11950), (307, 12058), (309, 12079), (313, 12112), (314, 12130), (316, 12148), (320, 12172), (325, 12202), (337, 12247), (338, 12250), (341, 12268), (368, 12379), (370, 12391), (371, 12394), (373, 12430), (389, 12472), (402, 12484), (414, 12511), (424, 12544), (436, 12619), (445, 12673), (446, 12676), (448, 12694), (455, 12739), (460, 12784), (469, 12832), (470, 12835), (484, 12961), (488, 12991), (490, 13000), (492, 13006), (524, 13159), (531, 13204), (536, 13228), (538, 13234), (547, 13270), (559, 13327), (578, 13378), (586, 13423), (607, 13561), (616, 13591), (647, 13783), (682, 13960), (753, 14152), (766, 14224), (777, 14260), (780, 14284), (782, 14296), (785, 14338), (792, 14386), (805, 14449), (809, 14476), (811, 14482), (816, 14515), (819, 14536), (821, 14563), (826, 14587), (828, 14623), (830, 14650), (832, 14659), (834, 14671), (852, 14773),

Gene: Obliviate_16 Start: 10043, Stop: 15586, Start Num: 8

Candidate Starts for Obliviate_16:

(Start: 8 @10043 has 37 MA's), (Start: 11 @10058 has 1 MA's), (Start: 12 @10064 has 1 MA's), (Start: 14 @10094 has 1 MA's), (15, 10103), (16, 10106), (18, 10148), (38, 10259), (40, 10280), (65, 10508), (68, 10526), (71, 10541), (72, 10547), (73, 10550), (76, 10568), (82, 10592), (95, 10676), (97, 10682), (105, 10718), (107, 10733), (109, 10742), (135, 10910), (138, 10937), (155, 11054), (164, 11108), (184, 11225), (189, 11255), (211, 11459), (219, 11504), (223, 11531), (224, 11543), (240, 11633), (245, 11678), (250, 11705), (254, 11735), (267, 11822), (268, 11825), (272, 11864), (293, 11984), (297, 12026), (302, 12071), (304, 12077), (306, 12089), (307, 12092), (313, 12146), (317, 12185), (320, 12206), (321, 12209), (324, 12227), (330, 12254), (335, 12275), (337, 12281), (341, 12302), (345, 12329), (349, 12401), (370, 12536), (389, 12617), (398, 12641), (405, 12656), (423, 12686), (424, 12689), (432, 12740), (445, 12821), (446, 12824), (452, 12857), (455, 12887), (457, 12911), (468, 12977), (505, 13244), (508, 13262), (514, 13292), (517, 13337), (518, 13340), (521, 13355), (522, 13364), (529, 13400), (530, 13409), (532, 13418), (542, 13469), (556, 13541), (561, 13559), (570, 13580), (581, 13679), (582, 13682), (591, 13715), (599, 13781), (600, 13799), (603, 13814), (610, 13847), (619, 13898), (627, 13949), (664, 14192), (665, 14195), (675, 14267), (676, 14270), (685, 14336), (686, 14339), (690, 14357), (700, 14417), (706, 14474), (707, 14492), (720, 14573), (721, 14576), (725, 14591), (748, 14750), (758, 14804), (762, 14870), (763, 14876), (777, 14936), (778, 14942), (783, 14993), (792, 15065), (798, 15089), (802, 15107), (805, 15131), (806, 15137), (809, 15158), (816, 15197), (830, 15338), (833, 15350), (843, 15401), (845, 15419), (864, 15569),

Gene: Opie_17 Start: 10940, Stop: 16069, Start Num: 25

Candidate Starts for Opie_17:

(Start: 25 @10940 has 13 MA's), (Start: 28 @10949 has 33 MA's), (57, 11222), (59, 11231), (76, 11327), (84, 11369), (90, 11390), (106, 11483), (109, 11501), (138, 11696), (161, 11855), (182, 11975), (183, 11978), (189, 12014), (199, 12092), (211, 12215), (215, 12248), (218, 12257), (220, 12266), (224, 12299), (226, 12311), (229, 12335), (238, 12380), (244, 12425), (250, 12461), (252, 12473), (254, 12491), (261, 12527), (276, 12650), (283, 12692), (302, 12827), (303, 12830), (304, 12833), (307, 12848), (313, 12902), (317, 12941), (332, 13022), (337, 13037), (341, 13058), (343, 13073), (345, 13085), (346, 13121), (349, 13157), (374, 13319), (389, 13352), (406, 13376), (413, 13388), (414, 13391), (424, 13424), (427, 13442), (440, 13523), (442, 13529), (444, 13550), (445, 13553), (446, 13556), (459, 13655), (462, 13670), (467, 13694), (469, 13709), (470, 13712), (471, 13718), (477, 13772), (489, 13871), (497, 13913), (503, 13946), (510, 13991), (514, 14015), (519, 14060), (525, 14078), (544, 14186), (552, 14216), (563, 14255), (564, 14258), (568, 14267), (608, 14516), (614, 14540), (638, 14684), (641, 14708), (652, 14759), (670, 14876), (676, 14903), (678, 14921), (692, 14999), (694, 15005), (697, 15014), (698, 15041), (708, 15134), (716, 15173), (722, 15215), (749, 15368), (756, 15401), (757, 15404), (760, 15461), (764, 15470), (767, 15482), (774, 15503), (778, 15524), (807, 15716), (814, 15755), (824, 15821), (826, 15824), (829, 15878), (857, 16031),

Gene: Orla_18 Start: 10598, Stop: 14806, Start Num: 81

Candidate Starts for Orla_18:

(Start: 81 @10598 has 23 MA's), (Start: 86 @10625 has 2 MA's), (136, 10934), (143, 10991), (147, 11015), (153, 11060), (157, 11105), (162, 11123), (166, 11138), (169, 11156), (170, 11165), (177, 11219), (188, 11276), (200, 11357), (205, 11405), (207, 11444), (209, 11459), (214, 11468), (217, 11495), (222, 11525), (225, 11546), (247, 11669), (257, 11735), (266, 11798), (279, 11885), (293, 11954), (307, 12062), (309, 12083), (313, 12116), (314, 12134), (316, 12152), (320, 12176), (325, 12206), (337, 12251), (338, 12254), (341, 12272), (368, 12383), (370, 12395), (373, 12434), (389, 12476), (402, 12488), (405, 12500), (414, 12515), (424, 12548), (436, 12623), (445, 12677), (446, 12680), (448, 12698), (455, 12743), (459, 12782), (460, 12788), (465, 12812), (468, 12833), (469, 12836), (470, 12839), (484, 12965), (486, 12986), (488, 12995), (490, 13004), (492, 13010), (524, 13163), (531, 13208), (536, 13232), (538, 13238), (547, 13274), (554, 13307), (559, 13331), (578, 13382), (586, 13427), (607, 13565), (616, 13595), (647, 13787), (682, 13964), (753, 14156), (766, 14228), (777, 14264), (780, 14288), (782, 14300), (785, 14342), (792, 14390), (805, 14453), (809, 14480), (811, 14486), (816, 14519), (819, 14540), (821, 14567), (826, 14591), (828, 14627), (830, 14654), (832, 14663), (834, 14675), (852, 14777),

Gene: PCoral7_17 Start: 10271, Stop: 15886, Start Num: 8

Candidate Starts for PCoral7_17:

(Start: 7 @10235 has 1 MA's), (Start: 8 @10271 has 37 MA's), (Start: 12 @10292 has 1 MA's), (15, 10331), (18, 10376), (34, 10466), (36, 10475), (38, 10487), (40, 10508), (45, 10565), (48, 10637), (51, 10658), (59, 10700), (60, 10703), (63, 10730), (67, 10751), (68, 10754), (72, 10775), (76, 10796), (87, 10847), (88, 10850), (97, 10910), (128, 11093), (138, 11165), (167, 11351), (184, 11453), (186, 11468), (189, 11483), (195, 11540), (219, 11732), (238, 11852), (250, 11933), (254, 11963), (261, 11999), (267, 12050), (288, 12185), (289, 12188), (293, 12212), (299, 12263), (302, 12299), (304, 12305), (307, 12320), (313, 12374), (317, 12413), (321, 12437), (324, 12455), (335, 12503), (337, 12509), (340, 12527), (341, 12530), (343, 12545), (345, 12557), (347, 12605), (370, 12743), (379, 12824), (382, 12848), (383, 12860), (384, 12863), (391, 12896), (415, 12998), (422, 13025), (423, 13028), (424, 13031), (425, 13037), (432, 13082), (434, 13094), (436, 13106), (440, 13130), (443, 13145), (445, 13160), (446, 13163), (450, 13187), (453, 13214), (465, 13295), (476, 13379), (489, 13484), (496, 13517), (505, 13583), (506, 13592), (514, 13631), (516, 13664), (517, 13676), (518, 13679), (521, 13694), (522, 13703), (529, 13739), (530, 13748), (532, 13757), (567, 13913), (568, 13916), (570, 13919), (571, 13940), (582, 14021), (592, 14063), (603, 14150), (610, 14183), (612, 14192), (619, 14234), (637, 14348), (663, 14513), (675, 14597), (676, 14600), (680, 14630), (681, 14633), (685, 14666), (686, 14669), (700, 14747), (706, 14804), (725, 14921), (731, 14972), (753, 15074), (758, 15107), (762, 15173), (777, 15239), (778, 15245), (780, 15263), (783, 15296), (792, 15368), (802, 15410), (803, 15416), (805, 15434), (806, 15440), (809, 15461), (816, 15500), (830, 15641), (843, 15704), (854, 15779), (864, 15872),

Gene: Periwinkle_20 Start: 10340, Stop: 15973, Start Num: 20

Candidate Starts for Periwinkle_20:

(17, 10313), (Start: 20 @10340 has 1 MA's), (Start: 31 @10385 has 1 MA's), (33, 10406), (37, 10427), (41, 10472), (Start: 42 @10487 has 1 MA's), (48, 10571), (56, 10613), (57, 10625), (68, 10688), (71, 10703), (73, 10712), (76, 10730), (77, 10736), (88, 10784), (95, 10838), (112, 10919), (133, 11063), (134, 11069), (138, 11099), (171, 11318), (184, 11393), (189, 11423), (208, 11606), (211, 11627), (219, 11672), (220, 11678), (223, 11699), (235, 11780), (245, 11846), (250, 11873), (252, 11885), (254, 11903), (255, 11915), (261, 11939), (264, 11951), (267, 11990), (268, 11993), (269, 12002), (272, 12032), (278, 12077), (290, 12137), (293, 12152), (296, 12182), (297, 12194), (302, 12239), (304, 12245), (306, 12257), (307, 12260), (309, 12281), (312, 12311), (313, 12314), (321, 12377), (325, 12404), (326, 12407), (327, 12410), (328, 12416), (334, 12440), (335, 12443), (337, 12449), (339, 12455), (341, 12470), (344, 12488), (349, 12569), (355, 12617), (356, 12623), (360, 12650), (382, 12809), (383, 12821), (391, 12857), (407, 12917), (414, 12956), (416, 12962), (417, 12965),

(423, 12986), (424, 12989), (440, 13088), (447, 13127), (451, 13151), (455, 13184), (458, 13229), (464, 13283), (472, 13370), (473, 13391), (478, 13427), (482, 13457), (494, 13538), (496, 13547), (500, 13571), (512, 13652), (514, 13658), (517, 13703), (518, 13706), (529, 13766), (530, 13775), (532, 13784), (554, 13892), (567, 13940), (570, 13946), (581, 14045), (582, 14048), (588, 14060), (603, 14177), (610, 14210), (619, 14261), (625, 14291), (632, 14351), (644, 14432), (649, 14453), (654, 14486), (666, 14549), (667, 14558), (668, 14567), (686, 14681), (693, 14711), (696, 14720), (701, 14759), (702, 14762), (705, 14792), (706, 14813), (734, 15017), (743, 15080), (746, 15086), (756, 15137), (781, 15323), (790, 15410), (795, 15437), (796, 15440), (810, 15515), (814, 15539), (820, 15578), (822, 15614), (827, 15635), (836, 15722), (841, 15764), (847, 15797), (849, 15809), (861, 15887), (865, 15953),

Gene: Petra_19 Start: 10705, Stop: 16197, Start Num: 14

Candidate Starts for Petra_19:

(Start: 8 @10654 has 37 MA's), (Start: 11 @10669 has 1 MA's), (Start: 12 @10675 has 1 MA's), (Start: 14 @10705 has 1 MA's), (15, 10714), (16, 10717), (18, 10759), (38, 10870), (40, 10891), (65, 11119), (68, 11137), (72, 11158), (73, 11161), (76, 11179), (82, 11203), (95, 11287), (105, 11329), (107, 11344), (109, 11353), (135, 11521), (138, 11548), (155, 11665), (184, 11836), (189, 11866), (211, 12070), (219, 12115), (245, 12289), (250, 12316), (254, 12346), (267, 12433), (272, 12475), (274, 12481), (293, 12595), (295, 12610), (297, 12637), (302, 12682), (304, 12688), (307, 12703), (313, 12757), (317, 12796), (320, 12817), (321, 12820), (324, 12838), (330, 12865), (335, 12886), (337, 12892), (341, 12913), (345, 12940), (385, 13213), (398, 13252), (405, 13267), (423, 13297), (424, 13300), (432, 13351), (445, 13432), (446, 13435), (452, 13468), (455, 13498), (468, 13588), (505, 13855), (514, 13903), (517, 13948), (518, 13951), (521, 13966), (522, 13975), (529, 14011), (530, 14020), (532, 14029), (542, 14080), (556, 14152), (561, 14170), (570, 14191), (581, 14290), (582, 14293), (591, 14326), (599, 14392), (600, 14410), (603, 14425), (610, 14458), (619, 14509), (627, 14560), (664, 14803), (665, 14806), (675, 14878), (676, 14881), (685, 14947), (686, 14950), (690, 14968), (700, 15028), (706, 15085), (707, 15103), (720, 15184), (721, 15187), (725, 15202), (748, 15361), (758, 15415), (762, 15481), (777, 15547), (778, 15553), (792, 15676), (798, 15700), (802, 15718), (805, 15742), (806, 15748), (809, 15769), (816, 15808), (830, 15949), (833, 15961), (843, 16012), (845, 16030), (854, 16087), (864, 16180),

Gene: Phabuloso_18 Start: 9869, Stop: 15502, Start Num: 21

Candidate Starts for Phabuloso_18:

(Start: 21 @9869 has 11 MA's), (29, 9896), (Start: 31 @9914 has 1 MA's), (33, 9935), (37, 9956), (41, 10001), (Start: 42 @10016 has 1 MA's), (48, 10100), (56, 10142), (57, 10154), (68, 10217), (71, 10232), (73, 10241), (76, 10259), (77, 10265), (88, 10313), (112, 10448), (134, 10598), (138, 10628), (171, 10847), (184, 10922), (189, 10952), (211, 11156), (218, 11198), (219, 11201), (220, 11207), (223, 11228), (235, 11309), (245, 11375), (250, 11402), (252, 11414), (254, 11432), (255, 11444), (261, 11468), (264, 11480), (267, 11519), (268, 11522), (269, 11531), (272, 11561), (278, 11606), (290, 11666), (293, 11681), (296, 11711), (297, 11723), (302, 11768), (304, 11774), (307, 11789), (310, 11819), (312, 11840), (313, 11843), (321, 11906), (325, 11933), (326, 11936), (327, 11939), (328, 11945), (334, 11969), (335, 11972), (337, 11978), (339, 11984), (341, 11999), (344, 12017), (349, 12098), (355, 12146), (356, 12152), (360, 12179), (382, 12338), (383, 12350), (391, 12386), (407, 12446), (414, 12485), (416, 12491), (417, 12494), (423, 12515), (424, 12518), (440, 12617), (447, 12656), (451, 12680), (455, 12713), (458, 12758), (464, 12812), (472, 12899), (473, 12920), (478, 12956), (482, 12986), (493, 13064), (494, 13067), (496, 13076), (500, 13100), (512, 13181), (514, 13187), (517, 13232), (518, 13235), (521, 13250), (529, 13295), (530, 13304), (532, 13313), (533, 13316), (554, 13421), (567, 13469), (570, 13475), (581, 13574), (582, 13577), (588, 13589), (603, 13706), (610, 13739), (619, 13790), (625, 13820), (632, 13880), (644, 13961), (649, 13982), (654, 14015), (666, 14078), (668, 14096), (686, 14210), (693, 14240), (696, 14249), (701, 14288), (702, 14291), (705, 14321), (706, 14342), (726, 14495), (734, 14546), (743, 14609), (746, 14615), (756, 14666), (781, 14852), (790, 14939), (795, 14966), (796, 14969), (810, 15044), (814, 15068), (820, 15107), (822, 15143), (827, 15164), (836, 15251), (841, 15293), (847, 15326), (849, 15338),

(861, 15416), (865, 15482),

Gene: Phistory_19 Start: 10653, Stop: 16280, Start Num: 19

Candidate Starts for Phistory_19:

(Start: 19 @10653 has 1 MA's), (24, 10659), (Start: 31 @10698 has 1 MA's), (41, 10785), (48, 10884), (56, 10926), (57, 10938), (68, 11001), (71, 11016), (73, 11025), (76, 11043), (77, 11049), (88, 11097), (100, 11172), (112, 11232), (134, 11382), (138, 11412), (184, 11706), (189, 11736), (208, 11919), (211, 11940), (218, 11982), (219, 11985), (220, 11991), (223, 12012), (224, 12024), (234, 12084), (238, 12105), (245, 12159), (250, 12186), (252, 12198), (254, 12216), (255, 12228), (261, 12252), (264, 12264), (267, 12303), (268, 12306), (269, 12315), (273, 12348), (283, 12417), (288, 12438), (293, 12465), (294, 12471), (297, 12507), (298, 12510), (302, 12552), (304, 12558), (306, 12570), (307, 12573), (312, 12624), (313, 12627), (321, 12690), (322, 12699), (325, 12717), (326, 12720), (328, 12729), (337, 12762), (341, 12783), (342, 12789), (343, 12798), (346, 12846), (350, 12888), (355, 12930), (360, 12963), (369, 13014), (370, 13017), (373, 13056), (374, 13065), (382, 13122), (383, 13134), (391, 13170), (407, 13230), (414, 13269), (416, 13275), (423, 13299), (424, 13302), (427, 13320), (440, 13401), (451, 13464), (455, 13497), (459, 13572), (464, 13596), (465, 13608), (468, 13641), (473, 13704), (478, 13740), (482, 13770), (493, 13848), (494, 13851), (496, 13860), (500, 13884), (514, 13971), (517, 14016), (518, 14019), (521, 14034), (529, 14079), (530, 14088), (532, 14097), (533, 14100), (554, 14205), (567, 14253), (570, 14259), (581, 14358), (582, 14361), (588, 14373), (603, 14490), (610, 14523), (619, 14574), (625, 14604), (632, 14664), (644, 14745), (649, 14766), (650, 14769), (666, 14862), (668, 14880), (686, 14994), (693, 15024), (696, 15033), (701, 15072), (702, 15075), (705, 15105), (706, 15126), (734, 15324), (743, 15387), (746, 15393), (751, 15420), (756, 15444), (781, 15630), (790, 15717), (795, 15744), (796, 15747), (810, 15822), (814, 15846), (820, 15885), (822, 15921), (827, 15942), (836, 16029), (841, 16071), (847, 16104), (849, 16116), (861, 16194), (865, 16260),

Gene: PhrostedPhlake_18 Start: 10632, Stop: 16172, Start Num: 8

Candidate Starts for PhrostedPhlake_18:

(Start: 8 @10632 has 37 MA's), (Start: 11 @10647 has 1 MA's), (Start: 12 @10653 has 1 MA's), (Start: 14 @10683 has 1 MA's), (15, 10692), (18, 10737), (38, 10848), (40, 10869), (65, 11097), (68, 11115), (72, 11136), (73, 11139), (76, 11157), (82, 11181), (95, 11265), (97, 11271), (105, 11307), (107, 11322), (109, 11331), (118, 11391), (135, 11499), (138, 11526), (155, 11643), (164, 11697), (171, 11739), (184, 11814), (189, 11844), (211, 12048), (219, 12093), (245, 12267), (250, 12294), (254, 12324), (267, 12411), (272, 12453), (281, 12516), (293, 12573), (297, 12615), (302, 12660), (304, 12666), (307, 12681), (313, 12735), (317, 12774), (320, 12795), (321, 12798), (324, 12816), (330, 12843), (335, 12864), (337, 12870), (341, 12891), (345, 12918), (398, 13230), (405, 13245), (423, 13275), (424, 13278), (432, 13329), (445, 13410), (446, 13413), (452, 13446), (455, 13476), (468, 13566), (505, 13833), (514, 13881), (516, 13914), (517, 13926), (518, 13929), (521, 13944), (522, 13953), (529, 13989), (530, 13998), (532, 14007), (554, 14115), (567, 14163), (568, 14166), (570, 14169), (582, 14271), (583, 14274), (603, 14400), (610, 14433), (618, 14481), (619, 14484), (627, 14535), (637, 14604), (664, 14778), (665, 14781), (675, 14853), (676, 14856), (685, 14922), (686, 14925), (690, 14943), (700, 15003), (706, 15060), (707, 15078), (720, 15159), (721, 15162), (725, 15177), (748, 15336), (758, 15390), (762, 15456), (777, 15522), (778, 15528), (782, 15558), (792, 15651), (798, 15675), (802, 15693), (805, 15717), (806, 15723), (809, 15744), (816, 15783), (830, 15924), (843, 15987), (845, 16005), (864, 16155),

Gene: Pipp_17 Start: 10133, Stop: 15790, Start Num: 5

Candidate Starts for Pipp_17:

(4, 10094), (Start: 5 @10133 has 1 MA's), (Start: 8 @10247 has 37 MA's), (Start: 11 @10262 has 1 MA's), (Start: 12 @10268 has 1 MA's), (Start: 14 @10298 has 1 MA's), (15, 10307), (16, 10310), (18, 10352), (38, 10463), (40, 10484), (68, 10730), (72, 10751), (73, 10754), (76, 10772), (82, 10796), (95, 10880), (97, 10886), (105, 10922), (107, 10937), (109, 10946), (112, 10961), (118, 11006), (135, 11114), (138, 11141), (144, 11174), (155, 11258), (189, 11459), (211, 11663), (220, 11714), (223,

11735), (224, 11747), (240, 11837), (245, 11882), (250, 11909), (254, 11939), (267, 12026), (268, 12029), (272, 12068), (283, 12140), (293, 12188), (297, 12230), (302, 12275), (304, 12281), (306, 12293), (307, 12296), (313, 12350), (317, 12389), (320, 12410), (321, 12413), (324, 12431), (330, 12458), (335, 12479), (337, 12485), (341, 12506), (370, 12740), (385, 12806), (398, 12845), (405, 12860), (423, 12890), (424, 12893), (432, 12944), (445, 13025), (446, 13028), (452, 13061), (455, 13091), (468, 13181), (496, 13382), (505, 13448), (514, 13496), (517, 13541), (518, 13544), (521, 13559), (522, 13568), (529, 13604), (530, 13613), (532, 13622), (556, 13745), (570, 13784), (581, 13883), (582, 13886), (599, 13985), (600, 14003), (603, 14018), (610, 14051), (619, 14102), (627, 14153), (637, 14222), (664, 14396), (665, 14399), (674, 14465), (675, 14471), (676, 14474), (685, 14540), (686, 14543), (690, 14561), (700, 14621), (706, 14678), (707, 14696), (720, 14777), (725, 14795), (731, 14846), (748, 14954), (758, 15008), (762, 15074), (776, 15128), (777, 15140), (778, 15146), (782, 15176), (792, 15269), (798, 15293), (802, 15311), (805, 15335), (806, 15341), (809, 15362), (816, 15401), (830, 15542), (843, 15605), (845, 15623), (854, 15680), (864, 15773),

Gene: Pons_16 Start: 9384, Stop: 14465, Start Num: 28

Candidate Starts for Pons_16:

(Start: 28 @9384 has 33 MA's), (46, 9540), (60, 9669), (64, 9699), (77, 9768), (80, 9780), (83, 9795), (88, 9816), (90, 9825), (94, 9867), (97, 9876), (105, 9912), (109, 9936), (118, 9996), (127, 10050), (131, 10089), (133, 10095), (136, 10110), (138, 10131), (147, 10185), (164, 10302), (175, 10365), (182, 10410), (189, 10449), (193, 10491), (211, 10650), (215, 10683), (219, 10695), (223, 10722), (230, 10779), (236, 10809), (239, 10821), (253, 10923), (254, 10926), (267, 11013), (274, 11061), (293, 11175), (299, 11226), (304, 11268), (307, 11283), (308, 11292), (309, 11304), (313, 11337), (318, 11379), (328, 11439), (329, 11442), (330, 11445), (331, 11451), (336, 11469), (341, 11493), (350, 11598), (359, 11646), (370, 11706), (371, 11709), (373, 11745), (384, 11826), (390, 11856), (395, 11877), (396, 11880), (397, 11883), (415, 11961), (422, 11985), (424, 11991), (444, 12117), (450, 12147), (455, 12186), (461, 12234), (465, 12255), (466, 12258), (467, 12264), (474, 12330), (481, 12375), (484, 12408), (486, 12429), (498, 12483), (526, 12633), (528, 12642), (543, 12729), (607, 13047), (616, 13077), (638, 13215), (653, 13296), (682, 13446), (686, 13476), (727, 13686), (729, 13695), (730, 13701), (740, 13737), (761, 13854), (763, 13860), (773, 13902), (778, 13920), (792, 14043), (798, 14067), (800, 14082), (805, 14112), (809, 14139), (811, 14145), (816, 14178), (824, 14247), (826, 14250), (828, 14286), (837, 14358), (842, 14376),

Gene: PotPie_16 Start: 10237, Stop: 15330, Start Num: 28

Candidate Starts for PotPie_16:

(Start: 28 @10237 has 33 MA's), (46, 10393), (60, 10522), (64, 10552), (77, 10621), (80, 10633), (88, 10669), (90, 10678), (94, 10720), (97, 10729), (105, 10765), (109, 10789), (127, 10903), (131, 10942), (136, 10963), (138, 10984), (164, 11155), (175, 11218), (182, 11263), (193, 11344), (211, 11503), (215, 11536), (219, 11548), (223, 11575), (230, 11632), (236, 11662), (239, 11674), (253, 11776), (254, 11779), (267, 11866), (274, 11914), (293, 12028), (304, 12121), (307, 12136), (309, 12157), (313, 12190), (315, 12220), (318, 12232), (324, 12271), (329, 12295), (330, 12298), (336, 12322), (341, 12346), (350, 12451), (363, 12529), (370, 12559), (371, 12562), (373, 12598), (379, 12640), (382, 12664), (384, 12679), (386, 12694), (390, 12709), (396, 12733), (408, 12772), (410, 12787), (411, 12793), (422, 12838), (424, 12844), (444, 12970), (450, 13000), (456, 13051), (461, 13087), (465, 13108), (466, 13111), (474, 13183), (481, 13228), (484, 13261), (486, 13282), (498, 13336), (509, 13411), (528, 13495), (543, 13582), (607, 13900), (616, 13930), (638, 14068), (648, 14119), (653, 14149), (682, 14314), (686, 14344), (724, 14524), (730, 14575), (740, 14602), (747, 14623), (761, 14719), (773, 14767), (778, 14785), (792, 14908), (798, 14932), (800, 14947), (805, 14977), (809, 15004), (811, 15010), (816, 15043), (824, 15112), (826, 15115), (828, 15151), (842, 15241),

Gene: PrincePatrick_17 Start: 10339, Stop: 15960, Start Num: 8

Candidate Starts for PrincePatrick_17:

(Start: 7 @10303 has 1 MA's), (Start: 8 @10339 has 37 MA's), (Start: 12 @10360 has 1 MA's), (15, 10399), (18, 10444), (34, 10534), (36, 10543), (38, 10555), (40, 10576), (45, 10633), (48, 10705), (51,

10726), (59, 10768), (60, 10771), (63, 10798), (67, 10819), (68, 10822), (72, 10843), (76, 10864), (87, 10915), (88, 10918), (97, 10978), (128, 11161), (138, 11233), (167, 11419), (184, 11521), (186, 11536), (189, 11551), (195, 11608), (219, 11800), (238, 11920), (250, 12001), (254, 12031), (261, 12067), (267, 12118), (272, 12160), (283, 12232), (291, 12268), (293, 12280), (299, 12331), (304, 12373), (307, 12388), (313, 12442), (317, 12481), (321, 12505), (324, 12523), (335, 12571), (337, 12577), (340, 12595), (341, 12598), (343, 12613), (345, 12625), (347, 12673), (350, 12703), (362, 12778), (379, 12892), (382, 12916), (383, 12928), (384, 12931), (391, 12964), (415, 13066), (424, 13099), (432, 13150), (434, 13162), (436, 13174), (440, 13198), (446, 13234), (450, 13258), (453, 13285), (465, 13366), (476, 13450), (489, 13555), (496, 13588), (505, 13654), (506, 13663), (514, 13702), (516, 13735), (517, 13747), (518, 13750), (521, 13765), (522, 13774), (529, 13810), (530, 13819), (532, 13828), (541, 13870), (567, 13984), (568, 13987), (570, 13990), (571, 14011), (582, 14092), (592, 14134), (603, 14221), (610, 14254), (612, 14263), (619, 14305), (637, 14419), (675, 14668), (676, 14671), (680, 14701), (681, 14704), (684, 14728), (685, 14737), (686, 14740), (700, 14818), (706, 14875), (725, 14992), (731, 15043), (758, 15181), (762, 15247), (777, 15313), (778, 15319), (780, 15337), (790, 15430), (792, 15442), (803, 15490), (805, 15508), (806, 15514), (809, 15535), (816, 15574), (830, 15715), (843, 15778), (854, 15853), (864, 15946),

Gene: PsychoKiller_16 Start: 9629, Stop: 14767, Start Num: 28

Candidate Starts for PsychoKiller_16:

(Start: 22 @9605 has 5 MA's), (Start: 28 @9629 has 33 MA's), (32, 9656), (46, 9785), (49, 9860), (77, 10013), (78, 10016), (94, 10112), (97, 10121), (103, 10151), (105, 10157), (107, 10172), (108, 10175), (112, 10196), (122, 10268), (125, 10289), (136, 10355), (138, 10376), (155, 10493), (182, 10655), (189, 10694), (198, 10769), (215, 10928), (219, 10940), (223, 10967), (228, 11012), (230, 11024), (245, 11114), (248, 11132), (252, 11153), (255, 11183), (261, 11207), (264, 11219), (267, 11258), (271, 11291), (288, 11393), (289, 11396), (293, 11420), (304, 11513), (307, 11528), (311, 11567), (332, 11702), (333, 11705), (341, 11738), (351, 11846), (352, 11849), (357, 11900), (371, 11975), (382, 12077), (390, 12122), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (428, 12278), (432, 12308), (440, 12356), (442, 12362), (446, 12389), (466, 12524), (481, 12641), (484, 12674), (486, 12695), (501, 12764), (502, 12770), (504, 12785), (526, 12905), (528, 12914), (543, 12998), (607, 13319), (646, 13538), (653, 13574), (691, 13787), (729, 13979), (740, 14027), (747, 14048), (761, 14156), (778, 14222), (780, 14240), (792, 14345), (799, 14375), (800, 14384), (805, 14414), (816, 14480), (821, 14528), (828, 14588), (841, 14675), (852, 14738),

Gene: Quasar_16 Start: 10238, Stop: 15376, Start Num: 28

Candidate Starts for Quasar_16:

(Start: 22 @10214 has 5 MA's), (Start: 28 @10238 has 33 MA's), (32, 10265), (46, 10394), (49, 10469), (77, 10622), (78, 10625), (94, 10721), (97, 10730), (103, 10760), (105, 10766), (107, 10781), (108, 10784), (112, 10805), (122, 10877), (125, 10898), (136, 10964), (138, 10985), (155, 11102), (182, 11264), (189, 11303), (198, 11378), (215, 11537), (219, 11549), (223, 11576), (228, 11621), (230, 11633), (245, 11723), (248, 11741), (252, 11762), (255, 11792), (261, 11816), (264, 11828), (267, 11867), (271, 11900), (288, 12002), (289, 12005), (293, 12029), (294, 12035), (304, 12122), (307, 12137), (311, 12176), (333, 12314), (340, 12344), (341, 12347), (351, 12455), (352, 12458), (357, 12509), (371, 12584), (382, 12686), (390, 12731), (395, 12752), (396, 12755), (397, 12758), (414, 12833), (424, 12866), (428, 12887), (432, 12917), (440, 12965), (442, 12971), (446, 12998), (466, 13133), (481, 13250), (484, 13283), (486, 13304), (487, 13307), (501, 13373), (502, 13379), (504, 13394), (526, 13514), (528, 13523), (543, 13607), (607, 13928), (646, 14147), (653, 14183), (691, 14396), (729, 14588), (740, 14636), (747, 14657), (761, 14765), (778, 14831), (780, 14849), (792, 14954), (799, 14984), (800, 14993), (805, 15023), (816, 15089), (821, 15137), (828, 15197), (841, 15284), (852, 15347),

Gene: RADical_17 Start: 9630, Stop: 14768, Start Num: 28

Candidate Starts for RADical_17:

(Start: 22 @9606 has 5 MA's), (Start: 28 @9630 has 33 MA's), (32, 9657), (46, 9786), (49, 9861), (77, 10014), (78, 10017), (94, 10113), (97, 10122), (103, 10152), (105, 10158), (107, 10173), (108, 10176), (111, 10191), (112, 10197), (122, 10269), (125, 10290), (136, 10356), (138, 10377), (155, 10494), (182, 10656), (189, 10695), (198, 10770), (215, 10929), (219, 10941), (223, 10968), (228, 11013), (230, 11025), (245, 11115), (248, 11133), (252, 11154), (255, 11184), (261, 11208), (264, 11220), (267, 11259), (271, 11292), (288, 11394), (289, 11397), (293, 11421), (304, 11514), (307, 11529), (311, 11568), (324, 11664), (326, 11676), (333, 11706), (341, 11739), (351, 11847), (352, 11850), (357, 11901), (371, 11976), (382, 12078), (390, 12123), (395, 12144), (396, 12147), (397, 12150), (414, 12225), (424, 12258), (428, 12279), (440, 12357), (442, 12363), (446, 12390), (466, 12525), (481, 12642), (484, 12675), (486, 12696), (501, 12765), (502, 12771), (504, 12786), (526, 12906), (528, 12915), (543, 12999), (607, 13320), (646, 13539), (653, 13575), (691, 13788), (729, 13980), (740, 14028), (747, 14049), (761, 14157), (778, 14223), (780, 14241), (786, 14301), (792, 14346), (799, 14376), (800, 14385), (805, 14415), (816, 14481), (821, 14529), (828, 14589), (841, 14676), (852, 14739),

Gene: REQ2_18 Start: 12445, Stop: 18258, Start Num: 1

Candidate Starts for REQ2_18:

(Start: 1 @12445 has 1 MA's), (3, 12493), (9, 12664), (Start: 28 @12805 has 33 MA's), (44, 12958), (46, 12970), (49, 13045), (50, 13051), (53, 13060), (61, 13114), (67, 13147), (77, 13198), (78, 13201), (89, 13252), (97, 13306), (98, 13309), (109, 13366), (110, 13369), (115, 13402), (116, 13420), (119, 13447), (120, 13450), (124, 13480), (130, 13531), (133, 13540), (142, 13630), (206, 14125), (221, 14227), (232, 14308), (237, 14338), (247, 14407), (253, 14452), (265, 14515), (283, 14668), (299, 14767), (302, 14803), (304, 14809), (305, 14818), (307, 14824), (316, 14914), (322, 14950), (329, 14983), (336, 15010), (341, 15034), (343, 15049), (345, 15061), (351, 15142), (369, 15244), (401, 15430), (404, 15445), (420, 15517), (424, 15529), (426, 15544), (433, 15589), (438, 15622), (441, 15631), (447, 15667), (467, 15802), (471, 15826), (472, 15838), (473, 15859), (475, 15871), (485, 15961), (504, 16075), (505, 16093), (515, 16150), (534, 16264), (539, 16297), (568, 16405), (573, 16441), (580, 16480), (584, 16498), (589, 16519), (590, 16522), (604, 16615), (631, 16750), (635, 16771), (643, 16828), (700, 17152), (704, 17185), (715, 17263), (723, 17308), (728, 17347), (732, 17377), (735, 17392), (738, 17410), (742, 17443), (771, 17611), (832, 18052), (835, 18064), (839, 18094), (840, 18097), (848, 18142), (856, 18190),

Gene: RSchmailzl_17 Start: 9773, Stop: 14911, Start Num: 28

Candidate Starts for RSchmailzl_17:

(Start: 22 @9749 has 5 MA's), (Start: 28 @9773 has 33 MA's), (32, 9800), (46, 9929), (49, 10004), (77, 10157), (78, 10160), (94, 10256), (97, 10265), (103, 10295), (105, 10301), (107, 10316), (108, 10319), (112, 10340), (122, 10412), (125, 10433), (136, 10499), (138, 10520), (155, 10637), (182, 10799), (189, 10838), (198, 10913), (215, 11072), (219, 11084), (223, 11111), (228, 11156), (230, 11168), (245, 11258), (248, 11276), (252, 11297), (255, 11327), (261, 11351), (264, 11363), (267, 11402), (271, 11435), (273, 11447), (288, 11537), (289, 11540), (293, 11564), (294, 11570), (304, 11657), (307, 11672), (311, 11711), (317, 11765), (324, 11807), (326, 11819), (331, 11840), (341, 11882), (351, 11990), (358, 12050), (371, 12119), (380, 12209), (382, 12221), (390, 12266), (395, 12287), (396, 12290), (397, 12293), (414, 12368), (419, 12386), (424, 12401), (432, 12452), (440, 12500), (442, 12506), (446, 12533), (466, 12668), (481, 12785), (484, 12818), (486, 12839), (487, 12842), (501, 12908), (502, 12914), (504, 12929), (526, 13049), (528, 13058), (543, 13142), (607, 13463), (646, 13682), (653, 13718), (691, 13931), (729, 14123), (740, 14171), (747, 14192), (761, 14300), (778, 14366), (780, 14384), (792, 14489), (799, 14519), (800, 14528), (805, 14558), (816, 14624), (821, 14672), (828, 14732), (841, 14819), (852, 14882),

Gene: RanchParmCat_19 Start: 10311, Stop: 14516, Start Num: 81

Candidate Starts for RanchParmCat_19:

(Start: 81 @10311 has 23 MA's), (Start: 86 @10338 has 2 MA's), (131, 10626), (136, 10647), (137, 10653), (141, 10686), (143, 10704), (147, 10728), (157, 10818), (160, 10827), (162, 10836), (169,

10869), (172, 10896), (174, 10905), (176, 10929), (203, 11082), (207, 11145), (209, 11160), (217, 11196), (222, 11226), (225, 11247), (233, 11289), (247, 11370), (259, 11445), (260, 11454), (265, 11475), (286, 11622), (307, 11763), (309, 11784), (312, 11814), (313, 11817), (314, 11835), (317, 11856), (320, 11877), (324, 11898), (336, 11949), (337, 11952), (338, 11955), (341, 11973), (361, 12054), (368, 12084), (373, 12135), (402, 12189), (414, 12216), (424, 12249), (433, 12309), (445, 12378), (446, 12381), (459, 12483), (460, 12489), (469, 12537), (470, 12540), (481, 12633), (484, 12666), (486, 12687), (488, 12696), (490, 12705), (492, 12711), (524, 12864), (536, 12933), (538, 12939), (547, 12975), (585, 13104), (607, 13245), (613, 13269), (624, 13314), (647, 13467), (648, 13470), (682, 13659), (686, 13689), (753, 13866), (766, 13938), (773, 13962), (777, 13974), (780, 13998), (782, 14010), (791, 14094), (792, 14100), (802, 14142), (805, 14163), (811, 14196), (816, 14229), (819, 14250), (821, 14277), (826, 14301), (828, 14337), (834, 14385), (852, 14487),

Gene: RedBaron_17 Start: 9673, Stop: 14811, Start Num: 28

Candidate Starts for RedBaron_17:

(Start: 22 @9649 has 5 MA's), (Start: 28 @9673 has 33 MA's), (32, 9700), (46, 9829), (49, 9904), (77, 10057), (78, 10060), (94, 10156), (97, 10165), (103, 10195), (105, 10201), (107, 10216), (108, 10219), (112, 10240), (122, 10312), (125, 10333), (136, 10399), (138, 10420), (155, 10537), (182, 10699), (189, 10738), (198, 10813), (223, 11011), (241, 11119), (252, 11197), (254, 11215), (256, 11233), (267, 11302), (268, 11305), (269, 11314), (273, 11347), (292, 11458), (293, 11464), (304, 11557), (307, 11572), (324, 11707), (331, 11740), (341, 11782), (351, 11890), (357, 11944), (370, 12016), (371, 12019), (382, 12121), (390, 12166), (392, 12175), (395, 12187), (396, 12190), (397, 12193), (414, 12268), (415, 12271), (416, 12274), (419, 12286), (422, 12295), (424, 12301), (430, 12343), (432, 12352), (440, 12400), (446, 12433), (466, 12568), (481, 12685), (484, 12718), (486, 12739), (501, 12808), (502, 12814), (526, 12949), (528, 12958), (543, 13042), (607, 13363), (646, 13582), (653, 13618), (729, 14023), (740, 14071), (747, 14092), (761, 14200), (778, 14266), (780, 14284), (792, 14389), (799, 14419), (800, 14428), (805, 14458), (816, 14524), (821, 14572), (828, 14632), (841, 14719), (852, 14782),

Gene: Samba_17 Start: 10382, Stop: 15874, Start Num: 8

Candidate Starts for Samba_17:

(Start: 8 @10382 has 37 MA's), (Start: 11 @10397 has 1 MA's), (Start: 12 @10403 has 1 MA's), (Start: 14 @10433 has 1 MA's), (15, 10442), (16, 10445), (18, 10487), (38, 10598), (40, 10619), (47, 10739), (54, 10781), (65, 10847), (68, 10865), (71, 10880), (72, 10886), (73, 10889), (76, 10907), (82, 10931), (95, 11015), (105, 11057), (107, 11072), (109, 11081), (135, 11249), (138, 11276), (155, 11393), (184, 11564), (189, 11594), (211, 11798), (219, 11843), (223, 11870), (224, 11882), (240, 11972), (245, 12017), (250, 12044), (254, 12074), (267, 12161), (272, 12203), (281, 12266), (283, 12275), (293, 12323), (297, 12365), (302, 12410), (304, 12416), (306, 12428), (307, 12431), (313, 12485), (317, 12524), (320, 12545), (321, 12548), (324, 12566), (325, 12575), (335, 12614), (337, 12620), (340, 12638), (341, 12641), (345, 12668), (385, 12941), (393, 12968), (398, 12980), (404, 12992), (405, 12995), (423, 13025), (424, 13028), (432, 13079), (445, 13160), (446, 13163), (452, 13196), (455, 13226), (457, 13250), (468, 13316), (505, 13583), (514, 13631), (517, 13676), (518, 13679), (521, 13694), (529, 13739), (530, 13748), (532, 13757), (542, 13808), (556, 13880), (561, 13898), (570, 13919), (581, 14018), (582, 14021), (591, 14054), (599, 14120), (600, 14138), (603, 14153), (610, 14186), (619, 14237), (627, 14288), (664, 14531), (665, 14534), (675, 14606), (676, 14609), (685, 14675), (686, 14678), (690, 14696), (700, 14756), (720, 14912), (721, 14915), (725, 14930), (748, 15101), (758, 15155), (766, 15212), (770, 15227), (779, 15275), (784, 15320), (807, 15440), (808, 15449), (815, 15488), (825, 15560), (830, 15629), (843, 15692), (845, 15710), (864, 15860),

Gene: Schnabeltier_17 Start: 10933, Stop: 16047, Start Num: 25

Candidate Starts for Schnabeltier_17:

(Start: 25 @10933 has 13 MA's), (Start: 28 @10942 has 33 MA's), (57, 11215), (59, 11224), (63, 11254), (66, 11263), (76, 11320), (90, 11383), (101, 11455), (106, 11476), (109, 11494), (131, 11647), (138, 11689), (147, 11743), (152, 11776), (182, 11968), (183, 11971), (189, 12007), (199, 12085),

(204, 12124), (211, 12208), (215, 12241), (218, 12250), (220, 12259), (224, 12292), (226, 12304), (229, 12328), (238, 12373), (240, 12382), (244, 12418), (245, 12427), (250, 12454), (252, 12466), (254, 12484), (261, 12520), (276, 12643), (283, 12685), (302, 12820), (303, 12823), (304, 12826), (307, 12841), (313, 12895), (317, 12934), (330, 13003), (332, 13015), (337, 13030), (341, 13051), (343, 13066), (345, 13078), (346, 13114), (349, 13150), (374, 13312), (406, 13369), (413, 13381), (414, 13384), (424, 13417), (438, 13510), (440, 13516), (442, 13522), (444, 13543), (445, 13546), (446, 13549), (455, 13612), (459, 13648), (462, 13663), (467, 13687), (469, 13702), (470, 13705), (471, 13711), (477, 13765), (489, 13864), (497, 13906), (510, 13984), (514, 14008), (519, 14053), (544, 14179), (548, 14188), (551, 14206), (552, 14209), (563, 14248), (564, 14251), (568, 14260), (594, 14419), (615, 14539), (629, 14617), (638, 14665), (640, 14677), (652, 14737), (670, 14854), (676, 14881), (678, 14899), (692, 14977), (694, 14983), (697, 14992), (698, 15019), (708, 15112), (716, 15151), (722, 15193), (749, 15346), (756, 15379), (757, 15382), (760, 15439), (764, 15448), (767, 15460), (774, 15481), (778, 15502), (807, 15694), (814, 15733), (826, 15802), (829, 15856), (857, 16009),

Gene: ShawBrad_18 Start: 9931, Stop: 15516, Start Num: 31

Candidate Starts for ShawBrad_18:

(Start: 21 @9886 has 11 MA's), (Start: 31 @9931 has 1 MA's), (33, 9952), (37, 9973), (41, 10018), (Start: 42 @10033 has 1 MA's), (48, 10117), (56, 10159), (57, 10171), (68, 10234), (71, 10249), (73, 10258), (76, 10276), (77, 10282), (88, 10330), (112, 10465), (134, 10615), (138, 10645), (184, 10939), (189, 10969), (211, 11173), (218, 11215), (219, 11218), (220, 11224), (223, 11245), (235, 11326), (245, 11392), (250, 11419), (252, 11431), (254, 11449), (255, 11461), (261, 11485), (264, 11497), (267, 11536), (268, 11539), (269, 11548), (272, 11578), (278, 11623), (290, 11683), (293, 11698), (296, 11728), (297, 11740), (302, 11785), (304, 11791), (306, 11803), (307, 11806), (309, 11827), (312, 11857), (313, 11860), (321, 11923), (325, 11950), (326, 11953), (327, 11956), (328, 11962), (334, 11986), (335, 11989), (337, 11995), (339, 12001), (341, 12016), (344, 12034), (349, 12115), (355, 12163), (356, 12169), (360, 12196), (373, 12289), (377, 12322), (382, 12352), (394, 12415), (400, 12433), (407, 12460), (440, 12631), (451, 12694), (455, 12727), (459, 12802), (464, 12826), (465, 12838), (468, 12871), (473, 12934), (478, 12970), (482, 13000), (493, 13078), (494, 13081), (496, 13090), (514, 13201), (517, 13246), (518, 13249), (521, 13264), (529, 13309), (530, 13318), (532, 13327), (533, 13330), (554, 13435), (567, 13483), (570, 13489), (581, 13588), (582, 13591), (588, 13603), (603, 13720), (610, 13753), (619, 13804), (625, 13834), (632, 13894), (644, 13975), (649, 13996), (654, 14029), (666, 14092), (668, 14110), (686, 14224), (693, 14254), (696, 14263), (701, 14302), (702, 14305), (705, 14335), (706, 14356), (734, 14554), (743, 14617), (746, 14623), (756, 14674), (781, 14866), (790, 14953), (795, 14980), (796, 14983), (810, 15058), (814, 15082), (820, 15121), (822, 15157), (827, 15178), (836, 15265), (841, 15307), (847, 15340), (849, 15352), (865, 15496),

Gene: SheckWes_15 Start: 9372, Stop: 14465, Start Num: 28

Candidate Starts for SheckWes_15:

(Start: 28 @9372 has 33 MA's), (46, 9528), (56, 9633), (60, 9657), (68, 9708), (71, 9723), (77, 9756), (88, 9804), (90, 9813), (94, 9855), (96, 9861), (97, 9864), (105, 9900), (109, 9924), (114, 9951), (127, 10038), (131, 10077), (133, 10083), (136, 10098), (138, 10119), (147, 10173), (164, 10290), (175, 10353), (182, 10398), (189, 10437), (193, 10479), (211, 10641), (214, 10650), (215, 10674), (219, 10686), (223, 10713), (224, 10725), (230, 10770), (236, 10800), (239, 10812), (253, 10914), (254, 10917), (267, 11004), (270, 11031), (278, 11091), (284, 11121), (289, 11142), (293, 11166), (299, 11217), (304, 11259), (307, 11274), (308, 11283), (309, 11295), (313, 11328), (318, 11370), (328, 11430), (329, 11433), (330, 11436), (331, 11442), (336, 11460), (341, 11484), (348, 11568), (350, 11589), (359, 11637), (370, 11697), (371, 11700), (373, 11736), (382, 11802), (384, 11817), (390, 11847), (395, 11868), (396, 11871), (397, 11874), (415, 11952), (422, 11976), (424, 11982), (444, 12108), (450, 12138), (455, 12177), (461, 12225), (465, 12246), (466, 12249), (467, 12255), (474, 12321), (481, 12366), (484, 12399), (486, 12420), (498, 12474), (526, 12624), (528, 12633), (543, 12720), (585, 12897), (607, 13038), (616, 13068), (638, 13206), (653, 13287), (682, 13440), (686,

13470), (727, 13686), (729, 13695), (730, 13701), (740, 13737), (761, 13854), (763, 13860), (773, 13902), (778, 13920), (792, 14043), (798, 14067), (800, 14082), (805, 14112), (809, 14139), (811, 14145), (816, 14178), (824, 14247), (826, 14250), (828, 14286), (837, 14358), (838, 14361), (842, 14376),

Gene: SketchMex_15 Start: 9616, Stop: 14415, Start Num: 81

Candidate Starts for SketchMex_15:

(Start: 81 @9616 has 23 MA's), (Start: 86 @9643 has 2 MA's), (108, 9772), (124, 9874), (129, 9919), (132, 9931), (136, 9949), (139, 9976), (140, 9979), (142, 9994), (150, 10045), (151, 10048), (158, 10105), (159, 10108), (168, 10150), (171, 10168), (178, 10213), (187, 10249), (191, 10282), (196, 10315), (197, 10327), (205, 10381), (208, 10420), (210, 10435), (213, 10444), (217, 10471), (225, 10522), (233, 10564), (236, 10582), (239, 10591), (246, 10645), (258, 10708), (261, 10723), (269, 10786), (286, 10876), (292, 10903), (302, 10996), (304, 11002), (307, 11017), (311, 11056), (321, 11134), (327, 11167), (337, 11206), (340, 11224), (341, 11227), (345, 11254), (348, 11311), (350, 11332), (358, 11395), (363, 11431), (366, 11443), (371, 11464), (373, 11500), (379, 11542), (380, 11554), (382, 11566), (390, 11611), (391, 11614), (395, 11632), (396, 11635), (397, 11638), (414, 11713), (416, 11719), (424, 11746), (433, 11806), (436, 11821), (444, 11872), (445, 11875), (446, 11878), (448, 11896), (462, 11995), (465, 12010), (466, 12013), (484, 12163), (486, 12184), (495, 12226), (501, 12253), (502, 12259), (524, 12391), (528, 12403), (543, 12490), (552, 12532), (562, 12568), (579, 12643), (589, 12694), (595, 12733), (605, 12811), (617, 12862), (629, 12919), (651, 13057), (661, 13132), (686, 13276), (691, 13297), (713, 13474), (715, 13480), (761, 13804), (763, 13810), (778, 13870), (780, 13888), (783, 13921), (792, 13993), (800, 14032), (805, 14062), (816, 14128), (821, 14176), (828, 14236), (842, 14326), (852, 14386),

Gene: Socotra_17 Start: 9629, Stop: 14767, Start Num: 28

Candidate Starts for Socotra_17:

(Start: 22 @9605 has 5 MA's), (Start: 28 @9629 has 33 MA's), (32, 9656), (46, 9785), (49, 9860), (77, 10013), (78, 10016), (94, 10112), (97, 10121), (103, 10151), (105, 10157), (107, 10172), (108, 10175), (112, 10196), (122, 10268), (125, 10289), (136, 10355), (138, 10376), (155, 10493), (182, 10655), (189, 10694), (198, 10769), (215, 10928), (219, 10940), (223, 10967), (228, 11012), (230, 11024), (245, 11114), (248, 11132), (252, 11153), (255, 11183), (261, 11207), (264, 11219), (267, 11258), (271, 11291), (288, 11393), (289, 11396), (293, 11420), (304, 11513), (307, 11528), (311, 11567), (317, 11621), (324, 11663), (326, 11675), (333, 11705), (340, 11735), (341, 11738), (351, 11846), (352, 11849), (357, 11900), (371, 11975), (380, 12065), (382, 12077), (390, 12122), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (428, 12278), (432, 12308), (440, 12356), (442, 12362), (446, 12389), (466, 12524), (481, 12641), (484, 12674), (486, 12695), (487, 12698), (501, 12764), (502, 12770), (504, 12785), (526, 12905), (528, 12914), (543, 12998), (607, 13319), (646, 13538), (653, 13574), (691, 13787), (729, 13979), (740, 14027), (747, 14048), (761, 14156), (778, 14222), (780, 14240), (786, 14300), (792, 14345), (799, 14375), (800, 14384), (805, 14414), (816, 14480), (821, 14528), (828, 14588), (841, 14675), (852, 14738),

Gene: Sopespian_16 Start: 9630, Stop: 14768, Start Num: 28

Candidate Starts for Sopespian_16:

(Start: 22 @9606 has 5 MA's), (Start: 28 @9630 has 33 MA's), (32, 9657), (46, 9786), (49, 9861), (77, 10014), (78, 10017), (94, 10113), (97, 10122), (103, 10152), (105, 10158), (107, 10173), (108, 10176), (112, 10197), (122, 10269), (125, 10290), (136, 10356), (138, 10377), (155, 10494), (182, 10656), (189, 10695), (198, 10770), (215, 10929), (219, 10941), (223, 10968), (228, 11013), (230, 11025), (245, 11115), (248, 11133), (252, 11154), (255, 11184), (261, 11208), (264, 11220), (267, 11259), (271, 11292), (288, 11394), (289, 11397), (293, 11421), (304, 11514), (307, 11529), (311, 11568), (332, 11703), (333, 11706), (341, 11739), (351, 11847), (352, 11850), (357, 11901), (371, 11976), (380, 12066), (382, 12078), (390, 12123), (395, 12144), (396, 12147), (397, 12150), (414, 12225), (424, 12258), (428, 12279), (432, 12309), (440, 12357), (442, 12363), (446, 12390), (466, 12525), (481, 12642), (484, 12675), (486, 12696), (501, 12765), (502, 12771), (504, 12786), (526, 12906),

(528, 12915), (543, 12999), (607, 13320), (646, 13539), (653, 13575), (691, 13788), (729, 13980),
(740, 14028), (747, 14049), (761, 14157), (778, 14223), (780, 14241), (792, 14346), (799, 14376),
(800, 14385), (805, 14415), (816, 14481), (821, 14529), (828, 14589), (841, 14676), (852, 14739),

Gene: Spooky_18 Start: 9874, Stop: 15489, Start Num: 22

Candidate Starts for Spooky_18:

(Start: 22 @9874 has 5 MA's), (Start: 31 @9919 has 1 MA's), (33, 9940), (37, 9961), (41, 10006), (73, 10246), (91, 10339), (92, 10351), (96, 10375), (97, 10378), (109, 10438), (111, 10447), (112, 10453),
(122, 10525), (134, 10603), (136, 10612), (138, 10633), (202, 11053), (211, 11161), (215, 11194),
(219, 11206), (223, 11233), (245, 11380), (250, 11407), (254, 11437), (261, 11473), (267, 11524),
(268, 11527), (269, 11536), (274, 11572), (283, 11638), (293, 11686), (301, 11770), (302, 11773),
(304, 11779), (306, 11791), (307, 11794), (312, 11845), (313, 11848), (317, 11887), (337, 11983),
(341, 12004), (363, 12208), (370, 12238), (379, 12319), (382, 12343), (383, 12355), (391, 12391),
(407, 12451), (414, 12490), (416, 12496), (417, 12499), (423, 12520), (424, 12523), (440, 12622),
(447, 12661), (451, 12685), (455, 12718), (458, 12763), (464, 12817), (465, 12829), (472, 12904),
(473, 12925), (478, 12961), (482, 12991), (494, 13072), (496, 13081), (500, 13105), (512, 13186),
(514, 13192), (517, 13237), (518, 13240), (521, 13255), (529, 13300), (530, 13309), (532, 13318),
(554, 13426), (561, 13459), (567, 13474), (570, 13480), (581, 13579), (582, 13582), (583, 13585),
(588, 13594), (603, 13711), (610, 13744), (618, 13792), (619, 13795), (625, 13825), (632, 13885),
(644, 13966), (649, 13987), (650, 13990), (666, 14083), (667, 14092), (683, 14194), (686, 14215),
(693, 14245), (696, 14254), (701, 14293), (702, 14296), (703, 14299), (705, 14326), (711, 14380),
(726, 14497), (739, 14581), (741, 14593), (743, 14605), (746, 14611), (751, 14638), (756, 14662),
(781, 14839), (790, 14926), (794, 14944), (795, 14953), (810, 15031), (813, 15049), (823, 15139),
(827, 15151), (836, 15238), (841, 15280), (847, 15313), (849, 15325), (865, 15469),

Gene: Squiddly_20 Start: 11289, Stop: 16901, Start Num: 22

Candidate Starts for Squiddly_20:

(Start: 22 @11289 has 5 MA's), (26, 11307), (29, 11316), (Start: 31 @11334 has 1 MA's), (33, 11355),
(35, 11367), (41, 11421), (Start: 42 @11436 has 1 MA's), (62, 11604), (63, 11613), (68, 11637), (73, 11661),
(76, 11679), (85, 11724), (96, 11790), (97, 11793), (109, 11853), (134, 12018), (138, 12048),
(159, 12204), (184, 12342), (186, 12357), (202, 12468), (211, 12576), (218, 12618), (219, 12621),
(220, 12627), (223, 12648), (224, 12660), (245, 12795), (250, 12822), (254, 12852), (256, 12870),
(267, 12939), (269, 12951), (283, 13053), (293, 13101), (297, 13143), (302, 13188), (304, 13194),
(306, 13206), (307, 13209), (309, 13230), (312, 13260), (313, 13263), (316, 13299), (317, 13302),
(331, 13377), (337, 13398), (341, 13419), (348, 13503), (359, 13593), (379, 13734), (383, 13770),
(390, 13803), (391, 13806), (395, 13824), (407, 13866), (414, 13905), (416, 13911), (417, 13914),
(423, 13935), (424, 13938), (440, 14037), (447, 14076), (455, 14133), (459, 14208), (465, 14244),
(473, 14340), (478, 14376), (482, 14406), (493, 14484), (494, 14487), (496, 14496), (500, 14520),
(504, 14544), (507, 14577), (512, 14601), (514, 14607), (516, 14640), (517, 14652), (518, 14655),
(521, 14670), (527, 14688), (529, 14715), (530, 14724), (532, 14733), (533, 14736), (554, 14841),
(567, 14889), (570, 14895), (582, 14997), (588, 15009), (603, 15126), (610, 15159), (619, 15210),
(620, 15222), (625, 15240), (632, 15300), (644, 15381), (649, 15402), (666, 15498), (668, 15516),
(671, 15540), (683, 15609), (686, 15630), (693, 15660), (696, 15669), (701, 15708), (702, 15711),
(703, 15714), (705, 15741), (711, 15795), (726, 15912), (739, 15996), (741, 16008), (743, 16020),
(746, 16026), (751, 16053), (756, 16077), (781, 16254), (790, 16341), (794, 16359), (795, 16368),
(810, 16446), (812, 16461), (814, 16470), (822, 16545), (823, 16554), (827, 16566), (836, 16653),
(841, 16695), (847, 16728), (849, 16740), (861, 16815), (865, 16881),

Gene: Starburst_17 Start: 9629, Stop: 14767, Start Num: 28

Candidate Starts for Starburst_17:

(Start: 22 @9605 has 5 MA's), (Start: 28 @9629 has 33 MA's), (32, 9656), (46, 9785), (49, 9860), (77, 10013),
(78, 10016), (94, 10112), (97, 10121), (103, 10151), (105, 10157), (107, 10172), (108, 10175),
(112, 10196), (122, 10268), (125, 10289), (136, 10355), (138, 10376), (155, 10493), (182, 10655),

(189, 10694), (198, 10769), (215, 10928), (219, 10940), (223, 10967), (228, 11012), (230, 11024), (245, 11114), (248, 11132), (252, 11153), (255, 11183), (261, 11207), (264, 11219), (267, 11258), (271, 11291), (288, 11393), (289, 11396), (293, 11420), (294, 11426), (304, 11513), (307, 11528), (311, 11567), (333, 11705), (340, 11735), (341, 11738), (351, 11846), (352, 11849), (357, 11900), (371, 11975), (382, 12077), (390, 12122), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (428, 12278), (432, 12308), (440, 12356), (442, 12362), (446, 12389), (466, 12524), (481, 12641), (484, 12674), (486, 12695), (501, 12764), (502, 12770), (504, 12785), (526, 12905), (528, 12914), (543, 12998), (607, 13319), (646, 13538), (653, 13574), (691, 13787), (729, 13979), (740, 14027), (747, 14048), (761, 14156), (778, 14222), (780, 14240), (786, 14300), (792, 14345), (799, 14375), (800, 14384), (805, 14414), (816, 14480), (821, 14528), (828, 14588), (841, 14675), (852, 14738),

Gene: SteamedHams_18 Start: 9646, Stop: 14433, Start Num: 81

Candidate Starts for SteamedHams_18:

(Start: 81 @9646 has 23 MA's), (Start: 86 @9673 has 2 MA's), (99, 9751), (108, 9802), (121, 9889), (124, 9904), (132, 9961), (136, 9979), (139, 10006), (140, 10009), (151, 10078), (158, 10135), (168, 10180), (171, 10198), (178, 10243), (187, 10279), (191, 10312), (199, 10360), (200, 10363), (205, 10411), (208, 10450), (210, 10465), (235, 10606), (243, 10657), (246, 10675), (255, 10729), (286, 10906), (292, 10933), (302, 11026), (304, 11032), (307, 11047), (311, 11086), (312, 11098), (321, 11164), (337, 11236), (340, 11254), (341, 11257), (345, 11284), (373, 11530), (382, 11596), (390, 11641), (395, 11662), (396, 11665), (397, 11668), (408, 11704), (414, 11743), (416, 11749), (424, 11776), (445, 11905), (446, 11908), (448, 11926), (467, 12049), (469, 12064), (484, 12193), (486, 12214), (495, 12256), (501, 12283), (502, 12289), (524, 12421), (528, 12433), (543, 12520), (552, 12562), (562, 12598), (589, 12724), (595, 12763), (617, 12892), (629, 12949), (634, 12991), (651, 13084), (661, 13159), (673, 13222), (686, 13303), (691, 13324), (713, 13501), (715, 13507), (752, 13726), (759, 13804), (761, 13822), (763, 13828), (778, 13888), (780, 13906), (783, 13939), (792, 14011), (800, 14050), (805, 14080), (816, 14146), (821, 14194), (828, 14254), (842, 14344), (852, 14404),

Gene: SummitAcademy_15 Start: 9452, Stop: 14545, Start Num: 28

Candidate Starts for SummitAcademy_15:

(Start: 28 @9452 has 33 MA's), (46, 9608), (60, 9737), (64, 9767), (77, 9836), (80, 9848), (88, 9884), (94, 9935), (97, 9944), (105, 9980), (109, 10004), (118, 10064), (127, 10118), (131, 10157), (133, 10163), (136, 10178), (138, 10199), (164, 10370), (175, 10433), (182, 10478), (193, 10559), (211, 10718), (215, 10751), (219, 10763), (223, 10790), (230, 10847), (236, 10877), (239, 10889), (253, 10991), (254, 10994), (267, 11081), (274, 11129), (293, 11243), (304, 11336), (307, 11351), (309, 11372), (313, 11405), (315, 11435), (318, 11447), (324, 11486), (329, 11510), (330, 11513), (336, 11537), (341, 11561), (350, 11666), (363, 11744), (370, 11774), (371, 11777), (373, 11813), (379, 11855), (382, 11879), (384, 11894), (386, 11909), (390, 11924), (396, 11948), (408, 11987), (410, 12002), (411, 12008), (415, 12029), (422, 12053), (424, 12059), (444, 12185), (450, 12215), (456, 12266), (461, 12302), (465, 12323), (466, 12326), (474, 12398), (481, 12443), (484, 12476), (486, 12497), (498, 12551), (509, 12626), (528, 12710), (543, 12797), (607, 13115), (616, 13145), (638, 13283), (648, 13334), (653, 13364), (682, 13529), (686, 13559), (724, 13739), (730, 13790), (740, 13817), (747, 13838), (761, 13934), (773, 13982), (778, 14000), (792, 14123), (798, 14147), (800, 14162), (805, 14192), (809, 14219), (811, 14225), (816, 14258), (824, 14327), (826, 14330), (828, 14366), (842, 14456),

Gene: Survivors_18 Start: 10474, Stop: 15597, Start Num: 28

Candidate Starts for Survivors_18:

(23, 10453), (Start: 28 @10474 has 33 MA's), (32, 10501), (46, 10630), (54, 10726), (62, 10777), (74, 10834), (79, 10867), (80, 10870), (94, 10957), (98, 10969), (107, 11017), (108, 11020), (109, 11026), (116, 11080), (118, 11086), (125, 11134), (136, 11200), (138, 11221), (198, 11614), (199, 11617), (208, 11719), (219, 11785), (220, 11791), (223, 11812), (254, 12016), (256, 12034), (259, 12040),

(261, 12052), (264, 12064), (267, 12103), (269, 12115), (274, 12151), (281, 12208), (286, 12232), (288, 12238), (304, 12358), (307, 12373), (311, 12412), (320, 12487), (326, 12520), (330, 12535), (331, 12541), (332, 12547), (341, 12583), (351, 12691), (360, 12763), (370, 12817), (390, 12967), (396, 12991), (411, 13051), (412, 13063), (414, 13069), (422, 13096), (423, 13099), (424, 13102), (438, 13195), (440, 13201), (448, 13252), (457, 13321), (463, 13354), (466, 13369), (467, 13375), (473, 13432), (475, 13444), (480, 13483), (481, 13486), (483, 13507), (484, 13519), (486, 13540), (487, 13543), (495, 13582), (498, 13594), (501, 13609), (526, 13750), (543, 13846), (555, 13912), (565, 13933), (569, 13939), (607, 14176), (616, 14206), (624, 14245), (642, 14380), (650, 14410), (653, 14431), (679, 14569), (686, 14617), (737, 14848), (740, 14854), (761, 14983), (778, 15049), (783, 15100), (792, 15172), (800, 15211), (805, 15241), (811, 15274), (816, 15307), (826, 15379), (831, 15451), (841, 15505), (843, 15511), (852, 15568),

Gene: SweatNTears_18 Start: 10127, Stop: 14926, Start Num: 81

Candidate Starts for SweatNTears_18:

(Start: 81 @10127 has 23 MA's), (Start: 86 @10154 has 2 MA's), (88, 10160), (108, 10283), (124, 10385), (129, 10430), (132, 10442), (136, 10460), (139, 10487), (140, 10490), (142, 10505), (150, 10556), (151, 10559), (158, 10616), (159, 10619), (168, 10661), (171, 10679), (178, 10724), (187, 10760), (191, 10793), (196, 10826), (197, 10838), (205, 10892), (208, 10931), (210, 10946), (213, 10955), (217, 10982), (225, 11033), (236, 11093), (239, 11102), (246, 11156), (258, 11219), (261, 11234), (269, 11297), (286, 11387), (292, 11414), (300, 11495), (302, 11507), (304, 11513), (307, 11528), (310, 11558), (311, 11567), (321, 11645), (327, 11678), (337, 11717), (340, 11735), (341, 11738), (345, 11765), (348, 11822), (350, 11843), (366, 11954), (371, 11975), (373, 12011), (379, 12053), (380, 12065), (382, 12077), (390, 12122), (391, 12125), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (433, 12317), (444, 12383), (445, 12386), (446, 12389), (448, 12407), (462, 12506), (465, 12521), (466, 12524), (484, 12674), (486, 12695), (495, 12737), (501, 12764), (502, 12770), (524, 12902), (528, 12914), (543, 13001), (552, 13043), (562, 13079), (579, 13154), (589, 13205), (595, 13244), (597, 13268), (617, 13373), (629, 13430), (651, 13568), (661, 13643), (686, 13787), (691, 13808), (713, 13985), (715, 13991), (761, 14315), (763, 14321), (778, 14381), (780, 14399), (783, 14432), (792, 14504), (800, 14543), (805, 14573), (816, 14639), (821, 14687), (828, 14747), (842, 14837), (852, 14897),

Gene: TaronosaurusRx_17 Start: 10940, Stop: 16063, Start Num: 25

Candidate Starts for TaronosaurusRx_17:

(Start: 25 @10940 has 13 MA's), (27, 10946), (57, 11219), (59, 11228), (66, 11267), (76, 11324), (90, 11387), (106, 11480), (109, 11498), (131, 11651), (138, 11693), (152, 11780), (182, 11972), (183, 11975), (189, 12011), (194, 12059), (211, 12212), (215, 12245), (218, 12254), (220, 12263), (224, 12296), (226, 12308), (229, 12332), (238, 12377), (240, 12386), (245, 12431), (250, 12458), (252, 12470), (254, 12488), (276, 12647), (280, 12671), (281, 12680), (282, 12683), (302, 12824), (303, 12827), (304, 12830), (306, 12842), (307, 12845), (313, 12899), (317, 12938), (337, 13034), (341, 13055), (343, 13070), (345, 13082), (349, 13154), (374, 13316), (406, 13373), (413, 13385), (414, 13388), (424, 13421), (438, 13514), (440, 13520), (442, 13526), (444, 13547), (445, 13550), (446, 13553), (449, 13574), (453, 13604), (459, 13652), (460, 13658), (462, 13667), (467, 13691), (469, 13706), (470, 13709), (471, 13715), (475, 13760), (477, 13769), (489, 13868), (497, 13910), (503, 13943), (510, 13988), (514, 14012), (519, 14057), (525, 14075), (552, 14213), (557, 14234), (563, 14252), (564, 14255), (568, 14264), (606, 14495), (608, 14513), (614, 14537), (638, 14681), (641, 14705), (652, 14756), (676, 14900), (678, 14918), (684, 14957), (692, 14996), (694, 15002), (697, 15011), (701, 15053), (708, 15131), (716, 15170), (736, 15305), (756, 15398), (757, 15401), (760, 15458), (764, 15467), (767, 15479), (774, 15500), (807, 15713), (814, 15752), (826, 15821), (829, 15875), (857, 16025),

Gene: Toast_17 Start: 10235, Stop: 15886, Start Num: 7

Candidate Starts for Toast_17:

(Start: 7 @10235 has 1 MA's), (Start: 8 @10271 has 37 MA's), (Start: 12 @10292 has 1 MA's), (15, 10331), (18, 10376), (34, 10466), (36, 10475), (38, 10487), (40, 10508), (45, 10565), (48, 10637), (51, 10658), (59, 10700), (60, 10703), (63, 10730), (67, 10751), (68, 10754), (72, 10775), (76, 10796), (87, 10847), (88, 10850), (97, 10910), (128, 11093), (138, 11165), (167, 11351), (184, 11453), (186, 11468), (189, 11483), (195, 11540), (219, 11732), (238, 11852), (250, 11933), (254, 11963), (261, 11999), (267, 12050), (288, 12185), (289, 12188), (293, 12212), (299, 12263), (302, 12299), (304, 12305), (307, 12320), (313, 12374), (317, 12413), (321, 12437), (324, 12455), (335, 12503), (337, 12509), (340, 12527), (341, 12530), (343, 12545), (345, 12557), (347, 12605), (370, 12743), (379, 12824), (382, 12848), (383, 12860), (384, 12863), (391, 12896), (415, 12998), (422, 13025), (423, 13028), (424, 13031), (425, 13037), (432, 13082), (434, 13094), (436, 13106), (440, 13130), (443, 13145), (445, 13160), (446, 13163), (450, 13187), (453, 13214), (465, 13295), (476, 13379), (489, 13484), (496, 13517), (505, 13583), (506, 13592), (514, 13631), (516, 13664), (517, 13676), (518, 13679), (521, 13694), (522, 13703), (529, 13739), (530, 13748), (532, 13757), (567, 13913), (568, 13916), (570, 13919), (571, 13940), (582, 14021), (592, 14063), (603, 14150), (610, 14183), (612, 14192), (619, 14234), (637, 14348), (663, 14513), (675, 14597), (676, 14600), (680, 14630), (681, 14633), (685, 14666), (686, 14669), (700, 14747), (706, 14804), (725, 14921), (731, 14972), (753, 15074), (758, 15107), (762, 15173), (777, 15239), (778, 15245), (780, 15263), (783, 15296), (792, 15368), (802, 15410), (803, 15416), (805, 15434), (806, 15440), (809, 15461), (816, 15500), (830, 15641), (843, 15704), (854, 15779), (864, 15872),

Gene: Tolls_18 Start: 9649, Stop: 14436, Start Num: 81

Candidate Starts for Tolls_18:

(Start: 81 @9649 has 23 MA's), (Start: 86 @9676 has 2 MA's), (99, 9754), (108, 9805), (121, 9892), (124, 9907), (132, 9964), (136, 9982), (139, 10009), (140, 10012), (151, 10081), (158, 10138), (168, 10183), (171, 10201), (178, 10246), (181, 10261), (187, 10282), (191, 10315), (199, 10363), (200, 10366), (205, 10414), (208, 10453), (210, 10468), (243, 10660), (246, 10678), (262, 10762), (286, 10909), (292, 10936), (302, 11029), (304, 11035), (307, 11050), (311, 11089), (312, 11101), (321, 11167), (337, 11239), (340, 11257), (341, 11260), (345, 11287), (373, 11533), (382, 11599), (390, 11644), (395, 11665), (396, 11668), (397, 11671), (408, 11707), (414, 11746), (416, 11752), (424, 11779), (445, 11908), (446, 11911), (448, 11929), (467, 12052), (469, 12067), (484, 12196), (486, 12217), (495, 12259), (501, 12286), (502, 12292), (524, 12424), (528, 12436), (543, 12523), (552, 12565), (562, 12601), (589, 12727), (595, 12766), (617, 12895), (629, 12952), (634, 12994), (651, 13087), (661, 13162), (673, 13225), (686, 13306), (691, 13327), (713, 13504), (715, 13510), (752, 13729), (759, 13807), (761, 13825), (763, 13831), (778, 13891), (780, 13909), (783, 13942), (792, 14014), (800, 14053), (805, 14083), (816, 14149), (821, 14197), (828, 14257), (842, 14347), (852, 14407),

Gene: Troje_16 Start: 9601, Stop: 14397, Start Num: 81

Candidate Starts for Troje_16:

(Start: 81 @9601 has 23 MA's), (Start: 86 @9628 has 2 MA's), (88, 9634), (108, 9757), (124, 9859), (129, 9904), (132, 9916), (136, 9934), (139, 9961), (140, 9964), (142, 9979), (150, 10030), (151, 10033), (158, 10090), (159, 10093), (168, 10135), (171, 10153), (178, 10198), (187, 10234), (191, 10267), (196, 10300), (197, 10312), (205, 10366), (208, 10405), (210, 10420), (213, 10429), (217, 10456), (225, 10507), (236, 10567), (239, 10576), (246, 10630), (258, 10693), (261, 10708), (286, 10861), (292, 10888), (300, 10969), (302, 10981), (304, 10987), (307, 11002), (311, 11041), (321, 11119), (327, 11152), (337, 11191), (340, 11209), (341, 11212), (345, 11239), (348, 11296), (350, 11317), (358, 11380), (366, 11428), (371, 11449), (373, 11485), (379, 11527), (382, 11551), (390, 11596), (391, 11599), (395, 11617), (396, 11620), (397, 11623), (414, 11698), (416, 11704), (424, 11731), (433, 11791), (444, 11857), (445, 11860), (446, 11863), (448, 11881), (462, 11980), (465, 11995), (466, 11998), (484, 12148), (486, 12169), (495, 12211), (501, 12238), (502, 12244), (528, 12388), (543, 12475), (552, 12517), (562, 12553), (579, 12628), (589, 12679), (595, 12718), (605, 12796), (617, 12847), (629, 12904), (651, 13042), (661, 13114), (686, 13258), (691, 13279), (713, 13456), (715, 13462), (761, 13786), (763, 13792), (778, 13852), (780, 13870), (783, 13903), (792,

13975), (800, 14014), (805, 14044), (816, 14110), (818, 14128), (821, 14158), (828, 14218), (842, 14308), (852, 14368),

Gene: Typhonomachy_16 Start: 9629, Stop: 14767, Start Num: 28

Candidate Starts for Typhonomachy_16:

(Start: 22 @9605 has 5 MA's), (Start: 28 @9629 has 33 MA's), (32, 9656), (46, 9785), (49, 9860), (77, 10013), (78, 10016), (94, 10112), (97, 10121), (103, 10151), (105, 10157), (107, 10172), (108, 10175), (112, 10196), (122, 10268), (125, 10289), (136, 10355), (138, 10376), (155, 10493), (182, 10655), (189, 10694), (198, 10769), (215, 10928), (219, 10940), (223, 10967), (228, 11012), (230, 11024), (245, 11114), (248, 11132), (252, 11153), (255, 11183), (261, 11207), (264, 11219), (267, 11258), (271, 11291), (273, 11303), (288, 11393), (289, 11396), (293, 11420), (304, 11513), (307, 11528), (311, 11567), (317, 11621), (324, 11663), (333, 11705), (340, 11735), (341, 11738), (351, 11846), (352, 11849), (357, 11900), (371, 11975), (380, 12065), (382, 12077), (388, 12116), (390, 12122), (395, 12143), (396, 12146), (397, 12149), (414, 12224), (424, 12257), (428, 12278), (432, 12308), (440, 12356), (442, 12362), (446, 12389), (466, 12524), (481, 12641), (484, 12674), (486, 12695), (501, 12764), (502, 12770), (504, 12785), (526, 12905), (528, 12914), (543, 12998), (607, 13319), (646, 13538), (653, 13574), (691, 13787), (729, 13979), (740, 14027), (747, 14048), (761, 14156), (778, 14222), (780, 14240), (792, 14345), (799, 14375), (800, 14384), (805, 14414), (816, 14480), (821, 14528), (828, 14588), (841, 14675), (852, 14738),

Gene: UmaThurman_17 Start: 10381, Stop: 15924, Start Num: 8

Candidate Starts for UmaThurman_17:

(Start: 8 @10381 has 37 MA's), (Start: 11 @10396 has 1 MA's), (Start: 12 @10402 has 1 MA's), (Start: 14 @10432 has 1 MA's), (15, 10441), (16, 10444), (18, 10486), (38, 10597), (40, 10618), (65, 10846), (68, 10864), (71, 10879), (72, 10885), (73, 10888), (76, 10906), (82, 10930), (95, 11014), (96, 11017), (105, 11056), (107, 11071), (109, 11080), (135, 11248), (138, 11275), (189, 11593), (211, 11797), (219, 11842), (220, 11848), (223, 11869), (224, 11881), (240, 11971), (245, 12016), (250, 12043), (254, 12073), (267, 12160), (268, 12163), (272, 12202), (293, 12322), (297, 12364), (302, 12409), (304, 12415), (307, 12430), (313, 12484), (317, 12523), (320, 12544), (321, 12547), (324, 12565), (325, 12574), (335, 12613), (337, 12619), (341, 12640), (345, 12667), (370, 12874), (385, 12940), (398, 12979), (405, 12994), (423, 13024), (424, 13027), (432, 13078), (445, 13159), (446, 13162), (452, 13195), (455, 13225), (457, 13249), (505, 13582), (514, 13630), (517, 13675), (518, 13678), (521, 13693), (529, 13738), (530, 13747), (532, 13756), (542, 13807), (556, 13879), (561, 13897), (570, 13918), (581, 14017), (582, 14020), (591, 14053), (599, 14119), (600, 14137), (603, 14152), (610, 14185), (619, 14236), (627, 14287), (633, 14335), (664, 14530), (665, 14533), (675, 14605), (676, 14608), (685, 14674), (686, 14677), (690, 14695), (700, 14755), (706, 14812), (707, 14830), (720, 14911), (721, 14914), (725, 14929), (748, 15088), (758, 15142), (762, 15208), (776, 15262), (777, 15274), (778, 15280), (792, 15403), (798, 15427), (802, 15445), (805, 15469), (806, 15475), (809, 15496), (816, 15535), (830, 15676), (833, 15688), (843, 15739), (845, 15757), (864, 15907),

Gene: Utz_17 Start: 10248, Stop: 15791, Start Num: 8

Candidate Starts for Utz_17:

(Start: 8 @10248 has 37 MA's), (Start: 11 @10263 has 1 MA's), (Start: 12 @10269 has 1 MA's), (Start: 14 @10299 has 1 MA's), (15, 10308), (16, 10311), (18, 10353), (38, 10464), (40, 10485), (47, 10605), (54, 10647), (65, 10713), (68, 10731), (72, 10752), (73, 10755), (76, 10773), (82, 10797), (95, 10881), (96, 10884), (105, 10923), (107, 10938), (109, 10947), (135, 11115), (138, 11142), (155, 11259), (184, 11430), (189, 11460), (211, 11664), (219, 11709), (223, 11736), (224, 11748), (240, 11838), (250, 11910), (254, 11940), (267, 12027), (268, 12030), (272, 12069), (293, 12189), (297, 12231), (302, 12276), (304, 12282), (306, 12294), (307, 12297), (313, 12351), (317, 12390), (320, 12411), (321, 12414), (324, 12432), (335, 12480), (337, 12486), (341, 12507), (345, 12534), (385, 12807), (398, 12846), (405, 12861), (423, 12891), (424, 12894), (432, 12945), (445, 13026), (446, 13029), (452, 13062), (455, 13092), (457, 13116), (468, 13182), (505, 13449), (508, 13467), (514, 13497), (517, 13542), (518, 13545), (521, 13560), (522, 13569), (529, 13605), (530, 13614), (532, 13623), (542,

13674), (556, 13746), (561, 13764), (570, 13785), (581, 13884), (582, 13887), (591, 13920), (599, 13986), (600, 14004), (603, 14019), (610, 14052), (619, 14103), (627, 14154), (664, 14397), (665, 14400), (675, 14472), (676, 14475), (685, 14541), (686, 14544), (690, 14562), (700, 14622), (706, 14679), (707, 14697), (720, 14778), (721, 14781), (725, 14796), (758, 15009), (762, 15075), (777, 15141), (778, 15147), (792, 15270), (798, 15294), (802, 15312), (805, 15336), (806, 15342), (809, 15363), (816, 15402), (830, 15543), (843, 15606), (845, 15624), (850, 15651), (854, 15681), (864, 15774),

Gene: Vine_17 Start: 10381, Stop: 15480, Start Num: 28

Candidate Starts for Vine_17:

(Start: 28 @10381 has 33 MA's), (46, 10537), (60, 10666), (64, 10696), (77, 10765), (80, 10777), (88, 10813), (90, 10822), (94, 10864), (97, 10873), (105, 10909), (109, 10933), (118, 10993), (127, 11047), (131, 11086), (136, 11107), (138, 11128), (161, 11287), (164, 11299), (175, 11362), (182, 11407), (193, 11488), (211, 11647), (215, 11680), (219, 11692), (223, 11719), (230, 11776), (236, 11806), (239, 11818), (253, 11920), (254, 11923), (267, 12010), (273, 12055), (274, 12058), (293, 12172), (304, 12265), (307, 12280), (309, 12301), (313, 12334), (315, 12364), (318, 12376), (324, 12415), (329, 12439), (330, 12442), (336, 12466), (341, 12490), (350, 12595), (363, 12673), (370, 12703), (371, 12706), (373, 12742), (379, 12784), (382, 12808), (384, 12823), (386, 12838), (390, 12853), (396, 12877), (408, 12916), (410, 12931), (411, 12937), (415, 12958), (422, 12982), (424, 12988), (444, 13114), (450, 13144), (456, 13195), (461, 13231), (465, 13252), (466, 13255), (474, 13327), (481, 13372), (484, 13405), (486, 13426), (498, 13480), (509, 13555), (528, 13639), (543, 13726), (587, 13912), (607, 14044), (616, 14074), (638, 14212), (648, 14263), (653, 14293), (672, 14398), (682, 14449), (686, 14479), (724, 14659), (730, 14710), (740, 14752), (747, 14773), (761, 14869), (773, 14917), (778, 14935), (792, 15058), (798, 15082), (800, 15097), (805, 15127), (809, 15154), (811, 15160), (816, 15193), (824, 15262), (826, 15265), (828, 15301), (842, 15391),

Gene: Walrus_18 Start: 10497, Stop: 16019, Start Num: 12

Candidate Starts for Walrus_18:

(Start: 8 @10476 has 37 MA's), (Start: 11 @10491 has 1 MA's), (Start: 12 @10497 has 1 MA's), (Start: 14 @10527 has 1 MA's), (15, 10536), (16, 10539), (18, 10581), (38, 10692), (40, 10713), (47, 10833), (65, 10941), (68, 10959), (73, 10983), (76, 11001), (82, 11025), (95, 11109), (97, 11115), (105, 11151), (107, 11166), (109, 11175), (112, 11190), (118, 11235), (120, 11256), (135, 11343), (138, 11370), (144, 11403), (155, 11487), (164, 11541), (171, 11583), (184, 11658), (189, 11688), (211, 11892), (219, 11937), (245, 12111), (250, 12138), (254, 12168), (267, 12255), (268, 12258), (272, 12297), (274, 12303), (281, 12360), (293, 12417), (297, 12459), (302, 12504), (304, 12510), (307, 12525), (313, 12579), (317, 12618), (320, 12639), (321, 12642), (324, 12660), (330, 12687), (335, 12708), (337, 12714), (341, 12735), (349, 12834), (385, 13035), (389, 13050), (398, 13074), (405, 13089), (423, 13119), (424, 13122), (432, 13173), (445, 13254), (446, 13257), (452, 13290), (455, 13320), (457, 13344), (468, 13410), (505, 13677), (514, 13725), (517, 13770), (518, 13773), (521, 13788), (527, 13806), (529, 13833), (530, 13842), (532, 13851), (542, 13902), (556, 13974), (561, 13992), (570, 14013), (581, 14112), (582, 14115), (591, 14148), (599, 14214), (600, 14232), (603, 14247), (610, 14280), (619, 14331), (627, 14382), (664, 14625), (665, 14628), (675, 14700), (676, 14703), (685, 14769), (686, 14772), (690, 14790), (700, 14850), (706, 14907), (707, 14925), (720, 15006), (721, 15009), (725, 15024), (748, 15183), (758, 15237), (762, 15303), (763, 15309), (777, 15369), (778, 15375), (792, 15498), (798, 15522), (802, 15540), (805, 15564), (806, 15570), (809, 15591), (816, 15630), (830, 15771), (833, 15783), (843, 15834), (845, 15852), (863, 15981), (864, 16002),

Gene: Whack_16 Start: 10349, Stop: 16249, Start Num: 1

Candidate Starts for Whack_16:

(Start: 1 @10349 has 1 MA's), (2, 10358), (3, 10397), (6, 10445), (46, 10874), (49, 10949), (50, 10955), (61, 11018), (62, 11021), (68, 11054), (77, 11102), (78, 11105), (93, 11192), (98, 11213), (101, 11231), (109, 11270), (115, 11306), (120, 11354), (124, 11384), (133, 11444), (146, 11567), (175, 11777), (179, 11819), (206, 12029), (212, 12083), (221, 12134), (232, 12215), (251, 12341), (253, 12359),

(287, 12593), (299, 12674), (302, 12710), (304, 12716), (307, 12731), (312, 12782), (313, 12785), (319, 12836), (323, 12860), (324, 12866), (331, 12899), (339, 12926), (341, 12941), (346, 13004), (348, 13025), (355, 13088), (363, 13145), (377, 13247), (402, 13343), (419, 13400), (421, 13406), (422, 13409), (439, 13511), (443, 13529), (447, 13553), (481, 13802), (483, 13823), (491, 13880), (513, 14024), (520, 14081), (540, 14183), (545, 14207), (547, 14210), (563, 14270), (566, 14276), (575, 14324), (590, 14399), (601, 14498), (609, 14549), (611, 14555), (626, 14636), (628, 14645), (677, 14966), (681, 14990), (687, 15026), (695, 15065), (701, 15110), (709, 15170), (714, 15212), (718, 15242), (719, 15245), (744, 15416), (745, 15419), (750, 15446), (765, 15578), (769, 15593), (772, 15599), (775, 15608), (781, 15656), (817, 15905), (826, 15977), (832, 16052), (840, 16097), (846, 16127), (847, 16136), (853, 16172), (856, 16187),

Gene: Whitney_19 Start: 10672, Stop: 16305, Start Num: 22

Candidate Starts for Whitney_19:

(Start: 22 @10672 has 5 MA's), (Start: 31 @10717 has 1 MA's), (33, 10738), (37, 10759), (41, 10804), (Start: 42 @10819 has 1 MA's), (48, 10903), (56, 10945), (57, 10957), (68, 11020), (71, 11035), (73, 11044), (76, 11062), (77, 11068), (88, 11116), (112, 11251), (134, 11401), (138, 11431), (171, 11650), (184, 11725), (189, 11755), (211, 11959), (219, 12004), (220, 12010), (223, 12031), (226, 12055), (235, 12112), (245, 12178), (250, 12205), (252, 12217), (254, 12235), (255, 12247), (261, 12271), (264, 12283), (267, 12322), (268, 12325), (269, 12334), (272, 12364), (278, 12409), (290, 12469), (293, 12484), (296, 12514), (297, 12526), (302, 12571), (304, 12577), (307, 12592), (310, 12622), (312, 12643), (313, 12646), (321, 12709), (325, 12736), (326, 12739), (327, 12742), (328, 12748), (334, 12772), (335, 12775), (337, 12781), (339, 12787), (341, 12802), (344, 12820), (346, 12865), (355, 12949), (356, 12955), (360, 12982), (373, 13075), (374, 13084), (382, 13141), (383, 13153), (391, 13189), (392, 13195), (404, 13237), (407, 13249), (414, 13288), (416, 13294), (417, 13297), (422, 13315), (423, 13318), (424, 13321), (429, 13345), (440, 13420), (447, 13459), (451, 13483), (455, 13516), (465, 13627), (468, 13660), (473, 13723), (478, 13759), (482, 13789), (493, 13867), (494, 13870), (496, 13879), (500, 13903), (514, 13990), (517, 14035), (518, 14038), (521, 14053), (529, 14098), (530, 14107), (532, 14116), (533, 14119), (554, 14224), (567, 14272), (570, 14278), (581, 14377), (582, 14380), (588, 14392), (603, 14509), (610, 14542), (619, 14593), (625, 14623), (632, 14683), (644, 14764), (649, 14785), (650, 14788), (654, 14818), (666, 14881), (667, 14890), (668, 14899), (686, 15013), (693, 15043), (701, 15091), (702, 15094), (705, 15124), (706, 15145), (734, 15343), (743, 15406), (746, 15412), (756, 15463), (781, 15655), (790, 15742), (795, 15769), (796, 15772), (810, 15847), (814, 15871), (820, 15910), (822, 15946), (827, 15967), (836, 16054), (841, 16096), (847, 16129), (849, 16141), (865, 16285),

Gene: William_17 Start: 10217, Stop: 15835, Start Num: 8

Candidate Starts for William_17:

(Start: 7 @10181 has 1 MA's), (Start: 8 @10217 has 37 MA's), (Start: 12 @10238 has 1 MA's), (16, 10280), (18, 10322), (34, 10412), (36, 10421), (38, 10433), (40, 10454), (46, 10520), (48, 10583), (51, 10604), (59, 10646), (60, 10649), (63, 10676), (67, 10697), (68, 10700), (72, 10721), (76, 10742), (87, 10793), (88, 10796), (97, 10856), (128, 11039), (138, 11111), (167, 11297), (184, 11399), (186, 11414), (189, 11429), (195, 11486), (219, 11678), (238, 11798), (250, 11879), (254, 11909), (261, 11945), (267, 11996), (288, 12131), (289, 12134), (293, 12158), (299, 12209), (302, 12245), (304, 12251), (307, 12266), (313, 12320), (317, 12359), (321, 12383), (324, 12401), (335, 12449), (337, 12455), (340, 12473), (341, 12476), (343, 12491), (345, 12503), (347, 12551), (370, 12689), (379, 12770), (382, 12794), (383, 12806), (384, 12809), (391, 12842), (415, 12944), (422, 12971), (423, 12974), (424, 12977), (425, 12983), (434, 13040), (436, 13052), (440, 13076), (443, 13091), (445, 13106), (446, 13109), (450, 13133), (453, 13160), (465, 13241), (476, 13325), (489, 13430), (496, 13463), (505, 13529), (506, 13538), (514, 13577), (516, 13610), (517, 13622), (518, 13625), (521, 13640), (522, 13649), (529, 13685), (530, 13694), (532, 13703), (567, 13859), (568, 13862), (570, 13865), (571, 13886), (582, 13967), (592, 14009), (603, 14096), (610, 14129), (612, 14138), (619, 14180), (637, 14294), (675, 14543), (676, 14546), (680, 14576), (681, 14579), (684, 14603), (685, 14612), (686, 14615), (700, 14693), (706, 14750), (725, 14867), (731, 14918), (758, 15056), (762,

15122), (777, 15188), (778, 15194), (780, 15212), (790, 15305), (792, 15317), (803, 15365), (805, 15383), (806, 15389), (809, 15410), (816, 15449), (830, 15590), (843, 15653), (854, 15728), (864, 15821),

Gene: Wisp_16 Start: 10065, Stop: 15509, Start Num: 14

Candidate Starts for Wisp_16:

(Start: 8 @10014 has 37 MA's), (Start: 11 @10029 has 1 MA's), (Start: 12 @10035 has 1 MA's), (Start: 14 @10065 has 1 MA's), (15, 10074), (16, 10077), (18, 10119), (38, 10230), (40, 10251), (47, 10371), (54, 10413), (60, 10446), (65, 10479), (68, 10497), (71, 10512), (72, 10518), (73, 10521), (76, 10539), (82, 10563), (95, 10647), (105, 10689), (107, 10704), (109, 10713), (135, 10881), (138, 10908), (155, 11025), (184, 11196), (189, 11226), (211, 11430), (219, 11475), (223, 11502), (224, 11514), (240, 11604), (245, 11649), (250, 11676), (254, 11706), (267, 11793), (268, 11796), (272, 11835), (281, 11898), (293, 11955), (297, 11997), (302, 12042), (304, 12048), (306, 12060), (307, 12063), (313, 12117), (317, 12156), (320, 12177), (321, 12180), (324, 12198), (330, 12225), (335, 12246), (337, 12252), (340, 12270), (341, 12273), (342, 12279), (345, 12300), (385, 12573), (393, 12600), (398, 12612), (405, 12627), (423, 12657), (424, 12660), (445, 12792), (446, 12795), (452, 12828), (455, 12858), (457, 12882), (468, 12948), (505, 13215), (514, 13263), (517, 13308), (518, 13311), (521, 13326), (529, 13371), (530, 13380), (532, 13389), (542, 13440), (556, 13512), (561, 13530), (570, 13551), (581, 13650), (582, 13653), (591, 13686), (599, 13752), (600, 13770), (603, 13785), (610, 13818), (619, 13869), (627, 13920), (664, 14163), (665, 14166), (675, 14238), (676, 14241), (685, 14307), (686, 14310), (690, 14328), (700, 14388), (720, 14544), (721, 14547), (725, 14562), (748, 14733), (758, 14787), (766, 14844), (770, 14859), (779, 14907), (784, 14952), (807, 15072), (808, 15081), (815, 15120), (825, 15192), (830, 15261), (833, 15273), (843, 15324), (845, 15342), (854, 15399), (864, 15492),

Gene: Wocket_18 Start: 10497, Stop: 15983, Start Num: 8

Candidate Starts for Wocket_18:

(Start: 8 @10497 has 37 MA's), (Start: 11 @10512 has 1 MA's), (Start: 14 @10548 has 1 MA's), (15, 10557), (16, 10560), (18, 10602), (38, 10713), (40, 10734), (47, 10854), (65, 10962), (68, 10980), (72, 11001), (73, 11004), (76, 11022), (82, 11046), (88, 11076), (95, 11130), (97, 11136), (105, 11172), (107, 11187), (109, 11196), (135, 11364), (138, 11391), (164, 11562), (171, 11604), (184, 11679), (189, 11709), (211, 11913), (219, 11958), (220, 11964), (223, 11985), (224, 11997), (240, 12087), (245, 12132), (250, 12159), (254, 12189), (267, 12276), (272, 12318), (283, 12390), (293, 12438), (297, 12480), (302, 12525), (304, 12531), (307, 12546), (313, 12600), (317, 12639), (320, 12660), (321, 12663), (324, 12681), (330, 12708), (335, 12729), (337, 12735), (341, 12756), (345, 12783), (398, 13095), (405, 13110), (423, 13140), (424, 13143), (432, 13194), (445, 13275), (446, 13278), (452, 13311), (455, 13341), (457, 13365), (468, 13431), (505, 13698), (512, 13740), (514, 13746), (516, 13779), (517, 13791), (518, 13794), (521, 13809), (527, 13827), (529, 13854), (530, 13863), (532, 13872), (554, 13980), (567, 14028), (568, 14031), (570, 14034), (571, 14055), (582, 14136), (583, 14139), (603, 14265), (610, 14298), (618, 14346), (619, 14349), (621, 14364), (627, 14400), (665, 14646), (675, 14718), (676, 14721), (685, 14787), (686, 14790), (690, 14808), (700, 14868), (720, 15024), (725, 15042), (748, 15207), (758, 15261), (766, 15318), (770, 15333), (779, 15381), (784, 15426), (807, 15546), (808, 15555), (815, 15594), (825, 15666), (830, 15735), (843, 15798), (845, 15816), (851, 15846),

Gene: Wolfwood_20 Start: 10618, Stop: 15741, Start Num: 28

Candidate Starts for Wolfwood_20:

(23, 10597), (Start: 28 @10618 has 33 MA's), (32, 10645), (46, 10774), (54, 10870), (62, 10921), (74, 10978), (79, 11011), (80, 11014), (94, 11101), (98, 11113), (107, 11161), (108, 11164), (109, 11170), (110, 11173), (116, 11224), (118, 11230), (125, 11278), (136, 11344), (138, 11365), (198, 11758), (199, 11761), (208, 11863), (216, 11920), (218, 11926), (219, 11929), (220, 11935), (223, 11956), (240, 12058), (242, 12085), (254, 12160), (256, 12178), (261, 12196), (264, 12208), (267, 12247), (274, 12295), (281, 12352), (286, 12376), (288, 12382), (304, 12502), (307, 12517), (311, 12556),

(320, 12631), (326, 12664), (330, 12679), (331, 12685), (332, 12691), (341, 12727), (351, 12835), (360, 12907), (370, 12961), (382, 13066), (390, 13111), (396, 13135), (411, 13195), (412, 13207), (414, 13213), (422, 13240), (423, 13243), (424, 13246), (438, 13339), (440, 13345), (448, 13396), (457, 13465), (463, 13498), (466, 13513), (467, 13519), (473, 13576), (475, 13588), (480, 13627), (481, 13630), (483, 13651), (484, 13663), (486, 13684), (487, 13687), (495, 13726), (498, 13738), (501, 13753), (526, 13894), (543, 13990), (555, 14056), (565, 14077), (569, 14083), (607, 14320), (616, 14350), (642, 14524), (650, 14554), (653, 14575), (679, 14713), (686, 14761), (737, 14992), (740, 14998), (761, 15127), (778, 15193), (783, 15244), (792, 15316), (800, 15355), (805, 15385), (811, 15418), (816, 15451), (831, 15595), (841, 15649), (843, 15655), (852, 15712),

Gene: Yarn_15 Start: 9639, Stop: 14426, Start Num: 81

Candidate Starts for Yarn_15:

(Start: 81 @9639 has 23 MA's), (Start: 86 @9666 has 2 MA's), (99, 9744), (108, 9795), (121, 9882), (124, 9897), (132, 9954), (136, 9972), (139, 9999), (140, 10002), (151, 10071), (158, 10128), (168, 10173), (171, 10191), (178, 10236), (187, 10272), (191, 10305), (199, 10353), (200, 10356), (205, 10404), (208, 10443), (210, 10458), (243, 10650), (246, 10668), (262, 10752), (286, 10899), (292, 10926), (302, 11019), (304, 11025), (307, 11040), (311, 11079), (312, 11091), (321, 11157), (337, 11229), (340, 11247), (341, 11250), (345, 11277), (373, 11523), (382, 11589), (390, 11634), (395, 11655), (396, 11658), (397, 11661), (408, 11697), (414, 11736), (416, 11742), (424, 11769), (445, 11898), (446, 11901), (448, 11919), (467, 12042), (469, 12057), (484, 12186), (486, 12207), (495, 12249), (501, 12276), (502, 12282), (524, 12414), (528, 12426), (543, 12513), (552, 12555), (562, 12591), (589, 12717), (595, 12756), (617, 12885), (629, 12942), (634, 12984), (651, 13077), (661, 13152), (673, 13215), (686, 13296), (691, 13317), (713, 13494), (715, 13500), (752, 13719), (759, 13797), (761, 13815), (763, 13821), (778, 13881), (780, 13899), (783, 13932), (792, 14004), (800, 14043), (805, 14073), (816, 14139), (821, 14187), (828, 14247), (842, 14337), (852, 14397),

Gene: Yucky_16 Start: 10241, Stop: 15340, Start Num: 28

Candidate Starts for Yucky_16:

(Start: 28 @10241 has 33 MA's), (46, 10397), (64, 10556), (77, 10625), (88, 10673), (94, 10724), (97, 10733), (105, 10769), (109, 10793), (118, 10853), (127, 10907), (131, 10946), (133, 10952), (136, 10967), (138, 10988), (161, 11147), (164, 11159), (175, 11222), (182, 11267), (193, 11348), (211, 11507), (215, 11540), (219, 11552), (223, 11579), (230, 11636), (236, 11666), (239, 11678), (253, 11780), (254, 11783), (267, 11870), (273, 11915), (274, 11918), (293, 12032), (304, 12125), (307, 12140), (309, 12161), (313, 12194), (315, 12224), (318, 12236), (324, 12275), (329, 12299), (330, 12302), (336, 12326), (341, 12350), (350, 12455), (359, 12503), (363, 12533), (367, 12548), (370, 12563), (373, 12602), (379, 12644), (382, 12668), (384, 12683), (386, 12698), (390, 12713), (396, 12737), (408, 12776), (410, 12791), (411, 12797), (415, 12818), (422, 12842), (424, 12848), (444, 12974), (450, 13004), (454, 13040), (455, 13043), (461, 13091), (465, 13112), (466, 13115), (474, 13187), (481, 13232), (484, 13265), (486, 13286), (498, 13340), (509, 13415), (528, 13499), (543, 13586), (587, 13772), (607, 13904), (616, 13934), (638, 14072), (648, 14123), (653, 14153), (672, 14258), (682, 14309), (686, 14339), (724, 14519), (730, 14570), (740, 14612), (747, 14633), (761, 14729), (773, 14777), (778, 14795), (792, 14918), (798, 14942), (800, 14957), (805, 14987), (809, 15014), (811, 15020), (816, 15053), (824, 15122), (826, 15125), (828, 15161), (842, 15251),

Gene: Yummy_17 Start: 9515, Stop: 14311, Start Num: 81

Candidate Starts for Yummy_17:

(Start: 81 @9515 has 23 MA's), (Start: 86 @9542 has 2 MA's), (88, 9548), (108, 9671), (124, 9773), (129, 9818), (132, 9830), (136, 9848), (139, 9875), (140, 9878), (142, 9893), (150, 9944), (151, 9947), (158, 10004), (159, 10007), (160, 10010), (168, 10049), (171, 10067), (178, 10112), (187, 10148), (191, 10181), (196, 10214), (197, 10226), (205, 10280), (208, 10319), (210, 10334), (213, 10343), (217, 10370), (225, 10421), (236, 10481), (239, 10490), (246, 10544), (258, 10607), (261, 10622), (269, 10685), (286, 10775), (292, 10802), (302, 10895), (304, 10901), (307, 10916), (311, 10955), (321, 11033), (327, 11066), (337, 11105), (340, 11123), (341, 11126), (345, 11153), (348, 11210),

(350, 11231), (366, 11342), (371, 11363), (373, 11399), (379, 11441), (380, 11453), (382, 11465), (390, 11510), (391, 11513), (395, 11531), (396, 11534), (397, 11537), (414, 11612), (424, 11645), (433, 11705), (444, 11771), (445, 11774), (446, 11777), (448, 11795), (462, 11894), (465, 11909), (466, 11912), (484, 12062), (486, 12083), (495, 12125), (501, 12152), (502, 12158), (524, 12290), (528, 12302), (543, 12389), (552, 12431), (562, 12467), (572, 12503), (579, 12542), (589, 12593), (595, 12632), (605, 12710), (617, 12761), (629, 12818), (651, 12956), (661, 13028), (686, 13172), (691, 13193), (713, 13370), (715, 13376), (761, 13700), (763, 13706), (778, 13766), (780, 13784), (783, 13817), (792, 13889), (800, 13928), (805, 13958), (816, 14024), (818, 14042), (821, 14072), (828, 14132), (842, 14222), (852, 14282),

Gene: ZAYM_17 Start: 10932, Stop: 16055, Start Num: 25

Candidate Starts for ZAYM_17:

(Start: 25 @10932 has 13 MA's), (27, 10938), (57, 11211), (59, 11220), (66, 11259), (76, 11316), (90, 11379), (106, 11472), (109, 11490), (131, 11643), (138, 11685), (152, 11772), (182, 11964), (183, 11967), (189, 12003), (194, 12051), (211, 12204), (215, 12237), (218, 12246), (220, 12255), (224, 12288), (226, 12300), (229, 12324), (238, 12369), (240, 12378), (250, 12450), (252, 12462), (254, 12480), (276, 12639), (280, 12663), (281, 12672), (282, 12675), (302, 12816), (303, 12819), (304, 12822), (307, 12837), (313, 12891), (317, 12930), (337, 13026), (341, 13047), (343, 13062), (345, 13074), (349, 13146), (374, 13308), (406, 13365), (413, 13377), (414, 13380), (424, 13413), (438, 13506), (440, 13512), (442, 13518), (444, 13539), (445, 13542), (446, 13545), (449, 13566), (453, 13596), (459, 13644), (460, 13650), (462, 13659), (467, 13683), (469, 13698), (470, 13701), (471, 13707), (475, 13752), (477, 13761), (489, 13860), (497, 13902), (503, 13935), (510, 13980), (514, 14004), (519, 14049), (525, 14067), (552, 14205), (557, 14226), (563, 14244), (564, 14247), (568, 14256), (606, 14487), (608, 14505), (614, 14529), (638, 14673), (641, 14697), (652, 14748), (676, 14892), (678, 14910), (684, 14949), (692, 14988), (694, 14994), (697, 15003), (701, 15045), (708, 15123), (716, 15162), (736, 15297), (756, 15390), (757, 15393), (760, 15450), (764, 15459), (767, 15471), (774, 15492), (807, 15705), (814, 15744), (826, 15813), (829, 15867), (857, 16017),

Gene: Zarbodnamra_17 Start: 10273, Stop: 15795, Start Num: 8

Candidate Starts for Zarbodnamra_17:

(Start: 8 @10273 has 37 MA's), (Start: 11 @10288 has 1 MA's), (Start: 12 @10294 has 1 MA's), (Start: 14 @10324 has 1 MA's), (15, 10333), (16, 10336), (18, 10378), (38, 10489), (40, 10510), (65, 10738), (68, 10756), (71, 10771), (72, 10777), (73, 10780), (76, 10798), (82, 10822), (95, 10906), (96, 10909), (105, 10948), (107, 10963), (109, 10972), (135, 11140), (138, 11167), (184, 11455), (189, 11485), (211, 11689), (219, 11734), (223, 11761), (224, 11773), (240, 11863), (245, 11908), (250, 11935), (254, 11965), (267, 12052), (268, 12055), (272, 12094), (285, 12178), (293, 12214), (297, 12256), (302, 12301), (304, 12307), (306, 12319), (307, 12322), (313, 12376), (317, 12415), (320, 12436), (321, 12439), (324, 12457), (325, 12466), (330, 12484), (335, 12505), (337, 12511), (341, 12532), (345, 12559), (350, 12637), (389, 12826), (398, 12850), (404, 12862), (405, 12865), (418, 12880), (423, 12895), (424, 12898), (432, 12949), (445, 13030), (446, 13033), (452, 13066), (455, 13096), (457, 13120), (505, 13453), (514, 13501), (517, 13546), (518, 13549), (521, 13564), (529, 13609), (530, 13618), (532, 13627), (542, 13678), (556, 13750), (561, 13768), (570, 13789), (581, 13888), (582, 13891), (591, 13924), (599, 13990), (600, 14008), (603, 14023), (610, 14056), (619, 14107), (627, 14158), (664, 14401), (665, 14404), (675, 14476), (676, 14479), (685, 14545), (686, 14548), (690, 14566), (700, 14626), (706, 14683), (707, 14701), (720, 14782), (721, 14785), (725, 14800), (748, 14959), (758, 15013), (762, 15079), (763, 15085), (777, 15145), (778, 15151), (792, 15274), (798, 15298), (802, 15316), (805, 15340), (806, 15346), (809, 15367), (816, 15406), (830, 15547), (833, 15559), (843, 15610), (845, 15628), (864, 15778),

Gene: Zareef_18 Start: 10620, Stop: 15749, Start Num: 28

Candidate Starts for Zareef_18:

(23, 10599), (Start: 28 @10620 has 33 MA's), (32, 10647), (46, 10776), (54, 10872), (62, 10923), (74, 10980), (79, 11013), (80, 11016), (94, 11103), (98, 11115), (107, 11163), (108, 11166), (109, 11172),

(110, 11175), (116, 11226), (118, 11232), (125, 11280), (136, 11346), (138, 11367), (198, 11760),
(199, 11763), (208, 11865), (216, 11922), (218, 11928), (219, 11931), (220, 11937), (223, 11958),
(240, 12060), (242, 12087), (254, 12162), (256, 12180), (261, 12198), (264, 12210), (267, 12249),
(274, 12297), (281, 12354), (286, 12378), (288, 12384), (304, 12504), (307, 12519), (311, 12558),
(320, 12633), (326, 12666), (330, 12681), (331, 12687), (332, 12693), (341, 12729), (351, 12837),
(360, 12909), (370, 12963), (382, 13068), (390, 13113), (396, 13137), (405, 13167), (411, 13197),
(412, 13209), (414, 13215), (422, 13242), (424, 13248), (438, 13341), (440, 13347), (448, 13398),
(457, 13467), (463, 13500), (466, 13515), (467, 13521), (473, 13578), (481, 13632), (483, 13653),
(484, 13665), (486, 13686), (487, 13689), (501, 13755), (526, 13896), (543, 13992), (550, 14025),
(555, 14058), (565, 14079), (569, 14085), (607, 14322), (616, 14352), (642, 14526), (650, 14556),
(653, 14577), (686, 14769), (688, 14778), (712, 14859), (737, 15000), (740, 15006), (761, 15135),
(778, 15201), (783, 15252), (792, 15324), (800, 15363), (801, 15366), (805, 15393), (811, 15426),
(816, 15459), (826, 15531), (831, 15603), (841, 15657), (843, 15663), (852, 15720),

Gene: ZiggyZoo_16 Start: 10043, Stop: 15586, Start Num: 8

Candidate Starts for ZiggyZoo_16:

(Start: 8 @10043 has 37 MA's), (Start: 11 @10058 has 1 MA's), (Start: 12 @10064 has 1 MA's), (Start:
14 @10094 has 1 MA's), (15, 10103), (16, 10106), (18, 10148), (38, 10259), (40, 10280), (65, 10508),
(68, 10526), (71, 10541), (72, 10547), (73, 10550), (76, 10568), (82, 10592), (95, 10676), (97, 10682),
(105, 10718), (107, 10733), (109, 10742), (135, 10910), (138, 10937), (155, 11054), (164, 11108),
(184, 11225), (189, 11255), (211, 11459), (219, 11504), (223, 11531), (224, 11543), (240, 11633),
(245, 11678), (250, 11705), (254, 11735), (267, 11822), (268, 11825), (272, 11864), (293, 11984),
(297, 12026), (302, 12071), (304, 12077), (306, 12089), (307, 12092), (313, 12146), (317, 12185),
(320, 12206), (321, 12209), (324, 12227), (330, 12254), (335, 12275), (337, 12281), (341, 12302),
(345, 12329), (349, 12401), (370, 12536), (389, 12617), (398, 12641), (405, 12656), (423, 12686),
(424, 12689), (432, 12740), (445, 12821), (446, 12824), (452, 12857), (455, 12887), (457, 12911),
(468, 12977), (505, 13244), (508, 13262), (514, 13292), (517, 13337), (518, 13340), (521, 13355),
(522, 13364), (529, 13400), (530, 13409), (532, 13418), (542, 13469), (556, 13541), (561, 13559),
(570, 13580), (581, 13679), (582, 13682), (591, 13715), (599, 13781), (600, 13799), (603, 13814),
(610, 13847), (619, 13898), (627, 13949), (664, 14192), (665, 14195), (675, 14267), (676, 14270),
(685, 14336), (686, 14339), (690, 14357), (700, 14417), (706, 14474), (707, 14492), (720, 14573),
(721, 14576), (725, 14591), (748, 14750), (758, 14804), (762, 14870), (763, 14876), (777, 14936),
(778, 14942), (783, 14993), (792, 15065), (798, 15089), (802, 15107), (805, 15131), (806, 15137),
(809, 15158), (816, 15197), (830, 15338), (833, 15350), (843, 15401), (845, 15419), (864, 15569),

Gene: Zilla_17 Start: 10345, Stop: 15813, Start Num: 12

Candidate Starts for Zilla_17:

(Start: 8 @10324 has 37 MA's), (Start: 11 @10339 has 1 MA's), (Start: 12 @10345 has 1 MA's), (Start:
14 @10375 has 1 MA's), (15, 10384), (16, 10387), (18, 10429), (38, 10540), (40, 10561), (47, 10681),
(54, 10723), (65, 10789), (68, 10807), (72, 10828), (73, 10831), (76, 10849), (82, 10873), (95, 10957),
(105, 10999), (107, 11014), (109, 11023), (135, 11191), (138, 11218), (155, 11335), (184, 11506),
(189, 11536), (211, 11740), (219, 11785), (223, 11812), (224, 11824), (226, 11836), (240, 11914),
(245, 11959), (250, 11986), (254, 12016), (267, 12103), (268, 12106), (272, 12145), (293, 12265),
(297, 12307), (304, 12358), (307, 12373), (313, 12427), (317, 12466), (320, 12487), (321, 12490),
(324, 12508), (330, 12535), (335, 12556), (337, 12562), (341, 12583), (344, 12601), (345, 12610),
(385, 12883), (405, 12937), (423, 12967), (424, 12970), (432, 13021), (445, 13102), (446, 13105),
(452, 13138), (455, 13168), (457, 13192), (468, 13258), (505, 13525), (514, 13573), (516, 13606),
(517, 13618), (518, 13621), (529, 13681), (530, 13690), (532, 13699), (542, 13750), (556, 13822),
(561, 13840), (570, 13861), (581, 13960), (582, 13963), (591, 13996), (599, 14062), (600, 14080),
(603, 14095), (610, 14128), (619, 14179), (627, 14230), (637, 14299), (664, 14473), (665, 14476),
(675, 14548), (676, 14551), (685, 14617), (686, 14620), (690, 14638), (700, 14698), (706, 14755),
(707, 14773), (720, 14854), (721, 14857), (725, 14872), (748, 15043), (758, 15097), (770, 15169),
(773, 15178), (779, 15214), (787, 15274), (789, 15292), (793, 15310), (804, 15355), (808, 15388),

(825, 15499), (830, 15568), (843, 15631), (845, 15649), (864, 15799),