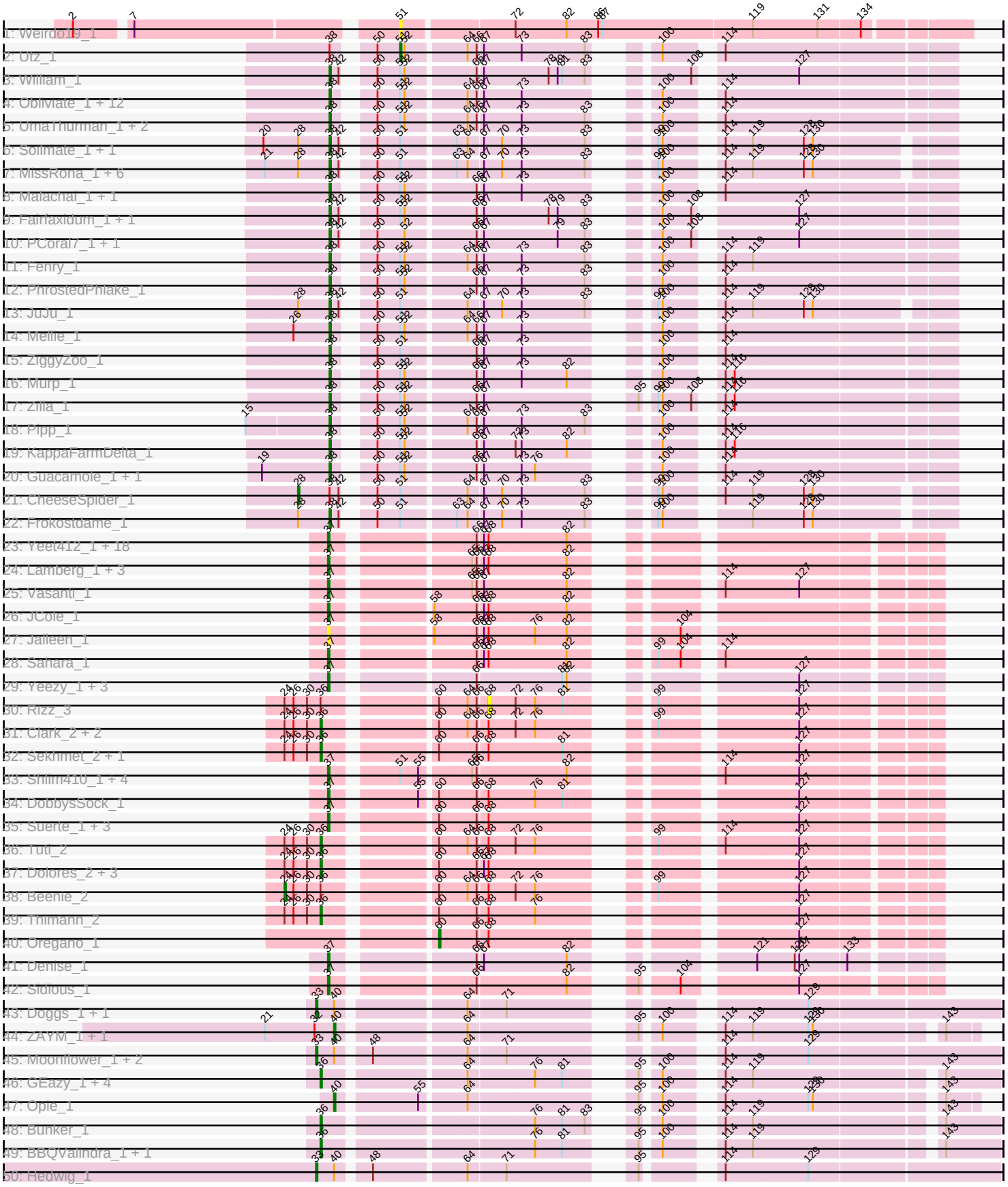
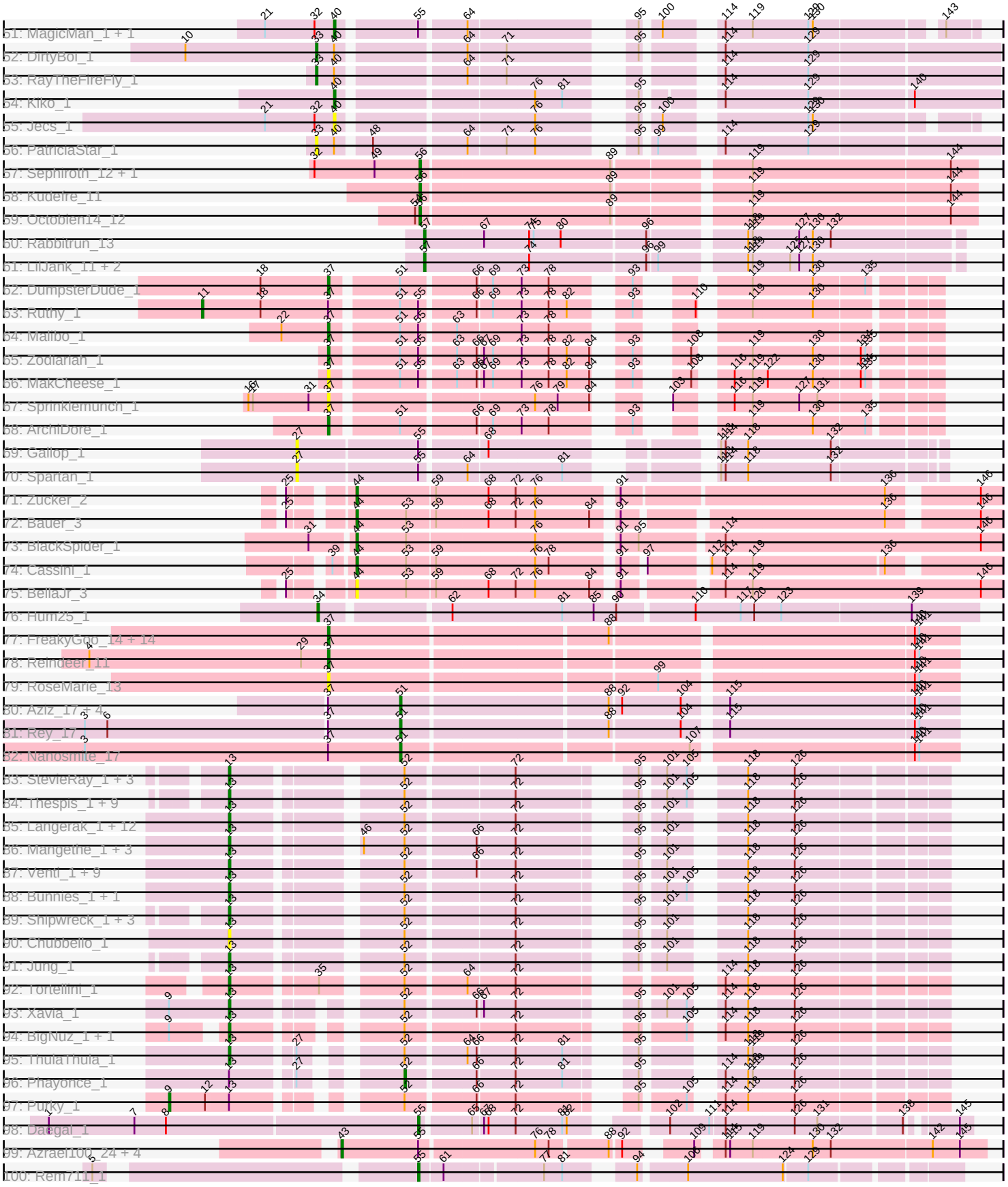
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1: Weirdo19_1
2: Otz_1
3: William_1
4: Oblivlate_1 + 12
5: OmaThurman_1 + 2
6: Solimate_1 + 1
7: MissRona_1 + 6
8: Malachai_1 + 1
9: Faimaxidum_1 + 1
10: PCoral7_1 + 1
11: Fenry_1
12: PhrostedPhlake_1
13: JuJu_1
14: Mellie_1
15: ZiggyZoo_1
16: Murp_1
17: Zilla_1
18: Pipp_1
19: KappaFarmDelta_1
20: Guacamole_1 + 1
21: CheeseSpider_1
22: Frokostdame_1
23: Yeet412_1 + 18
24: Lamberg_1 + 3
25: Vasanti_1
26: JCole_1
27: Jaileen_1
28: Sahara_1
29: Yeezy_1 + 3
30: Rizz_3
31: Clark_2 + 2
32: Sekhmet_2 + 1
33: Shlim410_1 + 4
34: DobbysSock_1
35: Suerte_1 + 3
36: Tuti_2
37: Dolores_2 + 3
38: Beenie_2
39: Thimann_2
40: Oregano_1
41: Denise_1
42: Sidious_1
43: Doggs_1 + 1
44: ZAYM_1 + 1
45: Moonflower_1 + 2
46: GEazy_1 + 4
47: Opie_1
48: Bunker_1
49: BBQValindra_1 + 1
50: Hedwig_1

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51: MagicMan_1 + 1
52: DirtyBoi_1
53: RayTheFireFly_1
54: Kiko_1
55: Jecs_1
56: PatriciaStar_1
57: Sephiroth_12 + 1
58: Kudeire_11
59: Octobien14_12
60: Rabbitrun_13
61: LilJank_11 + 2
62: DumpsterDude_1
63: Ruthy_1
64: Malibo_1
65: Zodiarian_1
66: MakCheese_1
67: Sprinklemunch_1
68: ArchiDore_1
69: Gallop_1
70: Spartan_1
71: Zucker_2
72: Bauer_3
73: BlackSpider_1
74: Cassini_1
75: BellaJr_3
76: Hum25_1
77: FreakyGoo_14 + 14
78: Reindeer_11
79: RoseMarie_13
80: Aziz_17 + 4
81: Rey_17
82: Nanosmile_17
83: StevieRay_1 + 3
84: Thespis_1 + 9
85: Langerak_1 + 12
86: Mangethe_1 + 3
87: Venti_1 + 9
88: Bunnies_1 + 1
89: Shipwreck_1 + 3
90: Chubbello_1
91: Jung_1
92: Tortellini_1
93: Xavia_1
94: BigNuz_1 + 1
95: ThulaThula_1
96: Phayonce_1
97: Purky_1
98: Dargal_1
99: Azrael102_24 + 4
100: Rem711_1

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101: 32HC_1
102: Mbo4_1
103: Finkie_1
104: Whack_1
105: Kumao_12
5
50
55
61
77
81
94
106
124
129
23
30
33
98
123
126
13
14
45
119
33
55
81
95
114
126
130
41
47
55
132
137
141

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 347224 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347224 has 243 members, 26 are drafts.

Phages represented in each track:
• Track 1 : Weirdo19_1
• Track 2 : Utz_1
• Track 3 : William_1
• Track 4 : Obliviate_1, CaptainKirk2_1, Delian_1, Barco_1, Lysidious_1, Archis_1, Jalammah_1, Samba_1, Wisp_1, MintFen_1, BlingBling_1, Melba_1, Hitter_1
• Track 5 : UmaThurman_1, Zarbodnamra_1, Wocket_1
• Track 6 : Soilmate_1, CarolAnn_1
• Track 7 : MissRona_1, Walrus_1, Petra_1, Azula_1, Blueberry_1, Gambino_1, Blino_1
• Track 8 : Malachai_1, Begonia_1
• Track 9 : Fairfaxidum_1, PrincePatrick_1
• Track 10 : PCoral7_1, Toast_1
• Track 11 : Fenry_1
• Track 12 : PhrostedPhlake_1
• Track 13 : JuJu_1
• Track 14 : Mellie_1
• Track 15 : ZiggyZoo_1
• Track 16 : Murp_1
• Track 17 : Zilla_1
• Track 18 : Pipp_1
• Track 19 : KappaFarmDelta_1
• Track 20 : Guacamole_1, JasperJr_1
• Track 21 : CheeseSpider_1
• Track 22 : Frokostdame_1
• Track 23 : Yeet412_1, LordFarquaad_1, Cynthia_1, Clap_1, GemG_1, FroggyToad_1, Whiteclaw_1, Attis_1, Gizermo_1, SoilAssassin_1, Yinzer_1, Ebert_1, Savage_1, Matteo_1, Bjanes7_1, Sproutie_1, Haley23_1, Mocha12_1, TuertoX_1
• Track 24 : Lamberg_1, EdnaMode_1, Nettuno_1, Pickett_1
• Track 25 : Vasanti_1
• Track 26 : JCole_1
• Track 27 : Jalleen_1
• Track 28 : Sahara_1
• Track 29 : Yeezy_1, BaxterFox_1, PantheRoc_1, Ohgeesy_1
• Track 30 : Rizz_3
• Track 31 : Clark_2, MichaelScott_2, Easley_2
• Track 32 : Sekhmet_2, Invectra_2
• Track 33 : Shlim410_1, Adora_1, Howe_1, Hortense_1, Twinkle_1

• Track 34 : DobbysSock_1
• Track 35 : Suerte_1, Powerball_1, Dorito_1, PhriskyACE_1
• Track 36 : Tuti_2
• Track 37 : Dolores_2, Samman98_2, Annalisa_2, WinkNick_2
• Track 38 : Beenie_2
• Track 39 : Thimann_2
• Track 40 : Oregano_1
• Track 41 : Denise_1
• Track 42 : Sidious_1
• Track 43 : Doggs_1, Coriander_1
• Track 44 : ZAYM_1, TaronosaurasRx_1
• Track 45 : Moonflower_1, Dmitri_1, Chipko_1
• Track 46 : GEazy_1, Bowser_1, Eyes_1, NaLuna_1, HannahD_1
• Track 47 : Opie_1
• Track 48 : Bunker_1
• Track 49 : BBQValindra_1, BackstagePass_1
• Track 50 : Hedwig_1
• Track 51 : MagicMan_1, Schnabeltier_1
• Track 52 : DirtyBoi_1
• Track 53 : RayTheFireFly_1
• Track 54 : Kiko_1
• Track 55 : Jecs_1
• Track 56 : PatriciaStar_1
• Track 57 : Sephiroth_12, Syleon_12
• Track 58 : Kudefre_11
• Track 59 : Octobien14_12
• Track 60 : Rabbitrun_13
• Track 61 : LilJank_11, Trax_11, Neville_11
• Track 62 : DumpsterDude_1
• Track 63 : Ruthy_1
• Track 64 : Malibo_1
• Track 65 : Zodiariah_1
• Track 66 : MakCheese_1
• Track 67 : Sprinklemunch_1
• Track 68 : ArchiDore_1
• Track 69 : Gallop_1
• Track 70 : Spartan_1
• Track 71 : Zucker_2
• Track 72 : Bauer_3
• Track 73 : BlackSpider_1
• Track 74 : Cassini_1
• Track 75 : BellaJr_3
• Track 76 : Hum25_1
• Track 77 : FreakyGoo_14, Auspice_13, Bricole_13, Dulcita_14, IPhane7_13, KleverKiS_13, Diminimus_14, Izel_14, Glaske16_14, Skinny_14, LilhomieP_12, PegLeg_13, TyDawg_13, Bongo_13, SlimJimmy_12
• Track 78 : Reindeer_11
• Track 79 : RoseMarie_13
• Track 80 : Aziz_17, MrMagoo_17, GardenSalsa_17, Estes_18, GenevaB15_17
• Track 81 : Rey_17
• Track 82 : Nanosmite_17
• Track 83 : StevieRay_1, Bhagsy_1, PeanutPie_1, Atcoo_1

• Track 84 : Thespis_1, Brusacoram_1, Megiddo_1, Phalm_1, Glaske_1, KilKor_1, StressBall_1, Willsammy_1, CactusJack_1, Gavriela_1
• Track 85 : Langerak_1, Etoile_1, Dynamo_1, Malithi_1, Polkaroo_1, FirstPlacePfu_1, Necropolis_1, Fishburne_1, GreaseLightnin_1, Camster_1, Zilizebeth_1, Kari_1, Vidya_1
• Track 86 : Mangethe_1, Majeke_1, Arib1_1, Phegasus_1
• Track 87 : Venti_1, Donovan_1, HUHilltop_1, GaloreK_1, Bartholomew_1, Sonah_1, Techage_1, Juniormint_1, Jebeks_1, BronnyJr_1
• Track 88 : Bunnies_1, Ksquared_1
• Track 89 : Shipwreck_1, Pygmy_1, Phineas_1, Bogie_1
• Track 90 : Chubbello_1
• Track 91 : Jung_1
• Track 92 : Tortellini_1
• Track 93 : Xavia_1
• Track 94 : BigNuz_1, Nazo_1
• Track 95 : ThulaThula_1
• Track 96 : Phayonce_1
• Track 97 : Purky_1
• Track 98 : Daegal_1
• Track 99 : Azrael100_24, EniyanLRS_22, MaryV_25, Cosmo_25, Wildcat_25
• Track 100 : Rem711_1
• Track 101 : 32HC_1
• Track 102 : Mbo4_1
• Track 103 : Finkle_1
• Track 104 : Whack_1
• Track 105 : Kumao_12

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

The start number called the most often in the published annotations is 37, it was called in 59 of the 217 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adora_1, ArchiDore_1, Attis_1, Auspice_13, BaxterFox_1, Bjanes7_1, Bongo_13, Bricole_13, Clap_1, Cynthia_1, Denise_1, Diminimus_14, DobbysSock_1, Dorito_1, Dulcita_14, DumpsterDude_1, Ebert_1, EdnaMode_1, FreakyGoo_14, FroggyToad_1, GemG_1, Gizermo_1, Glaske16_14, Haley23_1, Hortense_1, Howe_1, IPhane7_13, Izel_14, JCole_1, Jalleen_1, KleverKiS_13, Lamberg_1, LilhomieP_12, LordFarquaad_1, MakCheese_1, Malibo_1, Matteo_1, Mocha12_1, Nettuno_1, Ohgeesy_1, PantheRoc_1, PegLeg_13, PhriskyACE_1, Pickett_1, Powerball_1, Reindeer_11, RoseMarie_13, Sahara_1, Savage_1, Shlim410_1, Sidious_1, Skinny_14, SlimJimmy_12, SoilAssassin_1, Sprinklemunch_1, Sproutie_1, Suerte_1, TuertoX_1, Twinkle_1, TyDawg_13, Vasanti_1, Whiteclaw_1, Yeet412_1, Yeezy_1, Yinzer_1, Zodiariah_1,

Genes that have the "Most Annotated" start but do not call it:
• Aziz_17, Estes_18, GardenSalsa_17, GenevaB15_17, MrMagoo_17, Nanosmite_17, Rey_17, Ruthy_1,

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

• 32HC_1, Annalisa_2, Archis_1, Arib1_1, Atcoo_1, Azrael100_24, Azula_1, BBQValindra_1, BackstagePass_1, Barco_1, Bartholomew_1, Bauer_3, Beenie_2, Begonia_1, BellaJr_3, Bhagsy_1, BigNuz_1, BlackSpider_1, BlingBling_1, Blino_1, Blueberry_1, Bogie_1, Bowser_1, BronnyJr_1, Brusacoram_1, Bunker_1, Bunnies_1, CactusJack_1, Camster_1, CaptainKirk2_1, CarolAnn_1, Cassini_1, CheeseSpider_1, Chipko_1, Chubbello_1, Clark_2, Coriander_1, Cosmo_25, Daegal_1, Delian_1, DirtyBoi_1, Dmitri_1, Doggs_1, Dolores_2, Donovan_1, Dynamo_1, Easley_2, EniyanLRS_22, Etoile_1, Eyes_1, Fairfaxidum_1, Fenry_1, Finkle_1, FirstPlacePfu_1, Fishburne_1, Frokostdame_1, GEazy_1, Gallop_1, GaloreK_1, Gambino_1, Gavriela_1, Glaske_1, GreaseLightnin_1, Guacamole_1, HUHilltop_1, HannahD_1, Hedwig_1, Hitter_1, Hum25_1, Invectra_2, Jalammah_1, JasperJr_1, Jebeks_1, Jecs_1, JuJu_1, Jung_1, Juniormint_1, KappaFarmDelta_1, Kari_1, Kiko_1, KilKor_1, Ksquared_1, Kudefre_11, Kumao_12, Langerak_1, LilJank_11, Lysidious_1, MagicMan_1, Majeke_1, Malachai_1, Malithi_1, Mangethe_1, MaryV_25, Mbo4_1, Megiddo_1, Melba_1, Mellie_1, MichaelScott_2, MintFen_1, MissRona_1, Moonflower_1, Murp_1, NaLuna_1, Nazo_1, Necropolis_1, Neville_11, Obliviate_1, Octobien14_12, Opie_1, Oregano_1, PCoral7_1, PatriciaStar_1, PeanutPie_1, Petra_1, Phalm_1, Phayonce_1, Phegasus_1, Phineas_1, PhrostedPhlake_1, Pipp_1, Polkaroo_1, PrincePatrick_1, Purky_1, Pygmy_1, Rabbitrun_13, RayTheFireFly_1, Rem711_1, Rizz_3, Samba_1, Samman98_2, Schnabeltier_1, Sekhmet_2, Sephiroth_12, Shipwreck_1, Soilmate_1, Sonah_1, Spartan_1, StevieRay_1, StressBall_1, Syleon_12, TaronosaurasRx_1, Techage_1, Thespis_1, Thimann_2, ThulaThula_1, Toast_1, Tortellini_1, Trax_11, Tuti_2, UmaThurman_1, Utz_1, Venti_1, Vidya_1, Walrus_1, Weirdo19_1, Whack_1, Wildcat_25, William_1, Willsammy_1, WinkNick_2, Wisp_1, Wocket_1, Xavia_1, ZAYM_1, Zarbodnamra_1, ZiggyZoo_1, Zilizebeth_1, Zilla_1, Zucker_2,

Summary by start number:

Start 9:
• Found in 4 of 243 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Purky_1 (P6),

Start 11:
• Found in 1 of 243 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ruthy_1 (DW),

Start 13:
• Found in 57 of 243 (23.5%) of genes in pham
• Manual Annotations of this start: 49 of 217
• Called 94.7% of time when present
• Phage (with cluster) where this start called: Arib1_1 (P1), Atcoo_1 (P1), Bartholomew_1 (P1), Bhagsy_1 (P1), BigNuz_1 (P4), Bogie_1 (P1), BronnyJr_1 (P1), Brusacoram_1 (P1), Bunnies_1 (P1), CactusJack_1 (P1), Camster_1 (P1), Chubbello_1 (P1), Donovan_1 (P1), Dynamo_1 (P1), Etoile_1 (P1), FirstPlacePfu_1 (P1), Fishburne_1 (P1), GaloreK_1 (P1), Gavriela_1 (P1), Glaske_1 (P1), GreaseLightnin_1 (P1), HUHilltop_1 (P1), Jebeks_1 (P1), Jung_1 (P1), Juniormint_1 (P1), Kari_1 (P1), KilKor_1 (P1), Ksquared_1 (P1), Langerak_1 (P1), Majeke_1 (P1), Malithi_1 (P1), Mangethe_1 (P1), Megiddo_1 (P1), Nazo_1 (P4), Necropolis_1 (P1),

PeanutPie_1 (P1), Phalm_1 (P1), Phegasus_1 (P1), Phineas_1 (P1), Polkaroo_1 (P1), Pygmy_1 (P1), Shipwreck_1 (P1), Sonah_1 (P1), StevieRay_1 (P1), StressBall_1 (P1), Techage_1 (P1), Thespis_1 (P1), ThulaThula_1 (P5), Tortellini_1 (P2), Venti_1 (P1), Vidya_1 (P1), Willsammy_1 (P1), Xavia_1 (P3), Zilizebeth_1 (P1),

Start 14:
• Found in 1 of 243 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Finkle_1 (singleton),

Start 24:
• Found in 13 of 243 (5.3%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 7.7% of time when present
• Phage (with cluster) where this start called: Beenie_2 (CZ4),

Start 27:
• Found in 4 of 243 (1.6%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Gallop_1 (ES), Spartan_1 (ES),

Start 28:
• Found in 12 of 243 (4.9%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 8.3% of time when present
• Phage (with cluster) where this start called: CheeseSpider_1 (CV),

Start 33:
• Found in 11 of 243 (4.5%) of genes in pham
• Manual Annotations of this start: 7 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chipko_1 (DB), Coriander_1 (DB), DirtyBoi_1 (DB), Dmitri_1 (DB), Doggs_1 (DB), Hedwig_1 (DB), Mbo4_1 (singleton), Moonflower_1 (DB), PatriciaStar_1 (DB), RayTheFireFly_1 (DB), Whack_1 (singleton),

Start 34:
• Found in 1 of 243 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hum25_1 (FQ1),

Start 36:
• Found in 21 of 243 (8.6%) of genes in pham
• Manual Annotations of this start: 18 of 217
• Called 90.5% of time when present
• Phage (with cluster) where this start called: Annalisa_2 (CZ4), BBQValindra_1 (DB), BackstagePass_1 (DB), Bowser_1 (DB), Bunker_1 (DB), Clark_2 (CZ4), Dolores_2 (CZ4), Easley_2 (CZ4), Eyes_1 (DB), GEazy_1 (DB), HannahD_1 (DB), Invectra_2 (CZ4), MichaelScott_2 (CZ4), NaLuna_1 (DB), Samman98_2 (CZ4), Sekhmet_2 (CZ4), Thimann_2 (CZ4), Tuti_2 (CZ4), WinkNick_2 (CZ4),

Start 37:
• Found in 74 of 243 (30.5%) of genes in pham
• Manual Annotations of this start: 59 of 217
• Called 89.2% of time when present
• Phage (with cluster) where this start called: Adora_1 (CZ4), ArchiDore_1 (DW), Attis_1 (CZ2), Auspice_13 (M1), BaxterFox_1 (CZ3), Bjanes7_1 (CZ2), Bongo_13 (M1), Bricole_13 (M1), Clap_1 (CZ2), Cynthia_1 (CZ2), Denise_1 (CZ5), Diminimus_14 (M1), DobbysSock_1 (CZ4), Dorito_1 (CZ4), Dulcita_14 (M1), DumpsterDude_1 (DW), Ebert_1 (CZ2), EdnaMode_1 (CZ2), FreakyGoo_14 (M1), FroggyToad_1 (CZ2), GemG_1 (CZ2), Gizermo_1 (CZ2), Glaske16_14 (M1), Haley23_1 (CZ2), Hortense_1 (CZ4), Howe_1 (CZ4), IPhane7_13 (M1), Izel_14 (M1), JCole_1 (CZ2), Jalleen_1 (CZ2), KleverKiS_13 (M1), Lamberg_1 (CZ2), LilhomieP_12 (M1), LordFarquaad_1 (CZ2), MakCheese_1 (DW), Malibo_1 (DW), Matteo_1 (CZ2), Mocha12_1 (CZ2), Nettuno_1 (CZ2), Ohgeesy_1 (CZ), PantheRoc_1 (CZ3), PegLeg_13 (M1), PhriskyACE_1 (CZ4), Pickett_1 (CZ2), Powerball_1 (CZ4), Reindeer_11 (M1), RoseMarie_13 (M1), Sahara_1 (CZ2), Savage_1 (CZ2), Shlim410_1 (CZ4), Sidious_1 (CZ7), Skinny_14 (M1), SlimJimmy_12 (M1), SoilAssassin_1 (CZ2), Sprinklemunch_1 (DW), Sproutie_1 (CZ2), Suerte_1 (CZ4), TuertoX_1 (CZ2), Twinkle_1 (CZ4), TyDawg_13 (M1), Vasanti_1 (CZ2), Whiteclaw_1 (CZ2), Yeet412_1 (CZ2), Yeezy_1 (CZ3), Yinzer_1 (CZ2), Zodiariah_1 (DW),

Start 38:
• Found in 46 of 243 (18.9%) of genes in pham
• Manual Annotations of this start: 43 of 217
• Called 95.7% of time when present
• Phage (with cluster) where this start called: Archis_1 (CV), Azula_1 (CV), Barco_1 (CV), Begonia_1 (CV), BlingBling_1 (CV), Blino_1 (CV), Blueberry_1 (CV), CaptainKirk2_1 (CV), CarolAnn_1 (CV), Delian_1 (CV), Fairfaxidum_1 (CV), Fenry_1 (CV), Frokostdame_1 (CV), Gambino_1 (CV), Guacamole_1 (CV), Hitter_1 (CV), Jalammah_1 (CV), JasperJr_1 (CV), JuJu_1 (CV), KappaFarmDelta_1 (CV), Lysidious_1 (CV), Malachai_1 (CV), Melba_1 (CV), Mellie_1 (CV), MintFen_1 (CV), MissRona_1 (CV), Murp_1 (CV), Obliviate_1 (CV), PCoral7_1 (CV), Petra_1 (CV), PhrostedPhlake_1 (CV), Pipp_1 (CV), PrincePatrick_1 (CV), Samba_1 (CV), Soilmate_1 (CV), Toast_1 (CV), UmaThurman_1 (CV), Walrus_1 (CV), William_1 (CV), Wisp_1 (CV), Wocket_1 (CV), Zarbodnamra_1 (CV), ZiggyZoo_1 (CV), Zilla_1 (CV),

Start 40:
• Found in 16 of 243 (6.6%) of genes in pham
• Manual Annotations of this start: 5 of 217
• Called 43.8% of time when present
• Phage (with cluster) where this start called: Jecs_1 (DB), Kiko_1 (DB), MagicMan_1 (DB), Opie_1 (DB), Schnabeltier_1 (DB), TaronosaurasRx_1 (DB), ZAYM_1 (DB),

Start 43:
• Found in 5 of 243 (2.1%) of genes in pham
• Manual Annotations of this start: 5 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Azrael100_24 (V), Cosmo_25 (V), EniyanLRS_22 (V), MaryV_25 (V), Wildcat_25 (V),

Start 44:
• Found in 5 of 243 (2.1%) of genes in pham
• Manual Annotations of this start: 4 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bauer_3 (FN), BellaJr_3 (FN), BlackSpider_1 (FN), Cassini_1 (FN), Zucker_2 (FN),

Start 50:
• Found in 47 of 243 (19.3%) of genes in pham
• No Manual Annotations of this start.
• Called 2.1% of time when present
• Phage (with cluster) where this start called: 32HC_1 (Z),

Start 51:
• Found in 63 of 243 (25.9%) of genes in pham
• Manual Annotations of this start: 8 of 217
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Aziz_17 (M2), Estes_18 (M2), GardenSalsa_17 (M2), GenevaB15_17 (M2), MrMagoo_17 (M2), Nanosmite_17 (M3), Rey_17 (M2), Utz_1 (CV), Weirdo19_1 (AH),

Start 52:
• Found in 89 of 243 (36.6%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 1.1% of time when present
• Phage (with cluster) where this start called: Phayonce_1 (P5),

Start 55:
• Found in 25 of 243 (10.3%) of genes in pham
• Manual Annotations of this start: 3 of 217
• Called 12.0% of time when present
• Phage (with cluster) where this start called: Daegal_1 (Q), Kumao_12 (singleton), Rem711_1 (Z),

Start 56:
• Found in 4 of 243 (1.6%) of genes in pham
• Manual Annotations of this start: 4 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kudefre_11 (DU1), Octobien14_12 (DU1), Sephiroth_12 (DU1), Syleon_12 (DU1),

Start 57:
• Found in 4 of 243 (1.6%) of genes in pham
• Manual Annotations of this start: 4 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LilJank_11 (DU2), Neville_11 (DU2), Rabbitrun_13 (DU2), Trax_11 (DU2),

Start 60:
• Found in 19 of 243 (7.8%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 5.3% of time when present
• Phage (with cluster) where this start called: Oregano_1 (CZ4),

Start 68:
• Found in 50 of 243 (20.6%) of genes in pham
• No Manual Annotations of this start.
• Called 2.0% of time when present
• Phage (with cluster) where this start called: Rizz_3 (CZ4),

Summary by clusters:

There are 28 clusters represented in this pham: singleton, CZ2, CZ3, DB, CZ7, CZ4, CZ5, M1, M3, M2, DW, FN, DU1, DU2, P2, P3, P1, P6, P4, P5, AH, Q, CZ, V, Z, CV, ES, FQ1,

Info for manual annotations of cluster CV:
•Start number 28 was manually annotated 1 time for cluster CV.
•Start number 38 was manually annotated 43 times for cluster CV.
•Start number 51 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ:
•Start number 37 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:
•Start number 37 was manually annotated 24 times for cluster CZ2.

Info for manual annotations of cluster CZ3:
•Start number 37 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 24 was manually annotated 1 time for cluster CZ4.
•Start number 36 was manually annotated 11 times for cluster CZ4.
•Start number 37 was manually annotated 10 times for cluster CZ4.
•Start number 60 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ5:
•Start number 37 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ7:
•Start number 37 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DB:
•Start number 33 was manually annotated 6 times for cluster DB.
•Start number 36 was manually annotated 7 times for cluster DB.
•Start number 40 was manually annotated 5 times for cluster DB.

Info for manual annotations of cluster DU1:
•Start number 56 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:
•Start number 57 was manually annotated 4 times for cluster DU2.

Info for manual annotations of cluster DW:
•Start number 11 was manually annotated 1 time for cluster DW.

•Start number 37 was manually annotated 4 times for cluster DW.

Info for manual annotations of cluster FN:
•Start number 44 was manually annotated 4 times for cluster FN.

Info for manual annotations of cluster FQ1:
•Start number 34 was manually annotated 1 time for cluster FQ1.

Info for manual annotations of cluster M1:
•Start number 37 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:
•Start number 51 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:
•Start number 51 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster P1:
•Start number 13 was manually annotated 44 times for cluster P1.

Info for manual annotations of cluster P2:
•Start number 13 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:
•Start number 13 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:
•Start number 13 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:
•Start number 13 was manually annotated 1 time for cluster P5.
•Start number 52 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:
•Start number 9 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster Q:
•Start number 55 was manually annotated 1 time for cluster Q.

Info for manual annotations of cluster V:
•Start number 43 was manually annotated 5 times for cluster V.

Info for manual annotations of cluster Z:
•Start number 55 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_1 Start: 209, Stop: 550, Start Num: 50
Candidate Starts for 32HC_1:

(5, 38), (50, 209), (Start: 55 @236 has 3 MA's), (61, 251), (77, 311), (81, 323), (94, 356), (106, 383), (124, 446), (129, 461),

Gene: Adora_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Adora_1:
(Start: 37 @14 has 59 MA's), (Start: 51 @50 has 8 MA's), (Start: 55 @62 has 3 MA's), (65, 92), (66, 95), (82, 152), (114, 215), (127, 263),

Gene: Annalisa_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Annalisa_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (66, 597), (67, 600), (68, 603), (127, 765),

Gene: ArchiDore_1 Start: 127, Stop: 453, Start Num: 37
Candidate Starts for ArchiDore_1:
(Start: 37 @127 has 59 MA's), (Start: 51 @166 has 8 MA's), (66, 211), (69, 220), (73, 238), (78, 256), (93, 295), (119, 340), (130, 379), (135, 412),

Gene: Archis_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Archis_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Arib1_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Arib1_1:
(Start: 13 @55 has 49 MA's), (46, 124), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Atcoo_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for Atcoo_1:
(Start: 13 @43 has 49 MA's), (Start: 52 @139 has 1 MA's), (72, 205), (95, 262), (101, 274), (105, 286), (118, 310), (126, 340),

Gene: Attis_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Attis_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Auspice_13 Start: 4298, Stop: 4693, Start Num: 37
Candidate Starts for Auspice_13:
(Start: 37 @4298 has 59 MA's), (88, 4475), (140, 4664), (141, 4667),

Gene: Aziz_17 Start: 4947, Stop: 5294, Start Num: 51
Candidate Starts for Aziz_17:
(Start: 37 @4899 has 59 MA's), (Start: 51 @4947 has 8 MA's), (88, 5076), (92, 5082), (104, 5121), (115, 5145), (140, 5265), (141, 5268),

Gene: Azrael100_24 Start: 7714, Stop: 8103, Start Num: 43
Candidate Starts for Azrael100_24:
(Start: 43 @7714 has 5 MA's), (Start: 55 @7765 has 3 MA's), (76, 7837), (78, 7846), (88, 7882), (92, 7888), (109, 7921), (114, 7933), (115, 7936), (119, 7951), (130, 7990), (132, 8002), (142, 8068), (145, 8086),

Gene: Azula_1 Start: 57, Stop: 392, Start Num: 38

Candidate Starts for Azula_1:
(21, 15), (Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (63, 123), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: BBQValindra_1 Start: 176, Stop: 550, Start Num: 36
Candidate Starts for BBQValindra_1:
(Start: 36 @176 has 18 MA's), (76, 302), (81, 320), (95, 347), (100, 356), (114, 383), (119, 401), (143, 515),

Gene: BackstagePass_1 Start: 149, Stop: 523, Start Num: 36
Candidate Starts for BackstagePass_1:
(Start: 36 @149 has 18 MA's), (76, 275), (81, 293), (95, 320), (100, 329), (114, 356), (119, 374), (143, 488),

Gene: Barco_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Barco_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Bartholomew_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Bartholomew_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Bauer_3 Start: 1082, Stop: 1468, Start Num: 44
Candidate Starts for Bauer_3:
(25, 1049), (Start: 44 @1082 has 4 MA's), (53, 1115), (59, 1133), (68, 1166), (72, 1184), (76, 1196), (84, 1232), (91, 1244), (136, 1403), (146, 1454),

Gene: BaxterFox_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for BaxterFox_1:
(Start: 37 @14 has 59 MA's), (66, 95), (81, 149), (82, 152), (127, 263),

Gene: Beenie_2 Start: 486, Stop: 848, Start Num: 24
Candidate Starts for Beenie_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (64, 591), (66, 597), (68, 603), (72, 621), (76, 633), (99, 684), (127, 765),

Gene: Begonia_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Begonia_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: BellaJr_3 Start: 1081, Stop: 1479, Start Num: 44
Candidate Starts for BellaJr_3:
(25, 1048), (Start: 44 @1081 has 4 MA's), (53, 1114), (59, 1132), (68, 1165), (72, 1183), (76, 1195), (84, 1231), (91, 1243), (114, 1297), (119, 1315), (146, 1465),

Gene: Bhagsy_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for Bhagsy_1:
(Start: 13 @43 has 49 MA's), (Start: 52 @139 has 1 MA's), (72, 205), (95, 262), (101, 274), (105, 286), (118, 310), (126, 340),

Gene: BigNuz_1 Start: 43, Stop: 423, Start Num: 13
Candidate Starts for BigNuz_1:
(Start: 9 @16 has 1 MA's), (Start: 13 @43 has 49 MA's), (Start: 52 @130 has 1 MA's), (72, 196), (95, 253), (105, 277), (114, 286), (118, 301), (126, 331),

Gene: Bjanes7_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Bjanes7_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: BlackSpider_1 Start: 71, Stop: 478, Start Num: 44
Candidate Starts for BlackSpider_1:
(31, 44), (Start: 44 @71 has 4 MA's), (53, 104), (76, 185), (91, 233), (95, 245), (114, 296), (146, 464),

Gene: BlingBling_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for BlingBling_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Blino_1 Start: 57, Stop: 392, Start Num: 38
Candidate Starts for Blino_1:
(21, 15), (Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (63, 123), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: Blueberry_1 Start: 57, Stop: 392, Start Num: 38
Candidate Starts for Blueberry_1:
(21, 15), (Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (63, 123), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: Bogie_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for Bogie_1:
(Start: 13 @43 has 49 MA's), (Start: 52 @139 has 1 MA's), (72, 205), (95, 262), (101, 274), (118, 310), (126, 340),

Gene: Bongo_13 Start: 4298, Stop: 4693, Start Num: 37
Candidate Starts for Bongo_13:
(Start: 37 @4298 has 59 MA's), (88, 4475), (140, 4664), (141, 4667),

Gene: Bowser_1 Start: 176, Stop: 550, Start Num: 36
Candidate Starts for Bowser_1:
(Start: 36 @176 has 18 MA's), (64, 260), (76, 302), (81, 320), (95, 347), (100, 356), (114, 383), (119, 401), (143, 515),

Gene: Bricole_13 Start: 4297, Stop: 4692, Start Num: 37
Candidate Starts for Bricole_13:
(Start: 37 @4297 has 59 MA's), (88, 4474), (140, 4663), (141, 4666),

Gene: BronnyJr_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for BronnyJr_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Brusacoram_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for Brusacoram_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: Bunker_1 Start: 176, Stop: 550, Start Num: 36
Candidate Starts for Bunker_1:
(Start: 36 @176 has 18 MA's), (76, 302), (81, 320), (83, 335), (95, 347), (100, 356), (114, 383), (119, 401), (143, 515),

Gene: Bunnies_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Bunnies_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (105, 298), (118, 322), (126, 352),

Gene: CactusJack_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for CactusJack_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: Camster_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Camster_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: CaptainKirk2_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for CaptainKirk2_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: CarolAnn_1 Start: 56, Stop: 391, Start Num: 38
Candidate Starts for CarolAnn_1:
(20, 14), (Start: 28 @35 has 1 MA's), (Start: 38 @56 has 43 MA's), (42, 62), (50, 74), (Start: 51 @89 has 8 MA's), (63, 122), (64, 128), (67, 137), (70, 149), (73, 161), (83, 203), (99, 221), (100, 224), (114, 251), (119, 269), (128, 302), (130, 308),

Gene: Cassini_1 Start: 60, Stop: 443, Start Num: 44
Candidate Starts for Cassini_1:
(39, 48), (Start: 44 @60 has 4 MA's), (53, 93), (59, 111), (76, 174), (78, 183), (91, 222), (97, 234), (112, 267), (114, 276), (119, 294), (136, 378),

Gene: CheeseSpider_1 Start: 36, Stop: 392, Start Num: 28
Candidate Starts for CheeseSpider_1:
(Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: Chipko_1 Start: 226, Stop: 612, Start Num: 33
Candidate Starts for Chipko_1:
(Start: 33 @226 has 7 MA's), (Start: 40 @238 has 5 MA's), (48, 256), (64, 313), (71, 337), (114, 436), (129, 490),

Gene: Chubbello_1 Start: 54, Stop: 443, Start Num: 13
Candidate Starts for Chubbello_1:
(Start: 13 @54 has 49 MA's), (Start: 52 @150 has 1 MA's), (72, 216), (95, 273), (101, 285), (118, 321), (126, 351),

Gene: Clap_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Clap_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Clark_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Clark_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (64, 591), (66, 597), (68, 603), (72, 621), (76, 633), (99, 684), (127, 765),

Gene: Coriander_1 Start: 228, Stop: 614, Start Num: 33
Candidate Starts for Coriander_1:
(Start: 33 @228 has 7 MA's), (Start: 40 @240 has 5 MA's), (64, 315), (71, 339), (129, 492),

Gene: Cosmo_25 Start: 7720, Stop: 8109, Start Num: 43
Candidate Starts for Cosmo_25:
(Start: 43 @7720 has 5 MA's), (Start: 55 @7771 has 3 MA's), (76, 7843), (78, 7852), (88, 7888), (92, 7894), (109, 7927), (114, 7939), (115, 7942), (119, 7957), (130, 7996), (132, 8008), (142, 8074), (145, 8092),

Gene: Cynthia_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Cynthia_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Daegal_1 Start: 257, Stop: 571, Start Num: 55
Candidate Starts for Daegal_1:
(1, 14), (7, 71), (8, 92), (Start: 55 @257 has 3 MA's), (65, 287), (67, 293), (68, 296), (72, 314), (81, 344), (82, 347), (102, 392), (111, 416), (114, 425), (126, 470), (131, 485), (138, 536), (145, 563),

Gene: Delian_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Delian_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Denise_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Denise_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (82, 152), (121, 236), (126, 260), (127, 263), (133, 293),

Gene: Diminimus_14 Start: 4297, Stop: 4692, Start Num: 37
Candidate Starts for Diminimus_14:
(Start: 37 @4297 has 59 MA's), (88, 4474), (140, 4663), (141, 4666),

Gene: DirtyBoi_1 Start: 228, Stop: 614, Start Num: 33
Candidate Starts for DirtyBoi_1:
(10, 141), (Start: 33 @228 has 7 MA's), (Start: 40 @240 has 5 MA's), (64, 315), (71, 339), (95, 402), (114, 438), (129, 492),

Gene: Dmitri_1 Start: 228, Stop: 614, Start Num: 33

Candidate Starts for Dmitri_1:
(Start: 33 @228 has 7 MA's), (Start: 40 @240 has 5 MA's), (48, 258), (64, 315), (71, 339), (114, 438), (129, 492),

Gene: DobbysSock_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for DobbysSock_1:
(Start: 37 @14 has 59 MA's), (Start: 55 @62 has 3 MA's), (Start: 60 @71 has 1 MA's), (66, 95), (68, 101), (76, 131), (81, 149), (127, 263),

Gene: Doggs_1 Start: 228, Stop: 614, Start Num: 33
Candidate Starts for Doggs_1:
(Start: 33 @228 has 7 MA's), (Start: 40 @240 has 5 MA's), (64, 315), (71, 339), (129, 492),

Gene: Dolores_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Dolores_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (66, 597), (67, 600), (68, 603), (127, 765),

Gene: Donovan_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Donovan_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Dorito_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Dorito_1:
(Start: 37 @14 has 59 MA's), (Start: 60 @71 has 1 MA's), (66, 95), (68, 101), (127, 263),

Gene: Dulcita_14 Start: 4297, Stop: 4692, Start Num: 37
Candidate Starts for Dulcita_14:
(Start: 37 @4297 has 59 MA's), (88, 4474), (140, 4663), (141, 4666),

Gene: DumpsterDude_1 Start: 127, Stop: 453, Start Num: 37
Candidate Starts for DumpsterDude_1:
(18, 82), (Start: 37 @127 has 59 MA's), (Start: 51 @166 has 8 MA's), (66, 211), (69, 220), (73, 238), (78, 256), (93, 295), (119, 340), (130, 379), (135, 412),

Gene: Dynamo_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Dynamo_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Easley_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Easley_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (64, 591), (66, 597), (68, 603), (72, 621), (76, 633), (99, 684), (127, 765),

Gene: Ebert_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Ebert_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: EdnaMode_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for EdnaMode_1:
(Start: 37 @14 has 59 MA's), (65, 92), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: EniyanLRS_22 Start: 7412, Stop: 7801, Start Num: 43
Candidate Starts for EniyanLRS_22:
(Start: 43 @7412 has 5 MA's), (Start: 55 @7463 has 3 MA's), (76, 7535), (78, 7544), (88, 7580), (92, 7586), (109, 7619), (114, 7631), (115, 7634), (119, 7649), (130, 7688), (132, 7700), (142, 7766), (145, 7784),

Gene: Estes_18 Start: 5092, Stop: 5439, Start Num: 51
Candidate Starts for Estes_18:
(Start: 37 @5044 has 59 MA's), (Start: 51 @5092 has 8 MA's), (88, 5221), (92, 5227), (104, 5266), (115, 5290), (140, 5410), (141, 5413),

Gene: Etoile_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Etoile_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Eyes_1 Start: 176, Stop: 550, Start Num: 36
Candidate Starts for Eyes_1:
(Start: 36 @176 has 18 MA's), (64, 260), (76, 302), (81, 320), (95, 347), (100, 356), (114, 383), (119, 401), (143, 515),

Gene: Fairfaxidum_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Fairfaxidum_1:
(Start: 38 @56 has 43 MA's), (42, 62), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (78, 179), (79, 185), (83, 203), (100, 224), (108, 242), (127, 299),

Gene: Fenry_1 Start: 57, Stop: 398, Start Num: 38
Candidate Starts for Fenry_1:
(Start: 38 @57 has 43 MA's), (50, 75), (Start: 51 @90 has 8 MA's), (Start: 52 @93 has 1 MA's), (64, 129), (66, 135), (67, 138), (73, 162), (83, 204), (100, 225), (114, 252), (119, 270),

Gene: Finkle_1 Start: 10, Stop: 411, Start Num: 14
Candidate Starts for Finkle_1:
(Start: 13 @1 has 49 MA's), (Start: 14 @10 has 1 MA's), (45, 82), (119, 298),

Gene: FirstPlacePfu_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for FirstPlacePfu_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Fishburne_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Fishburne_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: FreakyGoo_14 Start: 4298, Stop: 4693, Start Num: 37
Candidate Starts for FreakyGoo_14:
(Start: 37 @4298 has 59 MA's), (88, 4475), (140, 4664), (141, 4667),

Gene: FroggyToad_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for FroggyToad_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Frokostdame_1 Start: 57, Stop: 392, Start Num: 38
Candidate Starts for Frokostdame_1:
(Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (63, 123), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (119, 270), (128, 303), (130, 309),

Gene: GEazy_1 Start: 176, Stop: 550, Start Num: 36
Candidate Starts for GEazy_1:
(Start: 36 @176 has 18 MA's), (64, 260), (76, 302), (81, 320), (95, 347), (100, 356), (114, 383), (119, 401), (143, 515),

Gene: Gallop_1 Start: 64, Stop: 435, Start Num: 27
Candidate Starts for Gallop_1:
(27, 64), (Start: 55 @142 has 3 MA's), (68, 181), (113, 295), (114, 298), (118, 313), (132, 367),

Gene: GaloreK_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for GaloreK_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Gambino_1 Start: 57, Stop: 392, Start Num: 38
Candidate Starts for Gambino_1:
(21, 15), (Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (63, 123), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: GardenSalsa_17 Start: 4926, Stop: 5273, Start Num: 51
Candidate Starts for GardenSalsa_17:
(Start: 37 @4878 has 59 MA's), (Start: 51 @4926 has 8 MA's), (88, 5055), (92, 5061), (104, 5100), (115, 5124), (140, 5244), (141, 5247),

Gene: Gavriela_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for Gavriela_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: GemG_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for GemG_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: GenevaB15_17 Start: 4947, Stop: 5294, Start Num: 51
Candidate Starts for GenevaB15_17:
(Start: 37 @4899 has 59 MA's), (Start: 51 @4947 has 8 MA's), (88, 5076), (92, 5082), (104, 5121), (115, 5145), (140, 5265), (141, 5268),

Gene: Gizermo_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Gizermo_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Glaske_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for Glaske_1:

(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: Glaske16_14 Start: 4297, Stop: 4692, Start Num: 37
Candidate Starts for Glaske16_14:
(Start: 37 @4297 has 59 MA's), (88, 4474), (140, 4663), (141, 4666),

Gene: GreaseLightnin_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for GreaseLightnin_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Guacamole_1 Start: 57, Stop: 398, Start Num: 38
Candidate Starts for Guacamole_1:
(19, 12), (Start: 38 @57 has 43 MA's), (50, 75), (Start: 51 @90 has 8 MA's), (Start: 52 @93 has 1 MA's), (66, 135), (67, 138), (73, 162), (76, 171), (100, 225), (114, 252),

Gene: HUHilltop_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for HUHilltop_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Haley23_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Haley23_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: HannahD_1 Start: 176, Stop: 550, Start Num: 36
Candidate Starts for HannahD_1:
(Start: 36 @176 has 18 MA's), (64, 260), (76, 302), (81, 320), (95, 347), (100, 356), (114, 383), (119, 401), (143, 515),

Gene: Hedwig_1 Start: 228, Stop: 614, Start Num: 33
Candidate Starts for Hedwig_1:
(Start: 33 @228 has 7 MA's), (Start: 40 @240 has 5 MA's), (48, 258), (64, 315), (71, 339), (95, 402), (114, 438), (129, 492),

Gene: Hitter_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Hitter_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Hortense_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Hortense_1:
(Start: 37 @14 has 59 MA's), (Start: 51 @50 has 8 MA's), (Start: 55 @62 has 3 MA's), (65, 92), (66, 95), (82, 152), (114, 215), (127, 263),

Gene: Howe_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Howe_1:
(Start: 37 @14 has 59 MA's), (Start: 51 @50 has 8 MA's), (Start: 55 @62 has 3 MA's), (65, 92), (66, 95), (82, 152), (114, 215), (127, 263),

Gene: Hum25_1 Start: 52, Stop: 471, Start Num: 34
Candidate Starts for Hum25_1:

(Start: 34 @52 has 1 MA's), (62, 130), (81, 202), (85, 223), (90, 238), (110, 286), (117, 316), (120, 325), (123, 343), (139, 427),

Gene: IPhane7_13 Start: 4298, Stop: 4693, Start Num: 37
Candidate Starts for IPhane7_13:
(Start: 37 @4298 has 59 MA's), (88, 4475), (140, 4664), (141, 4667),

Gene: Invectra_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Invectra_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (66, 597), (68, 603), (81, 651), (127, 765),

Gene: Izel_14 Start: 4297, Stop: 4692, Start Num: 37
Candidate Starts for Izel_14:
(Start: 37 @4297 has 59 MA's), (88, 4474), (140, 4663), (141, 4666),

Gene: JCole_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for JCole_1:
(Start: 37 @14 has 59 MA's), (58, 68), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Jalammah_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Jalammah_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Jalleen_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Jalleen_1:
(Start: 37 @14 has 59 MA's), (58, 68), (66, 95), (67, 98), (68, 101), (76, 131), (82, 152), (104, 197),

Gene: JasperJr_1 Start: 57, Stop: 398, Start Num: 38
Candidate Starts for JasperJr_1:
(19, 12), (Start: 38 @57 has 43 MA's), (50, 75), (Start: 51 @90 has 8 MA's), (Start: 52 @93 has 1 MA's), (66, 135), (67, 138), (73, 162), (76, 171), (100, 225), (114, 252),

Gene: Jebeks_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Jebeks_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Jecs_1 Start: 166, Stop: 516, Start Num: 40
Candidate Starts for Jecs_1:
(21, 121), (32, 154), (Start: 40 @166 has 5 MA's), (76, 283), (95, 328), (100, 337), (129, 418), (130, 421),

Gene: JuJu_1 Start: 57, Stop: 392, Start Num: 38
Candidate Starts for JuJu_1:
(Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: Jung_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for Jung_1:

(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (118, 309), (126, 339),

Gene: Juniormint_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Juniormint_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: KappaFarmDelta_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for KappaFarmDelta_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (72, 158), (73, 161), (82, 191), (100, 224), (114, 251), (116, 257),

Gene: Kari_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Kari_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Kiko_1 Start: 64, Stop: 435, Start Num: 40
Candidate Starts for Kiko_1:
(Start: 40 @64 has 5 MA's), (76, 181), (81, 199), (95, 226), (114, 259), (129, 313), (140, 379),

Gene: KilKor_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for KilKor_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: KleverKiS_13 Start: 4294, Stop: 4689, Start Num: 37
Candidate Starts for KleverKiS_13:
(Start: 37 @4294 has 59 MA's), (88, 4471), (140, 4660), (141, 4663),

Gene: Ksquared_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Ksquared_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (105, 298), (118, 322), (126, 352),

Gene: Kudefre_11 Start: 4593, Stop: 4943, Start Num: 56
Candidate Starts for Kudefre_11:
(Start: 56 @4593 has 4 MA's), (89, 4716), (119, 4797), (144, 4926),

Gene: Kumao_12 Start: 3923, Stop: 4243, Start Num: 55
Candidate Starts for Kumao_12:
(41, 3869), (47, 3890), (Start: 55 @3923 has 3 MA's), (132, 4163), (137, 4205), (141, 4220),

Gene: Lamberg_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Lamberg_1:
(Start: 37 @14 has 59 MA's), (65, 92), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Langerak_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Langerak_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: LilJank_11 Start: 4523, Stop: 4861, Start Num: 57
Candidate Starts for LilJank_11:
(Start: 57 @4523 has 4 MA's), (74, 4592), (96, 4667), (99, 4673), (118, 4724), (119, 4727), (125, 4751), (127, 4757), (130, 4766),

Gene: LilhomieP_12 Start: 4298, Stop: 4693, Start Num: 37
Candidate Starts for LilhomieP_12:
(Start: 37 @4298 has 59 MA's), (88, 4475), (140, 4664), (141, 4667),

Gene: LordFarquaad_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for LordFarquaad_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Lysidious_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Lysidious_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: MagicMan_1 Start: 166, Stop: 516, Start Num: 40
Candidate Starts for MagicMan_1:
(21, 121), (32, 154), (Start: 40 @166 has 5 MA's), (Start: 55 @214 has 3 MA's), (64, 241), (95, 328), (100, 337), (114, 364), (119, 382), (129, 418), (130, 421), (143, 496),

Gene: Majeke_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Majeke_1:
(Start: 13 @55 has 49 MA's), (46, 124), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: MakCheese_1 Start: 127, Stop: 453, Start Num: 37
Candidate Starts for MakCheese_1:
(Start: 37 @127 has 59 MA's), (Start: 51 @166 has 8 MA's), (Start: 55 @178 has 3 MA's), (63, 199), (66, 211), (67, 214), (69, 220), (73, 238), (78, 256), (82, 268), (84, 283), (93, 295), (108, 313), (116, 328), (119, 340), (122, 349), (130, 379), (134, 409), (135, 412),

Gene: Malachai_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Malachai_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Malibo_1 Start: 127, Stop: 453, Start Num: 37
Candidate Starts for Malibo_1:
(22, 97), (Start: 37 @127 has 59 MA's), (Start: 51 @166 has 8 MA's), (Start: 55 @178 has 3 MA's), (63, 199), (73, 238), (78, 256),

Gene: Malithi_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Malithi_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Mangethe_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Mangethe_1:
(Start: 13 @55 has 49 MA's), (46, 124), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: MaryV_25 Start: 7684, Stop: 8073, Start Num: 43
Candidate Starts for MaryV_25:
(Start: 43 @7684 has 5 MA's), (Start: 55 @7735 has 3 MA's), (76, 7807), (78, 7816), (88, 7852), (92, 7858), (109, 7891), (114, 7903), (115, 7906), (119, 7921), (130, 7960), (132, 7972), (142, 8038), (145, 8056),

Gene: Matteo_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Matteo_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Mbo4_1 Start: 117, Stop: 464, Start Num: 33
Candidate Starts for Mbo4_1:
(23, 99), (30, 111), (Start: 33 @117 has 7 MA's), (98, 300), (123, 369), (126, 378),

Gene: Megiddo_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for Megiddo_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: Melba_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Melba_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Mellie_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Mellie_1:
(26, 32), (Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: MichaelScott_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for MichaelScott_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (64, 591), (66, 597), (68, 603), (72, 621), (76, 633), (99, 684), (127, 765),

Gene: MintFen_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for MintFen_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: MissRona_1 Start: 57, Stop: 392, Start Num: 38
Candidate Starts for MissRona_1:
(21, 15), (Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (63, 123), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: Mocha12_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Mocha12_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Moonflower_1 Start: 227, Stop: 613, Start Num: 33
Candidate Starts for Moonflower_1:

(Start: 33 @227 has 7 MA's), (Start: 40 @239 has 5 MA's), (48, 257), (64, 314), (71, 338), (114, 437), (129, 491),

Gene: MrMagoo_17 Start: 4926, Stop: 5273, Start Num: 51
Candidate Starts for MrMagoo_17:
(Start: 37 @4878 has 59 MA's), (Start: 51 @4926 has 8 MA's), (88, 5055), (92, 5061), (104, 5100), (115, 5124), (140, 5244), (141, 5247),

Gene: Murp_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Murp_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (73, 161), (82, 191), (100, 224), (114, 251), (116, 257),

Gene: NaLuna_1 Start: 176, Stop: 550, Start Num: 36
Candidate Starts for NaLuna_1:
(Start: 36 @176 has 18 MA's), (64, 260), (76, 302), (81, 320), (95, 347), (100, 356), (114, 383), (119, 401), (143, 515),

Gene: Nanosmite_17 Start: 5093, Stop: 5440, Start Num: 51
Candidate Starts for Nanosmite_17:
(3, 4883), (Start: 37 @5045 has 59 MA's), (Start: 51 @5093 has 8 MA's), (107, 5273), (140, 5411), (141, 5414),

Gene: Nazo_1 Start: 43, Stop: 423, Start Num: 13
Candidate Starts for Nazo_1:
(Start: 9 @16 has 1 MA's), (Start: 13 @43 has 49 MA's), (Start: 52 @130 has 1 MA's), (72, 196), (95, 253), (105, 277), (114, 286), (118, 301), (126, 331),

Gene: Necropolis_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Necropolis_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Nettuno_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Nettuno_1:
(Start: 37 @14 has 59 MA's), (65, 92), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Neville_11 Start: 4473, Stop: 4811, Start Num: 57
Candidate Starts for Neville_11:
(Start: 57 @4473 has 4 MA's), (74, 4542), (96, 4617), (99, 4623), (118, 4674), (119, 4677), (125, 4701), (127, 4707), (130, 4716),

Gene: Obliviate_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Obliviate_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Octobien14_12 Start: 5664, Stop: 6014, Start Num: 56
Candidate Starts for Octobien14_12:
(54, 5661), (Start: 56 @5664 has 4 MA's), (89, 5787), (119, 5868), (144, 5997),

Gene: Ohgeesy_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Ohgeesy_1:

(Start: 37 @14 has 59 MA's), (66, 95), (81, 149), (82, 152), (127, 263),

Gene: Opie_1 Start: 166, Stop: 516, Start Num: 40
Candidate Starts for Opie_1:
(Start: 40 @166 has 5 MA's), (Start: 55 @214 has 3 MA's), (64, 241), (95, 328), (100, 337), (114, 364), (129, 418), (130, 421), (143, 496),

Gene: Oregano_1 Start: 101, Stop: 376, Start Num: 60
Candidate Starts for Oregano_1:
(Start: 60 @101 has 1 MA's), (66, 125), (68, 131), (127, 293),

Gene: PCoral7_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for PCoral7_1:
(Start: 38 @56 has 43 MA's), (42, 62), (50, 74), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (79, 185), (83, 203), (100, 224), (108, 242), (127, 299),

Gene: PantheRoc_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for PantheRoc_1:
(Start: 37 @14 has 59 MA's), (66, 95), (81, 149), (82, 152), (127, 263),

Gene: PatriciaStar_1 Start: 226, Stop: 612, Start Num: 33
Candidate Starts for PatriciaStar_1:
(Start: 33 @226 has 7 MA's), (Start: 40 @238 has 5 MA's), (48, 256), (64, 313), (71, 337), (76, 355), (95, 400), (99, 406), (114, 436), (129, 490),

Gene: PeanutPie_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for PeanutPie_1:
(Start: 13 @43 has 49 MA's), (Start: 52 @139 has 1 MA's), (72, 205), (95, 262), (101, 274), (105, 286), (118, 310), (126, 340),

Gene: PegLeg_13 Start: 4297, Stop: 4692, Start Num: 37
Candidate Starts for PegLeg_13:
(Start: 37 @4297 has 59 MA's), (88, 4474), (140, 4663), (141, 4666),

Gene: Petra_1 Start: 57, Stop: 392, Start Num: 38
Candidate Starts for Petra_1:
(21, 15), (Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (63, 123), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: Phalm_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for Phalm_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: Phayonce_1 Start: 139, Stop: 432, Start Num: 52
Candidate Starts for Phayonce_1:
(Start: 13 @55 has 49 MA's), (27, 91), (Start: 52 @139 has 1 MA's), (66, 181), (72, 205), (81, 235), (95, 262), (114, 295), (118, 310), (119, 313), (126, 340),

Gene: Phegasus_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Phegasus_1:

(Start: 13 @55 has 49 MA's), (46, 124), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Phineas_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for Phineas_1:
(Start: 13 @43 has 49 MA's), (Start: 52 @139 has 1 MA's), (72, 205), (95, 262), (101, 274), (118, 310), (126, 340),

Gene: PhriskyACE_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for PhriskyACE_1:
(Start: 37 @14 has 59 MA's), (Start: 60 @71 has 1 MA's), (66, 95), (68, 101), (127, 263),

Gene: PhrostedPhlake_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for PhrostedPhlake_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (73, 161), (83, 203), (100, 224), (114, 251),

Gene: Pickett_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Pickett_1:
(Start: 37 @14 has 59 MA's), (65, 92), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Pipp_1 Start: 55, Stop: 396, Start Num: 38
Candidate Starts for Pipp_1:
(15, 1), (Start: 38 @55 has 43 MA's), (50, 73), (Start: 51 @88 has 8 MA's), (Start: 52 @91 has 1 MA's), (64, 127), (66, 133), (67, 136), (73, 160), (83, 202), (100, 223), (114, 250),

Gene: Polkaroo_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Polkaroo_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Powerball_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Powerball_1:
(Start: 37 @14 has 59 MA's), (Start: 60 @71 has 1 MA's), (66, 95), (68, 101), (127, 263),

Gene: PrincePatrick_1 Start: 57, Stop: 398, Start Num: 38
Candidate Starts for PrincePatrick_1:
(Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (Start: 52 @93 has 1 MA's), (66, 135), (67, 138), (78, 180), (79, 186), (83, 204), (100, 225), (108, 243), (127, 300),

Gene: Purky_1 Start: 16, Stop: 432, Start Num: 9
Candidate Starts for Purky_1:
(Start: 9 @16 has 1 MA's), (12, 40), (Start: 13 @55 has 49 MA's), (Start: 52 @139 has 1 MA's), (66, 181), (72, 205), (95, 262), (105, 286), (114, 295), (118, 310), (126, 340),

Gene: Pygmy_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for Pygmy_1:
(Start: 13 @43 has 49 MA's), (Start: 52 @139 has 1 MA's), (72, 205), (95, 262), (101, 274), (118, 310), (126, 340),

Gene: Rabbitrun_13 Start: 4987, Stop: 5325, Start Num: 57
Candidate Starts for Rabbitrun_13:

(Start: 57 @4987 has 4 MA's), (67, 5026), (74, 5056), (75, 5059), (80, 5077), (96, 5131), (118, 5188), (119, 5191), (127, 5221), (130, 5230), (132, 5242),

Gene: RayTheFireFly_1 Start: 228, Stop: 614, Start Num: 33
Candidate Starts for RayTheFireFly_1:
(Start: 33 @228 has 7 MA's), (Start: 40 @240 has 5 MA's), (64, 315), (71, 339), (114, 438), (129, 492),

Gene: Reindeer_11 Start: 4169, Stop: 4564, Start Num: 37
Candidate Starts for Reindeer_11:
(4, 4010), (29, 4151), (Start: 37 @4169 has 59 MA's), (140, 4535), (141, 4538),

Gene: Rem711_1 Start: 226, Stop: 540, Start Num: 55
Candidate Starts for Rem711_1:
(5, 37), (Start: 55 @226 has 3 MA's), (61, 241), (77, 301), (81, 313), (94, 346), (106, 373), (124, 436), (129, 451),

Gene: Rey_17 Start: 5157, Stop: 5504, Start Num: 51
Candidate Starts for Rey_17:
(3, 4950), (6, 4965), (Start: 37 @5109 has 59 MA's), (Start: 51 @5157 has 8 MA's), (88, 5286), (104, 5331), (115, 5355), (140, 5475), (141, 5478),

Gene: Rizz_3 Start: 603, Stop: 848, Start Num: 68
Candidate Starts for Rizz_3:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (64, 591), (66, 597), (68, 603), (72, 621), (76, 633), (81, 651), (99, 684), (127, 765),

Gene: RoseMarie_13 Start: 4545, Stop: 4940, Start Num: 37
Candidate Starts for RoseMarie_13:
(Start: 37 @4545 has 59 MA's), (99, 4752), (140, 4911), (141, 4914),

Gene: Ruthy_1 Start: 43, Stop: 453, Start Num: 11
Candidate Starts for Ruthy_1:
(Start: 11 @43 has 1 MA's), (18, 82), (Start: 37 @127 has 59 MA's), (Start: 51 @166 has 8 MA's), (Start: 55 @178 has 3 MA's), (66, 211), (69, 220), (73, 238), (78, 256), (82, 268), (93, 295), (110, 316), (119, 340), (130, 379),

Gene: Sahara_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Sahara_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152), (99, 182), (104, 197), (114, 215),

Gene: Samba_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Samba_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Samman98_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Samman98_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (66, 597), (67, 600), (68, 603), (127, 765),

Gene: Savage_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Savage_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Schnabeltier_1 Start: 167, Stop: 517, Start Num: 40
Candidate Starts for Schnabeltier_1:
(21, 122), (32, 155), (Start: 40 @167 has 5 MA's), (Start: 55 @215 has 3 MA's), (64, 242), (95, 329), (100, 338), (114, 365), (119, 383), (129, 419), (130, 422), (143, 497),

Gene: Sekhmet_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Sekhmet_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (66, 597), (68, 603), (81, 651), (127, 765),

Gene: Sephiroth_12 Start: 4764, Stop: 5114, Start Num: 56
Candidate Starts for Sephiroth_12:
(32, 4695), (49, 4734), (Start: 56 @4764 has 4 MA's), (89, 4887), (119, 4968), (144, 5097),

Gene: Shipwreck_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for Shipwreck_1:
(Start: 13 @43 has 49 MA's), (Start: 52 @139 has 1 MA's), (72, 205), (95, 262), (101, 274), (118, 310), (126, 340),

Gene: Shlim410_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Shlim410_1:
(Start: 37 @14 has 59 MA's), (Start: 51 @50 has 8 MA's), (Start: 55 @62 has 3 MA's), (65, 92), (66, 95), (82, 152), (114, 215), (127, 263),

Gene: Sidious_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Sidious_1:
(Start: 37 @14 has 59 MA's), (66, 95), (82, 152), (95, 176), (104, 197), (127, 263),

Gene: Skinny_14 Start: 4297, Stop: 4692, Start Num: 37
Candidate Starts for Skinny_14:
(Start: 37 @4297 has 59 MA's), (88, 4474), (140, 4663), (141, 4666),

Gene: SlimJimmy_12 Start: 4297, Stop: 4692, Start Num: 37
Candidate Starts for SlimJimmy_12:
(Start: 37 @4297 has 59 MA's), (88, 4474), (140, 4663), (141, 4666),

Gene: SoilAssassin_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for SoilAssassin_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Soilmate_1 Start: 56, Stop: 391, Start Num: 38
Candidate Starts for Soilmate_1:
(20, 14), (Start: 28 @35 has 1 MA's), (Start: 38 @56 has 43 MA's), (42, 62), (50, 74), (Start: 51 @89 has 8 MA's), (63, 122), (64, 128), (67, 137), (70, 149), (73, 161), (83, 203), (99, 221), (100, 224), (114, 251), (119, 269), (128, 302), (130, 308),

Gene: Sonah_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Sonah_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Spartan_1 Start: 64, Stop: 435, Start Num: 27

Candidate Starts for Spartan_1:
(27, 64), (Start: 55 @142 has 3 MA's), (64, 169), (81, 229), (113, 295), (114, 298), (118, 313), (132, 367),

Gene: Sprinklemunch_1 Start: 125, Stop: 451, Start Num: 37
Candidate Starts for Sprinklemunch_1:
(16, 74), (17, 77), (31, 113), (Start: 37 @125 has 59 MA's), (76, 245), (79, 260), (84, 281), (103, 299), (116, 326), (119, 338), (127, 368), (131, 380),

Gene: Sproutie_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Sproutie_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: StevieRay_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for StevieRay_1:
(Start: 13 @43 has 49 MA's), (Start: 52 @139 has 1 MA's), (72, 205), (95, 262), (101, 274), (105, 286), (118, 310), (126, 340),

Gene: StressBall_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for StressBall_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: Suerte_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Suerte_1:
(Start: 37 @14 has 59 MA's), (Start: 60 @71 has 1 MA's), (66, 95), (68, 101), (127, 263),

Gene: Syleon_12 Start: 4686, Stop: 5036, Start Num: 56
Candidate Starts for Syleon_12:
(32, 4617), (49, 4656), (Start: 56 @4686 has 4 MA's), (89, 4809), (119, 4890), (144, 5019),

Gene: TaronosaurasRx_1 Start: 167, Stop: 517, Start Num: 40
Candidate Starts for TaronosaurasRx_1:
(21, 122), (32, 155), (Start: 40 @167 has 5 MA's), (64, 242), (95, 329), (100, 338), (114, 365), (119, 383), (129, 419), (130, 422), (143, 497),

Gene: Techage_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Techage_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Thespis_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for Thespis_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: Thimann_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Thimann_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (66, 597), (68, 603), (76, 633), (127, 765),

Gene: ThulaThula_1 Start: 55, Stop: 432, Start Num: 13
Candidate Starts for ThulaThula_1:

(Start: 13 @55 has 49 MA's), (27, 91), (Start: 52 @139 has 1 MA's), (64, 175), (66, 181), (72, 205), (81, 235), (95, 262), (118, 310), (119, 313), (126, 340),

Gene: Toast_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Toast_1:
(Start: 38 @56 has 43 MA's), (42, 62), (50, 74), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (79, 185), (83, 203), (100, 224), (108, 242), (127, 299),

Gene: Tortellini_1 Start: 43, Stop: 432, Start Num: 13
Candidate Starts for Tortellini_1:
(Start: 13 @43 has 49 MA's), (35, 94), (Start: 52 @139 has 1 MA's), (64, 175), (72, 205), (114, 295), (118, 310), (126, 340),

Gene: Trax_11 Start: 4473, Stop: 4811, Start Num: 57
Candidate Starts for Trax_11:
(Start: 57 @4473 has 4 MA's), (74, 4542), (96, 4617), (99, 4623), (118, 4674), (119, 4677), (125, 4701), (127, 4707), (130, 4716),

Gene: TuertoX_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for TuertoX_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Tuti_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for Tuti_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (64, 591), (66, 597), (68, 603), (72, 621), (76, 633), (99, 684), (114, 717), (127, 765),

Gene: Twinkle_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Twinkle_1:
(Start: 37 @14 has 59 MA's), (Start: 51 @50 has 8 MA's), (Start: 55 @62 has 3 MA's), (65, 92), (66, 95), (82, 152), (114, 215), (127, 263),

Gene: TyDawg_13 Start: 4298, Stop: 4693, Start Num: 37
Candidate Starts for TyDawg_13:
(Start: 37 @4298 has 59 MA's), (88, 4475), (140, 4664), (141, 4667),

Gene: UmaThurman_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for UmaThurman_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (83, 203), (100, 224), (114, 251),

Gene: Utz_1 Start: 89, Stop: 397, Start Num: 51
Candidate Starts for Utz_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (83, 203), (100, 224), (114, 251),

Gene: Vasanti_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Vasanti_1:
(Start: 37 @14 has 59 MA's), (65, 92), (66, 95), (67, 98), (82, 152), (114, 215), (127, 263),

Gene: Venti_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Venti_1:

(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (66, 193), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Vidya_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Vidya_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Walrus_1 Start: 57, Stop: 392, Start Num: 38
Candidate Starts for Walrus_1:
(21, 15), (Start: 28 @36 has 1 MA's), (Start: 38 @57 has 43 MA's), (42, 63), (50, 75), (Start: 51 @90 has 8 MA's), (63, 123), (64, 129), (67, 138), (70, 150), (73, 162), (83, 204), (99, 222), (100, 225), (114, 252), (119, 270), (128, 303), (130, 309),

Gene: Weirdo19_1 Start: 209, Stop: 565, Start Num: 51
Candidate Starts for Weirdo19_1:
(2, 14), (7, 47), (Start: 51 @209 has 8 MA's), (72, 278), (82, 311), (86, 332), (87, 335), (119, 431), (131, 473), (134, 500),

Gene: Whack_1 Start: 53, Stop: 403, Start Num: 33
Candidate Starts for Whack_1:
(Start: 33 @53 has 7 MA's), (Start: 55 @107 has 3 MA's), (81, 194), (95, 221), (114, 263), (126, 308), (130, 320),

Gene: Whiteclaw_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Whiteclaw_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Wildcat_25 Start: 7694, Stop: 8083, Start Num: 43
Candidate Starts for Wildcat_25:
(Start: 43 @7694 has 5 MA's), (Start: 55 @7745 has 3 MA's), (76, 7817), (78, 7826), (88, 7862), (92, 7868), (109, 7901), (114, 7913), (115, 7916), (119, 7931), (130, 7970), (132, 7982), (142, 8048), (145, 8066),

Gene: William_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for William_1:
(Start: 38 @56 has 43 MA's), (42, 62), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (78, 179), (79, 185), (81, 188), (83, 203), (108, 242), (127, 299),

Gene: Willsammy_1 Start: 42, Stop: 431, Start Num: 13
Candidate Starts for Willsammy_1:
(Start: 13 @42 has 49 MA's), (Start: 52 @138 has 1 MA's), (72, 204), (95, 261), (101, 273), (105, 285), (118, 309), (126, 339),

Gene: WinkNick_2 Start: 510, Stop: 848, Start Num: 36
Candidate Starts for WinkNick_2:
(Start: 24 @486 has 1 MA's), (26, 492), (30, 501), (Start: 36 @510 has 18 MA's), (Start: 60 @573 has 1 MA's), (66, 597), (67, 600), (68, 603), (127, 765),

Gene: Wisp_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Wisp_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Wocket_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Wocket_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (83, 203), (100, 224), (114, 251),

Gene: Xavia_1 Start: 55, Stop: 435, Start Num: 13
Candidate Starts for Xavia_1:
(Start: 9 @16 has 1 MA's), (Start: 13 @55 has 49 MA's), (Start: 52 @142 has 1 MA's), (66, 184), (67, 187), (72, 208), (95, 265), (101, 277), (105, 289), (114, 298), (118, 313), (126, 343),

Gene: Yeet412_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Yeet412_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: Yeezy_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Yeezy_1:
(Start: 37 @14 has 59 MA's), (66, 95), (81, 149), (82, 152), (127, 263),

Gene: Yinzer_1 Start: 14, Stop: 346, Start Num: 37
Candidate Starts for Yinzer_1:
(Start: 37 @14 has 59 MA's), (66, 95), (67, 98), (68, 101), (82, 152),

Gene: ZAYM_1 Start: 166, Stop: 516, Start Num: 40
Candidate Starts for ZAYM_1:
(21, 121), (32, 154), (Start: 40 @166 has 5 MA's), (64, 241), (95, 328), (100, 337), (114, 364), (119, 382), (129, 418), (130, 421), (143, 496),

Gene: Zarbodnamra_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Zarbodnamra_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (64, 128), (66, 134), (67, 137), (73, 161), (83, 203), (100, 224), (114, 251),

Gene: ZiggyZoo_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for ZiggyZoo_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (66, 134), (67, 137), (73, 161), (100, 224), (114, 251),

Gene: Zilizebeth_1 Start: 55, Stop: 444, Start Num: 13
Candidate Starts for Zilizebeth_1:
(Start: 13 @55 has 49 MA's), (Start: 52 @151 has 1 MA's), (72, 217), (95, 274), (101, 286), (118, 322), (126, 352),

Gene: Zilla_1 Start: 56, Stop: 397, Start Num: 38
Candidate Starts for Zilla_1:
(Start: 38 @56 has 43 MA's), (50, 74), (Start: 51 @89 has 8 MA's), (Start: 52 @92 has 1 MA's), (66, 134), (67, 137), (95, 215), (99, 221), (100, 224), (108, 242), (114, 251), (116, 257),

Gene: Zodiariah_1 Start: 125, Stop: 451, Start Num: 37
Candidate Starts for Zodiariah_1:
(Start: 37 @125 has 59 MA's), (Start: 51 @164 has 8 MA's), (Start: 55 @176 has 3 MA's), (63, 197), (66, 209), (67, 212), (69, 218), (73, 236), (78, 254), (82, 266), (84, 281), (93, 293), (108, 311), (119, 338), (130, 377), (134, 407), (135, 410),

Gene: Zucker_2 Start: 385, Stop: 780, Start Num: 44
Candidate Starts for Zucker_2:
(25, 352), (Start: 44 @385 has 4 MA's), (59, 436), (68, 469), (72, 487), (76, 499), (91, 547), (136, 715), (146, 766),