

1. JohnLord_29	34	53	80	100	120	131	138	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721
2. Caterpie_28	34	53	80	100	120	131	138	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721
3. Mao1_26 + 2	34	53	80	100	120	131	138	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721
4. JustASign_21	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
5. Lars_32 + 16	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
6. Kale0_32 + 2	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
7. Glass_32 + 2	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
8. Vic9_00032	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
9. LitsMir_32 + 1	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
10. PrinceCharming_32	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
11. HoleInOne_32	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
12. TAI7A_33	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
13. Sabella_32	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
14. ItsyBitsy1_32	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
15. Qyrzula_30	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
16. Tres_32	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
17. MasterPo_32	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
18. Godines_32	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
19. EagleHorse_32	58	149	141	120	144	161	171	185	192	209	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
20. Dampop_48	58	91							100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
21. GR01_33	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
22. Turuncu_47	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
23. GTE8_32	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
24. Foxboro_44 + 3	58	80	112						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
25. Kurl_43 + 4	58	80	112						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
26. GrootJr_45 + 2	58	112							100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
27. Commandaria_45	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
28. Pemberton_46	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
29. BiPauleto_46 + 2	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
30. IDyn_44	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
31. WhoseManz_45	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
32. HubbaBubba_41	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
33. NadineRae_43	58								100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
34. Marietta_43	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
35. HayZem_30	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
36. GMA7_22	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
37. GTE7_22	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
38. Amore2_32	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
39. RavenCo1_25	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
40. GMA3_19	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
41. Jumbo_24	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
42. PingPong_30	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
43. Daredevil_36 + 1	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
44. GMA2_32	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
45. BabyMoney_28	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
46. Ewald_29	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
47. Nyceirae_30	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
48. Phisby_29	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	680	705	721	
49. Meyran_28	58	90	10						100	201	235	271	288	308	324	332	334	336	432	443	448	500	519	524	534	555	570	620	68			

51: Zodianah_21	32	41	73	128	136	143	171	201	213	219	231	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710
52: Sprinklemur_20	41	76	101	128	136	143	171	201	213	219	231	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710
53: Clinton_18 + 4	41	76	101	128	136	143	171	201	213	219	231	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710
54: Cerasum_19	41	76	101	128	136	143	171	201	213	219	231	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710
55: Pippy_18	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
56: Neighly_26 + 5	10	116	130	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
57: SamScheppers_24	10	116	130	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
58: Dansy44_29	10	116	130	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
59: Eponine_28	10	116	130	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
60: Taquito_26	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
61: Omnicron_26	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
62: Rand014_26	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
63: SoSeprh_25 + 1	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
64: Paola_25 + 2	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
65: Thyatra_25	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
66: Gengar_25 + 2	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
67: UKRoe_25	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
68: LUDin_24 + 6	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
69: Krato_24	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
70: Feyre_25	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
71: Poochiewood_20 + 4	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
72: Appietree2_20 + 3	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
73: OnShagHennessy_20	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
74: Caim_20 + 1	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
75: Tyson_20 + 1	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
76: CicholasNage_20 + 1	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
77: AvadaKedavra_20	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
78: OPIE_20	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
79: Silverleaf_20	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
80: LeBron_20	64	82	126	144	163	190	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710				
81: DyoEdalos_21	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
82: PYPDMur_20	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
83: ChutneyChips	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
84: Bromden_21	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
85: Douzhi_20 + 1	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
86: FarmResident_13	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
87: Kropentea_20	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
88: Quby_20 + 1	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
89: Chaser_20	51	91	104	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
90: BrainDrainer_19	10	116	130	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710		
91: RoseMarie_35	15	60	80	101	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710	
92: GenevaB15_31	15	60	80	101	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710	
93: MrMagoo_34	15	60	80	101	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710	
94: AZIZ_34	15	60	80	101	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710	
95: Rey_34	15	60	80	101	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710	
96: Estes_35	15	60	80	101	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710	
97: Nanosmite_33	15	60	80	101	121	138	154	182	199	210	238	271	305	309	401	423	439	460	494	512	533	572	588	602	610	623	710	
98: Raymond7_49	10	116	130	121	138	154	182	199																				

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 328716 Report

This analysis was run 09/05/26 on database version 662.

Pham number 328716 has 184 members, 25 are drafts.

Phages represented in each track:

- Track 1 : JohnLord_29
- Track 2 : Caterpie_28
- Track 3 : Mao1_26, Mask_27, Sejanus_27
- Track 4 : JustASigh_21
- Track 5 : Lars_32, Opia_32, Rosebush_32, Hedgerow_32, Rhinoforte_32, Coffee_32, West99_32, Blocker23_32, Ares_32, Boyle_32, Tinciduntolum_33, Faze9_32, FrenchFry_32, Brownie5_32, Phantasmagoria_32, Arbiter_32, Kheth_32
- Track 6 : Kaleb_32, Lephleur_32, Kolhan_32
- Track 7 : Glass_32, Allegro_32, LizLemon_32
- Track 8 : Vic9_00032
- Track 9 : LilSmirk_32, Calamitous_32
- Track 10 : PrinceCharming_32, Bananafish_32
- Track 11 : Holeinone_32
- Track 12 : TA17A_33
- Track 13 : Sabella_32
- Track 14 : ItsyBitsy1_32
- Track 15 : Qyrzula_30
- Track 16 : Tres_32
- Track 17 : MasterPo_32
- Track 18 : Godines_32
- Track 19 : Eaglehorse_32
- Track 20 : Dalilpop_48
- Track 21 : GRU1_33
- Track 22 : Turuncu_47
- Track 23 : GTE8_32
- Track 24 : Foxboro_44, Wheezy_43, Tracker_43, Arti_43
- Track 25 : Kurt_43, KidneyBean_43, Jifall16_42, Phomeo_42, Emianna_43
- Track 26 : GrootJr_45, NovumRegina_43, NatB6_43
- Track 27 : Commandaria_45
- Track 28 : Pemberton_46
- Track 29 : BiPauneto_46, Yndexa_45, Sukkupi_45
- Track 30 : IDyn_44
- Track 31 : WhoseManz_45
- Track 32 : HubbaBubba_41
- Track 33 : NadineRae_43
- Track 34 : Marietta_45
- Track 35 : HayZem_31

- Track 36 : GMA7_22, Austin_32
- Track 37 : GTE7_22
- Track 38 : Amore2_32
- Track 39 : RavenCo17_25
- Track 40 : GMA3_19
- Track 41 : Jumbo_24
- Track 42 : Pimento_26
- Track 43 : Daredevil_36, Towmatter_35
- Track 44 : GMA2_32
- Track 45 : BabyMoney_28
- Track 46 : Ewald_29
- Track 47 : Nyceirae_30
- Track 48 : Phishy_29
- Track 49 : Meyran_28
- Track 50 : DumpsterDude_22
- Track 51 : Zodiariah_21
- Track 52 : Sprinklemunch_21
- Track 53 : Clifton_18, Jennelsea_18, LastJedi_18, Crumble_18, Koella_18
- Track 54 : Cerasum_19, BigPhil_19, Sarma624_19, Velveteen_19
- Track 55 : Pippy_18
- Track 56 : Neighly_26, Larva_26, Psycho_26, Edugator_25, Dadosky_26, AlleyCat_26
- Track 57 : SamScheppers_26
- Track 58 : DanSyl44_29
- Track 59 : Eponine_28
- Track 60 : Taquito_26
- Track 61 : Omnicron_26
- Track 62 : Rando14_26
- Track 63 : SoSeph_25, Heftyboy_25
- Track 64 : Paola_25, Guillsminger_25, Leston_25
- Track 65 : Thyatira_25
- Track 66 : Gengar_25, Waterfoul_25, Miryou_25
- Track 67 : OkiRoe_25
- Track 68 : LilDirt_24, ViviJ_24, Collard_25, BananenDer11_25, DoubleChamp_25, Agent47_25, InvictusManeo_25
- Track 69 : Kratio_24
- Track 70 : Feyre_25
- Track 71 : Poochiewood_20, Wyatt2_20, MAckerman_20, Acquire49_20, Rose5_20
- Track 72 : Appletree2_20, JoeDirt_20, Enceladus_20, DirkDirk_20
- Track 73 : OhShagHennessy_20
- Track 74 : Calm_20, Zaria_20
- Track 75 : Tyson_20, Wamburggrxpress_20
- Track 76 : CicholasNage_20, Halena_20
- Track 77 : AvadaKedavra_20
- Track 78 : UPIE_20
- Track 79 : Silverleaf_20
- Track 80 : LeBron_20
- Track 81 : DyoEdafos_21
- Track 82 : PYPDinur_20
- Track 83 : ChutneyChips_20
- Track 84 : Bromden_21
- Track 85 : Douzhi_20, Sheng711_20
- Track 86 : FarmResident_20

- Track 87 : Kropertea_20
- Track 88 : Quby_20, Douge_20
- Track 89 : Chaser_20
- Track 90 : BrainDrainer_21
- Track 91 : RoseMarie_31
- Track 92 : GenevaB15_34
- Track 93 : MrMagoo_34, GardenSalsa_34
- Track 94 : Aziz_34
- Track 95 : Rey_34
- Track 96 : Estes_35
- Track 97 : Nanosmite_34
- Track 98 : Raymond7_20
- Track 99 : Phrann_20
- Track 100 : BronnyJr_21
- Track 101 : Atcoo_21
- Track 102 : Xavia_21
- Track 103 : Demikore_37
- Track 104 : Labelle_36
- Track 105 : Madruga_35
- Track 106 : SuperSonics_36
- Track 107 : Patience_37
- Track 108 : D12_24, PR_24
- Track 109 : GodPhather_25
- Track 110 : Jeon_24

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

The start number called the most often in the published annotations is 58, it was called in 36 of the 159 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Allegro_32, Arbiter_32, Ares_32, Bananafish_32, Blocker23_32, Boyle_32, Brownie5_32, Calamitous_32, Coffee_32, Eaglehorse_32, Faze9_32, FrenchFry_32, Glass_32, Godines_32, Hedgerow_32, Holeinone_32, ItsyBitsy1_32, Kaleb_32, Kheth_32, Kolhan_32, Lars_32, Lephleur_32, LilSmirk_32, LizLemon_32, MasterPo_32, Opia_32, Phantasmagoria_32, PrinceCharming_32, Qyrzula_30, Rhinoforte_32, Rosebush_32, Sabella_32, TA17A_33, Tinciduntolum_33, Tres_32, Vic9_00032, West99_32,

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

-

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

- Acquire49_20, Agent47_25, AlleyCat_26, Amore2_32, Appletree2_20, Arti_43, Atcoo_21, Austin_32, AvadaKedavra_20, Aziz_34, BabyMoney_28, BananenDer11_25, BiPauneto_46, BigPhil_19, BrainDrainer_21, Bromden_21, BronnyJr_21, Calm_20, Caterpie_28, Cerasum_19, Chaser_20, ChutneyChips_20, CicholasNage_20, Clifton_18, Collard_25, Commandaria_45, Crumble_18, D12_24, Dadosky_26, Dalilpop_48, DanSyl44_29, Daredevil_36, Demikore_37, DirkDirk_20, DoubleChamp_25, Douge_20, Douzhi_20, DumpsterDude_22, DyoEdafos_21,

Edugator_25, Emianna_43, Enceladus_20, Eponine_28, Estes_35, Ewald_29,
 FarmResident_20, Feyre_25, Foxboro_44, GMA2_32, GMA3_19, GMA7_22,
 GRU1_33, GTE7_22, GTE8_32, GardenSalsa_34, GenevaB15_34, Gengar_25,
 GodPhather_25, GrootJr_45, Guillsminger_25, Halena_20, HayZem_31,
 Heftyboy_25, HubbaBubba_41, IDyn_44, InvictusManeo_25, Jennelsea_18,
 Jeon_24, Jifall16_42, JoeDirt_20, JohnLord_29, Jumbo_24, JustASigh_21,
 KidneyBean_43, Koella_18, Kratio_24, Kropertea_20, Kurt_43, Labelle_36, Larva_26,
 LastJedi_18, LeBron_20, Leston_25, LilDirt_24, MAckerman_20, Madruga_35,
 Mao1_26, Marietta_45, Mask_27, Meyran_28, Miryou_25, MrMagoo_34,
 NadineRae_43, Nanosmite_34, NatB6_43, Neighly_26, NovumRegina_43,
 Nyceirae_30, OhShagHennessy_20, OkiRoe_25, Omnicron_26, PR_24,
 PYPDinur_20, Paola_25, Patience_37, Pemberton_46, Phishy_29, Phomeo_42,
 Phrann_20, Pimento_26, Pippy_18, Poochiewood_20, Psycho_26, Quby_20,
 Rando14_26, RavenCo17_25, Raymond7_20, Rey_34, Rose5_20, RoseMarie_31,
 SamScheppers_26, Sarma624_19, Sejanus_27, Sheng711_20, Silverleaf_20,
 SoSeph_25, Sprinklemunch_21, Sukkupi_45, SuperSonics_36, Taquito_26,
 Thyatira_25, Towmatter_35, Tracker_43, Turuncu_47, Tyson_20, UPIE_20,
 Velveteen_19, ViviJ_24, Wamburgexpress_20, Waterfoul_25, Wheezy_43,
 WhoseManz_45, Wyatt2_20, Xavia_21, Yndexa_45, Zaria_20, Zodiariah_21,

Summary by start number:

Start 1:

- Found in 2 of 184 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil_36 (DL), Towmatter_35 (DL),

Start 3:

- Found in 5 of 184 (2.7%) of genes in pham
- Manual Annotations of this start: 3 of 159
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Labelle_36 (U), Madruga_35 (U), Patience_37 (U),

Start 4:

- Found in 5 of 184 (2.7%) of genes in pham
- No Manual Annotations of this start.
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Demikore_37 (U), SuperSonics_36 (U),

Start 12:

- Found in 5 of 184 (2.7%) of genes in pham
- Manual Annotations of this start: 3 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amore2_32 (CS1), Austin_32 (CS1), GMA7_22 (CS1), GTE7_22 (CS1), HayZem_31 (CS1),

Start 13:

- Found in 1 of 184 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA3_19 (DF2),

Start 14:

- Found in 5 of 184 (2.7%) of genes in pham
- Manual Annotations of this start: 4 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyMoney_28 (DT), Ewald_29 (DT), Meyran_28 (DT), Nyceirae_30 (DT), Phishy_29 (DT),

Start 15:

- Found in 2 of 184 (1.1%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: GMA2_32 (DS),

Start 17:

- Found in 5 of 184 (2.7%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Atcoo_21 (P1), BronnyJr_21 (P1), Xavia_21 (P3),

Start 18:

- Found in 10 of 184 (5.4%) of genes in pham
- Manual Annotations of this start: 10 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigPhil_19 (F1), Cerasum_19 (F1), Clifton_18 (F1), Crumble_18 (F1), Jennelsea_18 (F1), Koella_18 (F1), LastJedi_18 (F1), Pippy_18 (F1), Sarma624_19 (F1), Velveteen_19 (F1),

Start 19:

- Found in 3 of 184 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phrann_20 (N), Raymond7_20 (N), RoseMarie_31 (M1),

Start 20:

- Found in 6 of 184 (3.3%) of genes in pham
- Manual Annotations of this start: 6 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aziz_34 (M2), Estes_35 (M2), GardenSalsa_34 (M2), GenevaB15_34 (M2), MrMagoo_34 (M2), Rey_34 (M2),

Start 23:

- Found in 13 of 184 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Nanosmite_34 (M3),

Start 24:

- Found in 1 of 184 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 100.0% of time when present

- Phage (with cluster) where this start called: JustASigh_21 (AH),

Start 28:

- Found in 1 of 184 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jumbo_24 (DF3),

Start 31:

- Found in 12 of 184 (6.5%) of genes in pham
- Manual Annotations of this start: 6 of 159
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Bromden_21 (L4), Chaser_20 (L4), ChutneyChips_20 (L4), Douge_20 (L4), Douzhi_20 (L4), DyoEdafos_21 (L4), Kropertea_20 (L4), PYPDinur_20 (L4), Quby_20 (L4), Sheng711_20 (L4),

Start 32:

- Found in 2 of 184 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sprinklemunch_21 (DW), Zodiariah_21 (DW),

Start 38:

- Found in 2 of 184 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DumpsterDude_22 (DW), Pimento_26 (DI),

Start 40:

- Found in 9 of 184 (4.9%) of genes in pham
- Manual Annotations of this start: 3 of 159
- Called 44.4% of time when present
- Phage (with cluster) where this start called: DanSyl44_29 (K4), Eponine_28 (K4), SamScheppers_26 (K4), Taquito_26 (K4),

Start 51:

- Found in 8 of 184 (4.3%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: BrainDrainer_21 (L4), FarmResident_20 (L4),

Start 53:

- Found in 5 of 184 (2.7%) of genes in pham
- Manual Annotations of this start: 3 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caterpie_28 (AD), JohnLord_29 (AD), Mao1_26 (AD), Mask_27 (AD), Sejanus_27 (AD),

Start 58:

- Found in 37 of 184 (20.1%) of genes in pham

- Manual Annotations of this start: 36 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Allegro_32 (B2), Arbiter_32 (B2), Ares_32 (B2), Bananafish_32 (B2), Blocker23_32 (B2), Boyle_32 (B2), Brownie5_32 (B2), Calamitous_32 (B2), Coffee_32 (B2), Eaglehorse_32 (B2), Faze9_32 (B2), FrenchFry_32 (B2), Glass_32 (B2), Godines_32 (B2), Hedgerow_32 (B2), Holeinone_32 (B2), ItsyBitsy1_32 (B2), Kaleb_32 (B2), Kheth_32 (B2), Kolhan_32 (B2), Lars_32 (B2), Lephleur_32 (B2), LilSmirk_32 (B2), LizLemon_32 (B2), MasterPo_32 (B2), Opia_32 (B2), Phantasmagoria_32 (B2), PrinceCharming_32 (B2), Qyrzula_30 (B2), Rhinoforte_32 (B2), Rosebush_32 (B2), Sabella_32 (B2), TA17A_33 (B2), Tinciduntolum_33 (B2), Tres_32 (B2), Vic9_00032 (B2), West99_32 (B2),

Start 59:

- Found in 4 of 184 (2.2%) of genes in pham
- Manual Annotations of this start: 4 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: D12_24 (W), GodPhather_25 (W), Jeon_24 (W), PR_24 (W),

Start 64:

- Found in 27 of 184 (14.7%) of genes in pham
- Manual Annotations of this start: 25 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47_25 (K5), AlleyCat_26 (K5), BananenDer11_25 (K5), Collard_25 (K5), Dadosky_26 (K5), DoubleChamp_25 (K5), Edugator_25 (K5), Feyre_25 (K5), Gengar_25 (K5), Guillsminger_25 (K5), Heftyboy_25 (K5), InvictusManeo_25 (K5), Kratio_24 (K5), Larva_26 (K5), Leston_25 (K5), LilDirt_24 (K5), Miryou_25 (K5), Neighly_26 (K3), OkiRoe_25 (K5), Omnicron_26 (K5), Paola_25 (K5), Psycho_26 (K5), Rando14_26 (K5), SoSeph_25 (K5), Thyatira_25 (K5), ViviJ_24 (K5), Waterfoul_25 (K5),

Start 66:

- Found in 25 of 184 (13.6%) of genes in pham
- Manual Annotations of this start: 24 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti_43 (CR2), BiPauneto_46 (CR4), Commandaria_45 (CR2), Dalilpop_48 (CR1), Emianna_43 (CR2), Foxboro_44 (CR2), GRU1_33 (CR1), GrootJr_45 (CR2), HubbaBubba_41 (CR4), IDyn_44 (CR4), Jifall16_42 (CR2), KidneyBean_43 (CR2), Kurt_43 (CR2), Marietta_45 (CR4), NadineRae_43 (CR4), NatB6_43 (CR2), NovumRegina_43 (CR2), Pemberton_46 (CR4), Phomeo_42 (CR2), Sukkupi_45 (CR4), Tracker_43 (CR2), Turuncu_47 (CR1), Wheezy_43 (CR2), WhoseManz_45 (CR4), Yndexa_45 (CR4),

Start 67:

- Found in 1 of 184 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RavenCo17_25 (CZ8),

Start 69:

- Found in 1 of 184 (0.5%) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: GTE8_32 (CR2),

Start 79:

- Found in 27 of 184 (14.7%) of genes in pham
- Manual Annotations of this start: 19 of 159
- Called 74.1% of time when present
- Phage (with cluster) where this start called: Acquire49_20 (L1), Appletree2_20 (L1), AvadaKedavra_20 (L1), Calm_20 (L1), CicholasNage_20 (L1), DirkDirk_20 (L1), Enceladus_20 (L1), Halena_20 (L1), JoeDirt_20 (L1), LeBron_20 (L1), MAckerman_20 (L1), OhShagHennessy_20 (L1), Poochiewood_20 (L1), Rose5_20 (L1), Silverleaf_20 (L1), Tyson_20 (L1), UPIE_20 (L1), Wamburggrxpress_20 (L1), Wyatt2_20 (L1), Zaria_20 (L1),

Summary by clusters:

There are 29 clusters represented in this pham: DL, M3, DI, K4, CZ8, K3, M1, K5, M2, DW, DT, DS, DF3, DF2, CS1, P3, P1, AD, AH, N, L4, U, W, L1, CR2, F1, CR1, CR4, B2,

Info for manual annotations of cluster AD:

- Start number 53 was manually annotated 3 times for cluster AD.

Info for manual annotations of cluster AH:

- Start number 24 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster B2:

- Start number 58 was manually annotated 36 times for cluster B2.

Info for manual annotations of cluster CR1:

- Start number 66 was manually annotated 2 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 66 was manually annotated 13 times for cluster CR2.

Info for manual annotations of cluster CR4:

- Start number 66 was manually annotated 9 times for cluster CR4.

Info for manual annotations of cluster CS1:

- Start number 12 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CZ8:

- Start number 67 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DF3:

- Start number 28 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DI:

- Start number 38 was manually annotated 1 time for cluster DI.

Info for manual annotations of cluster DL:

- Start number 1 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DT:

- Start number 14 was manually annotated 4 times for cluster DT.

Info for manual annotations of cluster DW:

- Start number 32 was manually annotated 1 time for cluster DW.
- Start number 38 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster F1:

- Start number 18 was manually annotated 10 times for cluster F1.

Info for manual annotations of cluster K4:

- Start number 40 was manually annotated 3 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 64 was manually annotated 25 times for cluster K5.

Info for manual annotations of cluster L1:

- Start number 79 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L4:

- Start number 31 was manually annotated 6 times for cluster L4.

Info for manual annotations of cluster M2:

- Start number 20 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 23 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster N:

- Start number 19 was manually annotated 2 times for cluster N.

Info for manual annotations of cluster P1:

- Start number 17 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster P3:

- Start number 17 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster U:

- Start number 3 was manually annotated 3 times for cluster U.

Info for manual annotations of cluster W:

- Start number 59 was manually annotated 4 times for cluster W.

Gene Information:

Gene: Acquire49_20 Start: 18997, Stop: 21678, Start Num: 79

Candidate Starts for Acquire49_20:

(Start: 79 @18997 has 19 MA's), (81, 19003), (130, 19180), (134, 19210), (150, 19273), (167, 19348), (176, 19402), (186, 19462), (191, 19468), (208, 19534), (222, 19597), (233, 19630), (235, 19633), (240, 19657), (246, 19687), (248, 19693), (258, 19741), (263, 19762), (265, 19777), (269, 19798), (275, 19837), (278, 19849), (280, 19867), (290, 19924), (296, 19942), (303, 19972), (306, 19996), (307, 19999), (317, 20044), (331, 20095), (337, 20113), (348, 20167), (364, 20239), (366, 20251), (369, 20260), (378, 20302), (384, 20332), (392, 20368), (396, 20386), (404, 20401), (406, 20407), (411, 20440), (445, 20569), (447, 20578), (466, 20659), (478, 20695), (479, 20701), (505, 20806), (509, 20815), (514, 20830), (519, 20848), (531, 20890), (554, 20986), (555, 20992), (569, 21046), (572, 21052), (574, 21064), (596, 21175), (601, 21205), (602, 21211), (635, 21307), (638, 21313), (647, 21337), (650, 21343), (651, 21349), (661, 21394), (664, 21403), (667, 21412), (680, 21451), (689, 21487), (690, 21496), (693, 21511), (711, 21607), (719, 21658), (720, 21664),

Gene: Agent47_25 Start: 21256, Stop: 23766, Start Num: 64

Candidate Starts for Agent47_25:

(Start: 64 @21256 has 25 MA's), (77, 21304), (82, 21316), (86, 21325), (142, 21535), (163, 21619), (197, 21772), (204, 21796), (211, 21826), (236, 21907), (237, 21916), (239, 21925), (244, 21952), (251, 21973), (256, 22006), (261, 22018), (265, 22045), (266, 22051), (273, 22096), (288, 22174), (307, 22252), (311, 22273), (323, 22318), (333, 22354), (341, 22390), (346, 22411), (352, 22441), (355, 22453), (386, 22573), (405, 22636), (414, 22660), (430, 22717), (445, 22774), (448, 22789), (452, 22810), (463, 22849), (503, 22990), (532, 23077), (546, 23143), (561, 23179), (570, 23212), (575, 23233), (582, 23269), (600, 23344), (601, 23347), (605, 23371), (619, 23404), (630, 23431), (640, 23452), (646, 23470), (663, 23524), (713, 23752),

Gene: Allegro_32 Start: 29960, Stop: 32680, Start Num: 58

Candidate Starts for Allegro_32:

(Start: 58 @29960 has 36 MA's), (74, 30014), (89, 30053), (102, 30098), (110, 30122), (111, 30125), (120, 30158), (143, 30266), (147, 30287), (148, 30290), (162, 30344), (173, 30404), (177, 30428), (184, 30464), (198, 30512), (204, 30533), (212, 30572), (222, 30611), (228, 30626), (241, 30680), (243, 30692), (251, 30716), (255, 30740), (260, 30752), (263, 30767), (265, 30782), (271, 30824), (275, 30842), (282, 30881), (287, 30905), (325, 31076), (345, 31154), (358, 31214), (366, 31250), (367, 31253), (384, 31331), (392, 31367), (399, 31391), (424, 31490), (435, 31529), (447, 31583), (478, 31700), (485, 31727), (499, 31790), (500, 31796), (505, 31811), (519, 31853), (541, 31940), (555, 31997), (562, 32015), (566, 32036), (567, 32045), (569, 32051), (572, 32057), (574, 32069), (594, 32174), (598, 32192), (603, 32225), (635, 32312), (647, 32342), (650, 32348), (664, 32408), (690, 32501), (693, 32516), (705, 32558), (721, 32672),

Gene: AlleyCat_26 Start: 21193, Stop: 23697, Start Num: 64

Candidate Starts for AlleyCat_26:

(Start: 64 @21193 has 25 MA's), (77, 21241), (82, 21253), (126, 21400), (142, 21469), (163, 21553), (197, 21706), (204, 21730), (210, 21757), (236, 21841), (237, 21850), (239, 21859), (244, 21886), (251, 21907), (256, 21940), (261, 21952), (265, 21979), (288, 22108), (307, 22186), (311, 22207), (323, 22252), (333, 22288), (336, 22300), (341, 22324), (352, 22375), (355, 22387), (375, 22465), (386, 22507), (405, 22570), (414, 22594), (445, 22708), (448, 22723), (452, 22744), (463, 22783), (503, 22924), (532, 23011), (535, 23020), (546, 23077), (561, 23113), (570, 23146), (575, 23167), (600, 23278), (601, 23281), (605, 23305), (614, 23329), (617, 23335), (619, 23338), (630, 23365), (640, 23386), (646, 23404), (663, 23455), (689, 23536), (713, 23683),

Gene: Amore2_32 Start: 33685, Stop: 36453, Start Num: 12

Candidate Starts for Amore2_32:

(Start: 12 @33685 has 3 MA's), (30, 33769), (Start: 40 @33826 has 3 MA's), (93, 34012), (129, 34126), (143, 34198), (173, 34339), (195, 34426), (273, 34738), (340, 34966), (354, 35032), (368, 35086), (396, 35215), (416, 35290), (420, 35302), (428, 35329), (442, 35380), (462, 35464), (513, 35632), (522, 35659), (557, 35803), (588, 35956), (603, 36010), (607, 36025), (613, 36043), (615, 36046),

(620, 36058), (641, 36115), (644, 36124), (657, 36166), (668, 36211), (673, 36226), (708, 36379),

Gene: Appletree2_20 Start: 18940, Stop: 21621, Start Num: 79

Candidate Starts for Appletree2_20:

(Start: 79 @18940 has 19 MA's), (81, 18946), (130, 19123), (134, 19153), (150, 19216), (167, 19291), (186, 19405), (191, 19411), (208, 19477), (222, 19540), (233, 19573), (235, 19576), (240, 19600), (244, 19624), (246, 19630), (248, 19636), (258, 19684), (263, 19705), (265, 19720), (269, 19741), (275, 19780), (278, 19792), (280, 19810), (296, 19885), (303, 19915), (306, 19939), (307, 19942), (317, 19987), (331, 20038), (337, 20056), (348, 20110), (364, 20182), (366, 20194), (369, 20203), (372, 20221), (378, 20245), (384, 20275), (392, 20311), (404, 20344), (406, 20350), (418, 20416), (437, 20482), (447, 20521), (466, 20602), (478, 20638), (479, 20644), (505, 20749), (509, 20758), (514, 20773), (519, 20791), (531, 20833), (554, 20929), (555, 20935), (569, 20989), (572, 20995), (574, 21007), (596, 21118), (601, 21148), (602, 21154), (635, 21250), (638, 21256), (647, 21280), (650, 21286), (651, 21292), (661, 21337), (664, 21346), (667, 21355), (680, 21394), (689, 21430), (690, 21439), (693, 21454), (711, 21550), (719, 21601), (720, 21607),

Gene: Arbiter_32 Start: 30049, Stop: 32769, Start Num: 58

Candidate Starts for Arbiter_32:

(Start: 58 @30049 has 36 MA's), (74, 30103), (89, 30142), (102, 30187), (110, 30211), (111, 30214), (120, 30247), (143, 30355), (147, 30376), (148, 30379), (162, 30433), (173, 30493), (177, 30517), (184, 30553), (198, 30601), (204, 30622), (212, 30661), (222, 30700), (228, 30715), (241, 30769), (243, 30781), (251, 30805), (255, 30829), (260, 30841), (263, 30856), (265, 30871), (271, 30913), (275, 30931), (282, 30970), (287, 30994), (325, 31165), (345, 31243), (358, 31303), (366, 31339), (367, 31342), (384, 31420), (392, 31456), (399, 31480), (407, 31501), (447, 31672), (448, 31678), (478, 31789), (485, 31816), (499, 31879), (500, 31885), (505, 31900), (519, 31942), (541, 32029), (546, 32056), (555, 32086), (562, 32104), (566, 32125), (567, 32134), (569, 32140), (572, 32146), (574, 32158), (594, 32263), (598, 32281), (603, 32314), (635, 32401), (647, 32431), (650, 32437), (664, 32497), (690, 32590), (693, 32605), (705, 32647), (721, 32761),

Gene: Ares_32 Start: 29971, Stop: 32691, Start Num: 58

Candidate Starts for Ares_32:

(Start: 58 @29971 has 36 MA's), (74, 30025), (89, 30064), (102, 30109), (110, 30133), (111, 30136), (120, 30169), (143, 30277), (147, 30298), (148, 30301), (162, 30355), (173, 30415), (177, 30439), (184, 30475), (198, 30523), (204, 30544), (212, 30583), (222, 30622), (228, 30637), (241, 30691), (243, 30703), (251, 30727), (255, 30751), (260, 30763), (263, 30778), (265, 30793), (271, 30835), (275, 30853), (282, 30892), (287, 30916), (325, 31087), (345, 31165), (358, 31225), (366, 31261), (367, 31264), (384, 31342), (392, 31378), (399, 31402), (407, 31423), (447, 31594), (448, 31600), (478, 31711), (485, 31738), (499, 31801), (500, 31807), (505, 31822), (519, 31864), (541, 31951), (546, 31978), (555, 32008), (562, 32026), (566, 32047), (567, 32056), (569, 32062), (572, 32068), (574, 32080), (594, 32185), (598, 32203), (603, 32236), (635, 32323), (647, 32353), (650, 32359), (664, 32419), (690, 32512), (693, 32527), (705, 32569), (721, 32683),

Gene: Arti_43 Start: 32595, Stop: 34961, Start Num: 66

Candidate Starts for Arti_43:

(Start: 66 @32595 has 24 MA's), (112, 32724), (188, 33063), (256, 33303), (265, 33342), (267, 33357), (283, 33441), (284, 33447), (326, 33585), (350, 33678), (357, 33714), (419, 33906), (428, 33930), (442, 33960), (444, 33969), (456, 34014), (512, 34182), (533, 34245), (543, 34290), (548, 34314), (588, 34479), (589, 34482), (597, 34515), (607, 34557), (626, 34608), (647, 34659), (650, 34665), (655, 34686), (658, 34695), (660, 34710), (676, 34755), (714, 34941),

Gene: Atcoo_21 Start: 18913, Stop: 21759, Start Num: 17

Candidate Starts for Atcoo_21:

(Start: 17 @18913 has 2 MA's), (57, 19066), (137, 19339), (141, 19351), (145, 19372), (151, 19396), (168, 19471), (180, 19543), (189, 19573), (200, 19609), (213, 19672), (219, 19687), (230, 19714), (232, 19720), (251, 19795), (254, 19819), (256, 19825), (261, 19837), (267, 19879), (269, 19885), (285, 19972), (288, 19993), (294, 20017), (308, 20083), (313, 20104), (318, 20122), (325, 20155), (332, 20179), (334, 20182), (345, 20233), (358, 20293), (366, 20329), (367, 20332), (369, 20338), (384, 20410), (392, 20446), (399, 20470), (424, 20569), (435, 20608), (447, 20662), (464, 20737), (478, 20779), (485, 20806), (499, 20869), (500, 20875), (505, 20890), (519, 20932), (530, 20971), (541, 21019), (546, 21046), (547, 21049), (555, 21076), (562, 21094), (567, 21124), (572, 21136), (574, 21148), (594, 21253), (598, 21271), (603, 21304), (607, 21319), (647, 21421), (650, 21427), (664, 21487), (669, 21505), (690, 21580), (693, 21595), (694, 21601), (705, 21637), (721, 21751),

Gene: Austin_32 Start: 33685, Stop: 36453, Start Num: 12

Candidate Starts for Austin_32:

(Start: 12 @33685 has 3 MA's), (30, 33769), (Start: 40 @33826 has 3 MA's), (93, 34012), (129, 34126), (143, 34198), (173, 34339), (195, 34426), (273, 34738), (368, 35086), (396, 35215), (416, 35290), (420, 35302), (428, 35329), (442, 35380), (462, 35464), (513, 35632), (522, 35659), (557, 35803), (588, 35956), (603, 36010), (607, 36025), (613, 36043), (615, 36046), (620, 36058), (641, 36115), (644, 36124), (657, 36166), (668, 36211), (673, 36226), (708, 36379),

Gene: AvadaKedavra_20 Start: 19007, Stop: 21688, Start Num: 79

Candidate Starts for AvadaKedavra_20:

(Start: 79 @19007 has 19 MA's), (81, 19013), (130, 19190), (134, 19220), (150, 19283), (167, 19358), (186, 19472), (191, 19478), (208, 19544), (222, 19607), (233, 19640), (235, 19643), (240, 19667), (244, 19691), (246, 19697), (248, 19703), (258, 19751), (263, 19772), (265, 19787), (269, 19808), (275, 19847), (278, 19859), (280, 19877), (290, 19934), (296, 19952), (303, 19982), (306, 20006), (307, 20009), (317, 20054), (331, 20105), (337, 20123), (348, 20177), (364, 20249), (366, 20261), (369, 20270), (378, 20312), (384, 20342), (392, 20378), (396, 20396), (404, 20411), (406, 20417), (411, 20450), (445, 20579), (447, 20588), (466, 20669), (478, 20705), (479, 20711), (505, 20816), (509, 20825), (514, 20840), (519, 20858), (531, 20900), (554, 20996), (555, 21002), (569, 21056), (572, 21062), (574, 21074), (596, 21185), (601, 21215), (602, 21221), (635, 21317), (638, 21323), (647, 21347), (650, 21353), (651, 21359), (661, 21404), (664, 21413), (667, 21422), (680, 21461), (689, 21497), (690, 21506), (693, 21521), (711, 21617), (719, 21668), (720, 21674),

Gene: Aziz_34 Start: 25208, Stop: 27889, Start Num: 20

Candidate Starts for Aziz_34:

(Start: 20 @25208 has 6 MA's), (45, 25325), (70, 25409), (71, 25412), (78, 25445), (97, 25502), (139, 25676), (140, 25679), (156, 25742), (169, 25808), (170, 25817), (181, 25880), (206, 25961), (207, 25967), (208, 25970), (218, 26003), (233, 26045), (235, 26048), (251, 26111), (254, 26132), (256, 26138), (257, 26141), (264, 26174), (271, 26216), (272, 26225), (286, 26294), (287, 26297), (291, 26318), (301, 26351), (318, 26429), (324, 26459), (329, 26471), (339, 26504), (345, 26534), (355, 26582), (362, 26606), (387, 26699), (392, 26723), (397, 26741), (400, 26747), (449, 26903), (469, 26969), (480, 27005), (509, 27110), (523, 27152), (526, 27161), (544, 27245), (558, 27281), (559, 27284), (642, 27578), (652, 27608), (690, 27731), (705, 27785),

Gene: BabyMoney_28 Start: 23384, Stop: 25951, Start Num: 14

Candidate Starts for BabyMoney_28:

(Start: 14 @23384 has 4 MA's), (41, 23498), (43, 23507), (136, 23810), (171, 23984), (188, 24059), (207, 24119), (213, 24155), (226, 24206), (237, 24245), (251, 24281), (254, 24302), (256, 24308), (263, 24332), (265, 24347), (268, 24365), (271, 24389), (304, 24500), (305, 24503), (309, 24524), (338, 24617), (342, 24638), (417, 24872), (423, 24887), (449, 24968), (450, 24971), (451, 24980), (456, 25001), (460, 25022), (490, 25112), (494, 25124), (507, 25169), (512, 25181), (553, 25331), (572, 25397), (588, 25478), (596, 25502), (600, 25520), (601, 25523), (603, 25538), (610, 25559), (639, 25634), (688, 25769), (707, 25865), (710, 25886), (717, 25937),

Gene: Bananafish_32 Start: 29969, Stop: 32689, Start Num: 58

Candidate Starts for Bananafish_32:

(Start: 58 @29969 has 36 MA's), (74, 30023), (89, 30062), (102, 30107), (110, 30131), (111, 30134), (120, 30167), (143, 30275), (147, 30296), (148, 30299), (162, 30353), (173, 30413), (177, 30437), (184, 30473), (198, 30521), (204, 30542), (212, 30581), (222, 30620), (228, 30635), (241, 30689), (243, 30701), (251, 30725), (255, 30749), (260, 30761), (263, 30776), (265, 30791), (271, 30833), (275, 30851), (282, 30890), (287, 30914), (325, 31085), (345, 31163), (358, 31223), (366, 31259), (367, 31262), (384, 31340), (392, 31376), (399, 31400), (424, 31499), (435, 31538), (447, 31592), (478, 31709), (485, 31736), (499, 31799), (500, 31805), (505, 31820), (519, 31862), (541, 31949), (546, 31976), (555, 32006), (562, 32024), (566, 32045), (567, 32054), (569, 32060), (572, 32066), (574, 32078), (594, 32183), (598, 32201), (603, 32234), (635, 32321), (647, 32351), (650, 32357), (664, 32417), (690, 32510), (693, 32525), (705, 32567), (721, 32681),

Gene: BananenDer11_25 Start: 21217, Stop: 23727, Start Num: 64

Candidate Starts for BananenDer11_25:

(Start: 64 @21217 has 25 MA's), (77, 21265), (82, 21277), (86, 21286), (142, 21496), (163, 21580), (197, 21733), (204, 21757), (211, 21787), (236, 21868), (237, 21877), (239, 21886), (244, 21913), (251, 21934), (256, 21967), (261, 21979), (265, 22006), (266, 22012), (273, 22057), (288, 22135), (307, 22213), (311, 22234), (323, 22279), (333, 22315), (341, 22351), (346, 22372), (352, 22402), (355, 22414), (386, 22534), (405, 22597), (414, 22621), (430, 22678), (445, 22735), (448, 22750), (452, 22771), (463, 22810), (503, 22951), (532, 23038), (546, 23104), (561, 23140), (570, 23173), (575, 23194), (582, 23230), (600, 23305), (601, 23308), (605, 23332), (619, 23365), (630, 23392), (640, 23413), (646, 23431), (663, 23485), (713, 23713),

Gene: BiPauneto_46 Start: 32342, Stop: 34717, Start Num: 66

Candidate Starts for BiPauneto_46:

(Start: 66 @32342 has 24 MA's), (188, 32810), (207, 32870), (214, 32912), (216, 32921), (228, 32963), (251, 33023), (256, 33050), (276, 33152), (283, 33188), (284, 33194), (334, 33356), (348, 33419), (357, 33461), (373, 33521), (396, 33593), (406, 33614), (431, 33683), (442, 33707), (444, 33716), (486, 33860), (489, 33866), (501, 33908), (531, 33989), (548, 34064), (606, 34304), (607, 34307), (639, 34385), (648, 34409), (658, 34442), (685, 34523), (692, 34574), (695, 34583),

Gene: BigPhil_19 Start: 17226, Stop: 20090, Start Num: 18

Candidate Starts for BigPhil_19:

(Start: 18 @17226 has 10 MA's), (Start: 23 @17247 has 1 MA's), (29, 17268), (36, 17307), (52, 17376), (56, 17385), (57, 17388), (76, 17439), (107, 17529), (122, 17580), (137, 17664), (141, 17676), (145, 17697), (154, 17730), (182, 17877), (200, 17940), (209, 17979), (213, 18003), (219, 18018), (222, 18027), (232, 18054), (234, 18060), (251, 18129), (254, 18150), (256, 18156), (264, 18192), (267, 18210), (285, 18303), (288, 18324), (294, 18348), (308, 18414), (313, 18435), (318, 18453), (325, 18486), (334, 18513), (345, 18564), (352, 18600), (358, 18624), (366, 18660), (369, 18669), (371, 18684), (378, 18711), (384, 18741), (392, 18777), (399, 18801), (424, 18900), (435, 18939), (443, 18978), (448, 18999), (478, 19110), (485, 19137), (492, 19167), (498, 19188), (499, 19200), (500, 19206), (519, 19263), (555, 19407), (562, 19425), (572, 19467), (574, 19479), (603, 19635), (635, 19722), (647, 19752), (650, 19758), (664, 19818), (669, 19836), (690, 19911), (694, 19932), (705, 19968), (721, 20082),

Gene: Blocker23_32 Start: 30090, Stop: 32807, Start Num: 58

Candidate Starts for Blocker23_32:

(Start: 58 @30090 has 36 MA's), (74, 30144), (89, 30183), (102, 30228), (110, 30252), (111, 30255), (120, 30288), (143, 30396), (147, 30417), (148, 30420), (162, 30474), (173, 30534), (177, 30558), (184, 30594), (198, 30642), (204, 30663), (212, 30702), (222, 30741), (228, 30756), (241, 30810), (243, 30822), (251, 30846), (255, 30870), (260, 30882), (263, 30897), (265, 30912), (271, 30954),

(275, 30972), (282, 31011), (287, 31035), (325, 31206), (345, 31284), (358, 31344), (366, 31380), (367, 31383), (384, 31461), (392, 31497), (399, 31521), (407, 31542), (447, 31710), (448, 31716), (478, 31827), (485, 31854), (499, 31917), (500, 31923), (505, 31938), (519, 31980), (541, 32067), (546, 32094), (555, 32124), (562, 32142), (566, 32163), (567, 32172), (569, 32178), (572, 32184), (574, 32196), (594, 32301), (598, 32319), (603, 32352), (635, 32439), (647, 32469), (650, 32475), (664, 32535), (690, 32628), (693, 32643), (705, 32685), (721, 32799),

Gene: Boyle_32 Start: 30088, Stop: 32808, Start Num: 58

Candidate Starts for Boyle_32:

(Start: 58 @30088 has 36 MA's), (74, 30142), (89, 30181), (102, 30226), (110, 30250), (111, 30253), (120, 30286), (143, 30394), (147, 30415), (148, 30418), (162, 30472), (173, 30532), (177, 30556), (184, 30592), (198, 30640), (204, 30661), (212, 30700), (222, 30739), (228, 30754), (241, 30808), (243, 30820), (251, 30844), (255, 30868), (260, 30880), (263, 30895), (265, 30910), (271, 30952), (275, 30970), (282, 31009), (287, 31033), (325, 31204), (345, 31282), (358, 31342), (366, 31378), (367, 31381), (384, 31459), (392, 31495), (399, 31519), (407, 31540), (447, 31711), (448, 31717), (478, 31828), (485, 31855), (499, 31918), (500, 31924), (505, 31939), (519, 31981), (541, 32068), (546, 32095), (555, 32125), (562, 32143), (566, 32164), (567, 32173), (569, 32179), (572, 32185), (574, 32197), (594, 32302), (598, 32320), (603, 32353), (635, 32440), (647, 32470), (650, 32476), (664, 32536), (690, 32629), (693, 32644), (705, 32686), (721, 32800),

Gene: BrainDrainer_21 Start: 19057, Stop: 21555, Start Num: 51

Candidate Starts for BrainDrainer_21:

(Start: 31 @18952 has 6 MA's), (33, 18958), (36, 18979), (51, 19057), (91, 19177), (104, 19216), (154, 19417), (156, 19423), (164, 19456), (165, 19459), (206, 19639), (208, 19648), (211, 19663), (218, 19681), (229, 19711), (245, 19765), (251, 19783), (257, 19813), (274, 19903), (276, 19912), (277, 19915), (285, 19957), (295, 20005), (316, 20098), (322, 20119), (329, 20143), (336, 20167), (347, 20212), (355, 20254), (385, 20365), (389, 20386), (392, 20395), (396, 20413), (426, 20485), (452, 20587), (471, 20638), (473, 20644), (480, 20671), (484, 20686), (487, 20698), (498, 20737), (512, 20785), (519, 20809), (552, 20935), (556, 20944), (577, 21025), (634, 21226), (645, 21253), (651, 21268), (679, 21352), (705, 21451),

Gene: Bromden_21 Start: 19281, Stop: 21821, Start Num: 31

Candidate Starts for Bromden_21:

(Start: 31 @19281 has 6 MA's), (33, 19287), (36, 19308), (46, 19362), (61, 19410), (75, 19458), (90, 19494), (104, 19545), (132, 19665), (147, 19719), (174, 19854), (189, 19914), (218, 20025), (231, 20061), (250, 20139), (251, 20142), (261, 20181), (271, 20247), (272, 20256), (273, 20259), (274, 20262), (287, 20328), (314, 20442), (358, 20613), (394, 20754), (395, 20757), (396, 20760), (407, 20787), (410, 20796), (412, 20799), (429, 20856), (436, 20871), (438, 20880), (449, 20925), (452, 20943), (457, 20970), (464, 20985), (470, 20997), (472, 21003), (480, 21033), (483, 21042), (486, 21057), (489, 21063), (496, 21093), (497, 21096), (502, 21126), (516, 21156), (517, 21159), (571, 21348), (576, 21375), (584, 21420), (601, 21486), (609, 21519), (611, 21525), (628, 21564), (643, 21603), (653, 21630), (691, 21762),

Gene: BronnyJr_21 Start: 18884, Stop: 21730, Start Num: 17

Candidate Starts for BronnyJr_21:

(Start: 17 @18884 has 2 MA's), (57, 19037), (137, 19310), (141, 19322), (151, 19367), (168, 19442), (180, 19514), (189, 19544), (200, 19580), (213, 19643), (219, 19658), (230, 19685), (232, 19691), (251, 19766), (254, 19790), (256, 19796), (261, 19808), (267, 19850), (269, 19856), (285, 19943), (288, 19964), (294, 19988), (308, 20054), (313, 20075), (318, 20093), (325, 20126), (332, 20150), (334, 20153), (345, 20204), (352, 20240), (358, 20264), (366, 20300), (369, 20309), (371, 20324), (378, 20351), (384, 20381), (392, 20417), (399, 20441), (424, 20540), (435, 20579), (447, 20633), (448, 20639), (478, 20750), (485, 20777), (499, 20840), (500, 20846), (505, 20861), (519, 20903), (541, 20990), (555, 21047), (562, 21065), (572, 21107), (574, 21119), (598, 21242), (603, 21275),

(635, 21362), (647, 21392), (650, 21398), (664, 21458), (667, 21467), (669, 21476), (690, 21551),
(694, 21572), (705, 21608), (721, 21722),

Gene: Brownie5_32 Start: 30094, Stop: 32814, Start Num: 58

Candidate Starts for Brownie5_32:

(Start: 58 @30094 has 36 MA's), (74, 30148), (89, 30187), (102, 30232), (110, 30256), (111, 30259),
(120, 30292), (143, 30400), (147, 30421), (148, 30424), (162, 30478), (173, 30538), (177, 30562),
(184, 30598), (198, 30646), (204, 30667), (212, 30706), (222, 30745), (228, 30760), (241, 30814),
(243, 30826), (251, 30850), (255, 30874), (260, 30886), (263, 30901), (265, 30916), (271, 30958),
(275, 30976), (282, 31015), (287, 31039), (325, 31210), (345, 31288), (358, 31348), (366, 31384),
(367, 31387), (384, 31465), (392, 31501), (399, 31525), (407, 31546), (447, 31717), (448, 31723),
(478, 31834), (485, 31861), (499, 31924), (500, 31930), (505, 31945), (519, 31987), (541, 32074),
(546, 32101), (555, 32131), (562, 32149), (566, 32170), (567, 32179), (569, 32185), (572, 32191),
(574, 32203), (594, 32308), (598, 32326), (603, 32359), (635, 32446), (647, 32476), (650, 32482),
(664, 32542), (690, 32635), (693, 32650), (705, 32692), (721, 32806),

Gene: Calamitous_32 Start: 29974, Stop: 32694, Start Num: 58

Candidate Starts for Calamitous_32:

(Start: 58 @29974 has 36 MA's), (74, 30028), (89, 30067), (102, 30112), (110, 30136), (111, 30139),
(120, 30172), (143, 30280), (147, 30301), (148, 30304), (162, 30358), (173, 30418), (177, 30442),
(184, 30478), (198, 30526), (204, 30547), (212, 30586), (222, 30625), (228, 30640), (241, 30694),
(243, 30706), (251, 30730), (255, 30754), (260, 30766), (263, 30781), (265, 30796), (271, 30838),
(275, 30856), (282, 30895), (287, 30919), (325, 31090), (345, 31168), (358, 31228), (366, 31264),
(367, 31267), (384, 31345), (392, 31381), (399, 31405), (407, 31426), (447, 31597), (478, 31714),
(485, 31741), (499, 31804), (500, 31810), (505, 31825), (519, 31867), (541, 31954), (555, 32011),
(562, 32029), (566, 32050), (567, 32059), (569, 32065), (572, 32071), (574, 32083), (594, 32188),
(598, 32206), (603, 32239), (635, 32326), (647, 32356), (650, 32362), (664, 32422), (690, 32515),
(693, 32530), (705, 32572), (721, 32686),

Gene: Calm_20 Start: 19011, Stop: 21692, Start Num: 79

Candidate Starts for Calm_20:

(Start: 79 @19011 has 19 MA's), (81, 19017), (130, 19194), (134, 19224), (150, 19287), (167, 19362),
(176, 19416), (186, 19476), (191, 19482), (208, 19548), (222, 19611), (233, 19644), (235, 19647),
(240, 19671), (244, 19695), (246, 19701), (248, 19707), (258, 19755), (263, 19776), (265, 19791),
(269, 19812), (275, 19851), (278, 19863), (280, 19881), (296, 19956), (303, 19986), (306, 20010),
(307, 20013), (317, 20058), (331, 20109), (337, 20127), (348, 20181), (364, 20253), (366, 20265),
(369, 20274), (378, 20316), (384, 20346), (392, 20382), (396, 20400), (404, 20415), (406, 20421),
(411, 20454), (445, 20583), (447, 20592), (466, 20673), (478, 20709), (479, 20715), (505, 20820),
(509, 20829), (514, 20844), (519, 20862), (531, 20904), (554, 21000), (555, 21006), (569, 21060),
(572, 21066), (574, 21078), (596, 21189), (601, 21219), (602, 21225), (635, 21321), (638, 21327),
(647, 21351), (650, 21357), (651, 21363), (661, 21408), (664, 21417), (667, 21426), (680, 21465),
(689, 21501), (690, 21510), (693, 21525), (711, 21621), (719, 21672), (720, 21678),

Gene: Caterpie_28 Start: 26686, Stop: 29439, Start Num: 53

Candidate Starts for Caterpie_28:

(34, 26593), (Start: 53 @26686 has 3 MA's), (80, 26764), (94, 26800), (102, 26827), (110, 26851),
(125, 26920), (139, 26989), (145, 27013), (148, 27025), (198, 27259), (202, 27271), (205, 27286),
(212, 27322), (223, 27364), (239, 27418), (251, 27466), (255, 27496), (256, 27499), (277, 27607),
(287, 27661), (289, 27676), (293, 27691), (308, 27760), (313, 27781), (318, 27799), (325, 27832),
(332, 27856), (334, 27859), (345, 27910), (352, 27946), (358, 27970), (366, 28006), (369, 28015),
(371, 28030), (378, 28057), (384, 28087), (392, 28123), (396, 28141), (397, 28144), (402, 28153),
(432, 28279), (443, 28327), (478, 28459), (485, 28486), (498, 28537), (499, 28549), (500, 28555),
(519, 28612), (530, 28651), (541, 28699), (546, 28726), (555, 28756), (562, 28774), (567, 28804),

(572, 28816), (574, 28828), (595, 28936), (598, 28951), (603, 28984), (610, 29005), (635, 29071), (647, 29101), (650, 29107), (664, 29167), (667, 29176), (669, 29185), (690, 29260), (693, 29275), (694, 29281), (705, 29317), (721, 29431),

Gene: Cerasum_19 Start: 17226, Stop: 20090, Start Num: 18

Candidate Starts for Cerasum_19:

(Start: 18 @17226 has 10 MA's), (Start: 23 @17247 has 1 MA's), (29, 17268), (36, 17307), (52, 17376), (56, 17385), (57, 17388), (76, 17439), (107, 17529), (122, 17580), (137, 17664), (141, 17676), (145, 17697), (154, 17730), (182, 17877), (200, 17940), (209, 17979), (213, 18003), (219, 18018), (222, 18027), (232, 18054), (234, 18060), (251, 18129), (254, 18150), (256, 18156), (264, 18192), (267, 18210), (285, 18303), (288, 18324), (294, 18348), (308, 18414), (313, 18435), (318, 18453), (325, 18486), (334, 18513), (345, 18564), (352, 18600), (358, 18624), (366, 18660), (369, 18669), (371, 18684), (378, 18711), (384, 18741), (392, 18777), (399, 18801), (424, 18900), (435, 18939), (443, 18978), (448, 18999), (478, 19110), (485, 19137), (492, 19167), (498, 19188), (499, 19200), (500, 19206), (519, 19263), (555, 19407), (562, 19425), (572, 19467), (574, 19479), (603, 19635), (635, 19722), (647, 19752), (650, 19758), (664, 19818), (669, 19836), (690, 19911), (694, 19932), (705, 19968), (721, 20082),

Gene: Chaser_20 Start: 18881, Stop: 21517, Start Num: 31

Candidate Starts for Chaser_20:

(Start: 31 @18881 has 6 MA's), (33, 18887), (36, 18908), (51, 18986), (91, 19106), (104, 19145), (144, 19307), (154, 19346), (156, 19352), (163, 19382), (169, 19418), (174, 19454), (179, 19481), (183, 19487), (189, 19514), (204, 19565), (212, 19604), (218, 19625), (231, 19661), (250, 19739), (251, 19742), (253, 19754), (256, 19769), (261, 19781), (274, 19862), (282, 19904), (295, 19964), (322, 20078), (329, 20102), (349, 20180), (350, 20183), (355, 20213), (361, 20234), (362, 20237), (381, 20300), (395, 20369), (438, 20483), (450, 20537), (452, 20552), (454, 20558), (479, 20636), (488, 20666), (498, 20699), (508, 20738), (512, 20747), (524, 20789), (526, 20792), (550, 20897), (557, 20909), (562, 20921), (563, 20924), (577, 20987), (579, 20996), (634, 21188), (647, 21218), (666, 21275), (679, 21314), (686, 21326), (690, 21359), (713, 21500),

Gene: ChutneyChips_20 Start: 18874, Stop: 21414, Start Num: 31

Candidate Starts for ChutneyChips_20:

(Start: 31 @18874 has 6 MA's), (33, 18880), (36, 18901), (46, 18955), (61, 19003), (104, 19138), (132, 19258), (152, 19330), (154, 19339), (169, 19411), (174, 19447), (189, 19507), (211, 19588), (217, 19612), (218, 19618), (231, 19654), (259, 19768), (272, 19849), (273, 19852), (274, 19855), (279, 19876), (287, 19921), (297, 19957), (301, 19969), (323, 20068), (327, 20086), (383, 20287), (387, 20311), (395, 20350), (404, 20368), (407, 20380), (412, 20392), (429, 20449), (436, 20464), (438, 20473), (457, 20563), (464, 20578), (470, 20590), (472, 20596), (480, 20626), (486, 20650), (489, 20656), (496, 20686), (502, 20719), (517, 20752), (551, 20890), (563, 20911), (571, 20941), (576, 20968), (591, 21040), (601, 21079), (609, 21112), (628, 21157), (636, 21175), (643, 21196), (653, 21223), (678, 21298), (687, 21313), (691, 21355),

Gene: CicholasNage_20 Start: 18999, Stop: 21680, Start Num: 79

Candidate Starts for CicholasNage_20:

(Start: 79 @18999 has 19 MA's), (81, 19005), (130, 19182), (134, 19212), (150, 19275), (167, 19350), (176, 19404), (186, 19464), (191, 19470), (208, 19536), (222, 19599), (233, 19632), (235, 19635), (240, 19659), (244, 19683), (246, 19689), (248, 19695), (258, 19743), (263, 19764), (265, 19779), (269, 19800), (275, 19839), (278, 19851), (280, 19869), (296, 19944), (303, 19974), (306, 19998), (307, 20001), (317, 20046), (331, 20097), (337, 20115), (348, 20169), (364, 20241), (366, 20253), (369, 20262), (378, 20304), (384, 20334), (392, 20370), (396, 20388), (404, 20403), (406, 20409), (411, 20442), (445, 20571), (447, 20580), (466, 20661), (478, 20697), (479, 20703), (505, 20808), (509, 20817), (514, 20832), (519, 20850), (531, 20892), (554, 20988), (555, 20994), (569, 21048), (572, 21054), (574, 21066), (596, 21177), (601, 21207), (602, 21213), (610, 21243), (635, 21309),

(638, 21315), (647, 21339), (650, 21345), (651, 21351), (661, 21396), (664, 21405), (667, 21414),
(680, 21453), (689, 21489), (690, 21498), (693, 21513), (711, 21609), (719, 21660), (720, 21666),

Gene: Clifton_18 Start: 17353, Stop: 20217, Start Num: 18

Candidate Starts for Clifton_18:

(16, 17341), (Start: 18 @17353 has 10 MA's), (Start: 23 @17374 has 1 MA's), (29, 17395), (36, 17434),
(52, 17503), (56, 17512), (57, 17515), (76, 17566), (107, 17656), (120, 17701), (137, 17791), (139,
17800), (141, 17803), (145, 17824), (148, 17836), (158, 17869), (182, 18004), (196, 18052), (200,
18067), (206, 18088), (213, 18130), (219, 18145), (222, 18154), (232, 18181), (234, 18187), (243,
18232), (247, 18241), (251, 18256), (253, 18268), (254, 18277), (256, 18283), (260, 18292), (264,
18319), (267, 18337), (285, 18430), (288, 18451), (294, 18475), (308, 18541), (313, 18562), (318,
18580), (325, 18613), (332, 18637), (334, 18640), (345, 18691), (352, 18727), (358, 18751), (366,
18787), (369, 18796), (371, 18811), (378, 18838), (384, 18868), (392, 18904), (399, 18928), (424,
19027), (435, 19066), (447, 19120), (478, 19237), (485, 19264), (499, 19327), (500, 19333), (505,
19348), (519, 19390), (541, 19477), (546, 19504), (555, 19534), (562, 19552), (567, 19582), (572,
19594), (574, 19606), (594, 19711), (598, 19729), (603, 19762), (635, 19849), (647, 19879), (650,
19885), (664, 19945), (667, 19954), (669, 19963), (690, 20038), (694, 20059), (705, 20095), (721,
20209),

Gene: Coffee_32 Start: 30077, Stop: 32797, Start Num: 58

Candidate Starts for Coffee_32:

(Start: 58 @30077 has 36 MA's), (74, 30131), (89, 30170), (102, 30215), (110, 30239), (111, 30242),
(120, 30275), (143, 30383), (147, 30404), (148, 30407), (162, 30461), (173, 30521), (177, 30545),
(184, 30581), (198, 30629), (204, 30650), (212, 30689), (222, 30728), (228, 30743), (241, 30797),
(243, 30809), (251, 30833), (255, 30857), (260, 30869), (263, 30884), (265, 30899), (271, 30941),
(275, 30959), (282, 30998), (287, 31022), (325, 31193), (345, 31271), (358, 31331), (366, 31367),
(367, 31370), (384, 31448), (392, 31484), (399, 31508), (407, 31529), (447, 31700), (448, 31706),
(478, 31817), (485, 31844), (499, 31907), (500, 31913), (505, 31928), (519, 31970), (541, 32057),
(546, 32084), (555, 32114), (562, 32132), (566, 32153), (567, 32162), (569, 32168), (572, 32174),
(574, 32186), (594, 32291), (598, 32309), (603, 32342), (635, 32429), (647, 32459), (650, 32465),
(664, 32525), (690, 32618), (693, 32633), (705, 32675), (721, 32789),

Gene: Collard_25 Start: 21217, Stop: 23727, Start Num: 64

Candidate Starts for Collard_25:

(Start: 64 @21217 has 25 MA's), (77, 21265), (82, 21277), (86, 21286), (142, 21496), (163, 21580),
(197, 21733), (204, 21757), (211, 21787), (236, 21868), (237, 21877), (239, 21886), (244, 21913),
(251, 21934), (256, 21967), (261, 21979), (265, 22006), (266, 22012), (273, 22057), (288, 22135),
(307, 22213), (311, 22234), (323, 22279), (333, 22315), (341, 22351), (346, 22372), (352, 22402),
(355, 22414), (386, 22534), (405, 22597), (414, 22621), (430, 22678), (445, 22735), (448, 22750),
(452, 22771), (463, 22810), (503, 22951), (532, 23038), (546, 23104), (561, 23140), (570, 23173),
(575, 23194), (582, 23230), (600, 23305), (601, 23308), (605, 23332), (619, 23365), (630, 23392),
(640, 23413), (646, 23431), (663, 23485), (713, 23713),

Gene: Commandaria_45 Start: 33923, Stop: 36313, Start Num: 66

Candidate Starts for Commandaria_45:

(Start: 66 @33923 has 24 MA's), (112, 34052), (138, 34157), (188, 34391), (190, 34394), (210, 34466),
(216, 34502), (221, 34523), (256, 34631), (265, 34670), (267, 34685), (269, 34691), (283, 34769),
(284, 34775), (357, 35042), (396, 35174), (413, 35216), (442, 35288), (444, 35297), (489, 35447),
(490, 35453), (531, 35570), (548, 35645), (553, 35654), (637, 35957), (650, 35990), (658, 36020),
(702, 36167),

Gene: Crumble_18 Start: 17400, Stop: 20264, Start Num: 18

Candidate Starts for Crumble_18:

(16, 17388), (Start: 18 @17400 has 10 MA's), (Start: 23 @17421 has 1 MA's), (29, 17442), (36, 17481), (52, 17550), (56, 17559), (57, 17562), (76, 17613), (107, 17703), (120, 17748), (137, 17838), (139, 17847), (141, 17850), (145, 17871), (148, 17883), (158, 17916), (182, 18051), (196, 18099), (200, 18114), (206, 18135), (213, 18177), (219, 18192), (222, 18201), (232, 18228), (234, 18234), (243, 18279), (247, 18288), (251, 18303), (253, 18315), (254, 18324), (256, 18330), (260, 18339), (264, 18366), (267, 18384), (285, 18477), (288, 18498), (294, 18522), (308, 18588), (313, 18609), (318, 18627), (325, 18660), (332, 18684), (334, 18687), (345, 18738), (352, 18774), (358, 18798), (366, 18834), (369, 18843), (371, 18858), (378, 18885), (384, 18915), (392, 18951), (399, 18975), (424, 19074), (435, 19113), (447, 19167), (478, 19284), (485, 19311), (499, 19374), (500, 19380), (505, 19395), (519, 19437), (541, 19524), (546, 19551), (555, 19581), (562, 19599), (567, 19629), (572, 19641), (574, 19653), (594, 19758), (598, 19776), (603, 19809), (635, 19896), (647, 19926), (650, 19932), (664, 19992), (667, 20001), (669, 20010), (690, 20085), (694, 20106), (705, 20142), (721, 20256),

Gene: D12_24 Start: 27231, Stop: 29945, Start Num: 59

Candidate Starts for D12_24:

(Start: 59 @27231 has 4 MA's), (Start: 79 @27300 has 19 MA's), (94, 27333), (100, 27354), (118, 27411), (123, 27441), (127, 27459), (147, 27552), (148, 27555), (162, 27609), (163, 27615), (177, 27693), (184, 27729), (189, 27750), (204, 27798), (212, 27837), (228, 27891), (241, 27945), (243, 27957), (251, 27981), (255, 28005), (256, 28008), (265, 28047), (271, 28089), (287, 28170), (289, 28185), (299, 28215), (318, 28308), (325, 28341), (340, 28398), (343, 28410), (345, 28419), (358, 28479), (366, 28515), (367, 28518), (384, 28596), (392, 28632), (402, 28662), (407, 28677), (432, 28785), (443, 28833), (445, 28839), (447, 28848), (448, 28854), (478, 28965), (485, 28992), (499, 29055), (500, 29061), (505, 29076), (519, 29118), (555, 29262), (562, 29280), (572, 29322), (574, 29334), (594, 29439), (598, 29457), (603, 29490), (635, 29577), (647, 29607), (650, 29613), (654, 29634), (664, 29673), (669, 29691), (690, 29766), (694, 29787), (705, 29823), (721, 29937),

Gene: Dadosky_26 Start: 21194, Stop: 23698, Start Num: 64

Candidate Starts for Dadosky_26:

(Start: 64 @21194 has 25 MA's), (77, 21242), (82, 21254), (126, 21401), (142, 21470), (163, 21554), (197, 21707), (204, 21731), (210, 21758), (236, 21842), (237, 21851), (239, 21860), (244, 21887), (251, 21908), (256, 21941), (261, 21953), (265, 21980), (288, 22109), (307, 22187), (311, 22208), (323, 22253), (333, 22289), (336, 22301), (341, 22325), (352, 22376), (355, 22388), (375, 22466), (386, 22508), (405, 22571), (414, 22595), (445, 22709), (448, 22724), (452, 22745), (463, 22784), (503, 22925), (532, 23012), (535, 23021), (546, 23078), (561, 23114), (570, 23147), (575, 23168), (600, 23279), (601, 23282), (605, 23306), (614, 23330), (617, 23336), (619, 23339), (630, 23366), (640, 23387), (646, 23405), (663, 23456), (689, 23537), (713, 23684),

Gene: Dalilpop_48 Start: 34884, Stop: 37253, Start Num: 66

Candidate Starts for Dalilpop_48:

(Start: 66 @34884 has 24 MA's), (127, 35067), (188, 35352), (190, 35355), (207, 35412), (216, 35463), (221, 35484), (226, 35499), (254, 35586), (256, 35592), (265, 35631), (357, 36003), (396, 36135), (428, 36219), (442, 36249), (456, 36303), (543, 36579), (548, 36603), (553, 36612), (588, 36768), (607, 36837), (650, 36945), (655, 36966), (658, 36975), (660, 36990), (716, 37239),

Gene: DanSyl44_29 Start: 22286, Stop: 25030, Start Num: 40

Candidate Starts for DanSyl44_29:

(Start: 40 @22286 has 3 MA's), (72, 22376), (Start: 79 @22397 has 19 MA's), (92, 22421), (95, 22427), (100, 22445), (120, 22511), (137, 22601), (139, 22610), (141, 22613), (145, 22634), (148, 22646), (158, 22679), (182, 22814), (196, 22862), (200, 22877), (206, 22898), (209, 22916), (213, 22940), (219, 22955), (222, 22964), (232, 22991), (234, 22997), (243, 23042), (251, 23066), (253, 23078), (254, 23087), (256, 23093), (260, 23102), (264, 23129), (267, 23147), (285, 23240), (287, 23252), (288, 23261), (308, 23351), (313, 23372), (318, 23390), (325, 23423), (332, 23447), (334, 23450),

(345, 23501), (352, 23537), (358, 23561), (366, 23597), (369, 23606), (371, 23621), (378, 23648), (384, 23678), (392, 23714), (396, 23732), (397, 23735), (402, 23744), (432, 23870), (439, 23894), (447, 23933), (478, 24050), (485, 24077), (499, 24140), (500, 24146), (505, 24161), (519, 24203), (541, 24290), (555, 24347), (562, 24365), (567, 24395), (572, 24407), (574, 24419), (595, 24527), (598, 24542), (603, 24575), (610, 24596), (635, 24662), (647, 24692), (650, 24698), (664, 24758), (669, 24776), (690, 24851), (694, 24872), (705, 24908), (721, 25022),

Gene: Daredevil_36 Start: 31430, Stop: 34606, Start Num: 1

Candidate Starts for Daredevil_36:

(Start: 1 @31430 has 2 MA's), (2, 31484), (5, 31592), (9, 31655), (10, 31724), (11, 31727), (87, 32066), (114, 32156), (142, 32297), (149, 32327), (157, 32357), (203, 32573), (251, 32768), (256, 32795), (274, 32891), (320, 33107), (359, 33269), (377, 33341), (380, 33350), (446, 33572), (465, 33653), (475, 33683), (492, 33752), (508, 33809), (534, 33893), (536, 33905), (599, 34151), (615, 34208), (625, 34235), (628, 34244), (633, 34256), (664, 34358),

Gene: Demikore_37 Start: 28751, Stop: 32041, Start Num: 4

Candidate Starts for Demikore_37:

(Start: 3 @28739 has 3 MA's), (4, 28751), (6, 28880), (7, 28889), (8, 28901), (25, 29075), (42, 29159), (85, 29312), (97, 29354), (109, 29387), (117, 29414), (120, 29426), (163, 29642), (172, 29699), (175, 29720), (199, 29825), (208, 29861), (242, 29999), (249, 30026), (256, 30068), (263, 30092), (284, 30218), (287, 30233), (292, 30260), (298, 30281), (301, 30296), (302, 30305), (366, 30611), (367, 30614), (371, 30635), (384, 30692), (392, 30728), (399, 30752), (402, 30758), (407, 30773), (429, 30875), (432, 30881), (447, 30944), (464, 31019), (478, 31061), (519, 31214), (555, 31358), (562, 31376), (567, 31406), (572, 31418), (574, 31430), (613, 31619), (650, 31709), (664, 31769), (667, 31778), (693, 31877), (719, 32024), (720, 32030), (721, 32033),

Gene: DirkDirk_20 Start: 18980, Stop: 21661, Start Num: 79

Candidate Starts for DirkDirk_20:

(Start: 79 @18980 has 19 MA's), (81, 18986), (130, 19163), (134, 19193), (150, 19256), (167, 19331), (186, 19445), (191, 19451), (208, 19517), (222, 19580), (233, 19613), (235, 19616), (240, 19640), (244, 19664), (246, 19670), (248, 19676), (258, 19724), (263, 19745), (265, 19760), (269, 19781), (275, 19820), (278, 19832), (280, 19850), (296, 19925), (303, 19955), (306, 19979), (307, 19982), (317, 20027), (331, 20078), (337, 20096), (348, 20150), (364, 20222), (366, 20234), (369, 20243), (372, 20261), (378, 20285), (384, 20315), (392, 20351), (404, 20384), (406, 20390), (418, 20456), (437, 20522), (447, 20561), (466, 20642), (478, 20678), (479, 20684), (505, 20789), (509, 20798), (514, 20813), (519, 20831), (531, 20873), (554, 20969), (555, 20975), (569, 21029), (572, 21035), (574, 21047), (596, 21158), (601, 21188), (602, 21194), (635, 21290), (638, 21296), (647, 21320), (650, 21326), (651, 21332), (661, 21377), (664, 21386), (667, 21395), (680, 21434), (689, 21470), (690, 21479), (693, 21494), (711, 21590), (719, 21641), (720, 21647),

Gene: DoubleChamp_25 Start: 21217, Stop: 23727, Start Num: 64

Candidate Starts for DoubleChamp_25:

(Start: 64 @21217 has 25 MA's), (77, 21265), (82, 21277), (86, 21286), (142, 21496), (163, 21580), (197, 21733), (204, 21757), (211, 21787), (236, 21868), (237, 21877), (239, 21886), (244, 21913), (251, 21934), (256, 21967), (261, 21979), (265, 22006), (266, 22012), (273, 22057), (288, 22135), (307, 22213), (311, 22234), (323, 22279), (333, 22315), (341, 22351), (346, 22372), (352, 22402), (355, 22414), (386, 22534), (405, 22597), (414, 22621), (430, 22678), (445, 22735), (448, 22750), (452, 22771), (463, 22810), (503, 22951), (532, 23038), (546, 23104), (561, 23140), (570, 23173), (575, 23194), (582, 23230), (600, 23305), (601, 23308), (605, 23332), (619, 23365), (630, 23392), (640, 23413), (646, 23431), (663, 23485), (713, 23713),

Gene: Douge_20 Start: 18822, Stop: 21458, Start Num: 31

Candidate Starts for Douge_20:

(Start: 31 @18822 has 6 MA's), (33, 18828), (36, 18849), (51, 18927), (91, 19047), (104, 19086), (144, 19248), (154, 19287), (156, 19293), (163, 19323), (169, 19359), (174, 19395), (189, 19455), (204, 19506), (207, 19518), (218, 19566), (231, 19602), (250, 19680), (259, 19716), (261, 19722), (270, 19785), (274, 19803), (277, 19815), (285, 19857), (295, 19905), (322, 20019), (329, 20043), (349, 20121), (355, 20154), (361, 20175), (362, 20178), (381, 20241), (392, 20295), (395, 20310), (438, 20424), (450, 20478), (452, 20493), (454, 20499), (484, 20595), (488, 20607), (495, 20628), (498, 20640), (499, 20652), (508, 20679), (512, 20688), (523, 20724), (524, 20730), (526, 20733), (550, 20838), (557, 20850), (562, 20862), (563, 20865), (577, 20928), (579, 20937), (585, 20973), (631, 21123), (634, 21129), (647, 21159), (652, 21177), (671, 21234), (679, 21255), (681, 21258), (686, 21267), (690, 21300), (705, 21354),

Gene: Douzhi_20 Start: 18813, Stop: 21416, Start Num: 31

Candidate Starts for Douzhi_20:

(Start: 31 @18813 has 6 MA's), (33, 18819), (36, 18840), (51, 18918), (91, 19038), (104, 19077), (154, 19278), (156, 19284), (164, 19317), (165, 19320), (206, 19500), (208, 19509), (211, 19524), (218, 19542), (229, 19572), (245, 19626), (251, 19644), (257, 19674), (274, 19764), (276, 19773), (277, 19776), (285, 19818), (295, 19866), (316, 19959), (322, 19980), (329, 20004), (336, 20028), (347, 20073), (355, 20115), (385, 20226), (389, 20247), (392, 20256), (396, 20274), (426, 20346), (452, 20448), (471, 20499), (473, 20505), (480, 20532), (484, 20547), (487, 20559), (498, 20598), (512, 20646), (519, 20670), (552, 20796), (556, 20805), (577, 20886), (634, 21087), (645, 21114), (651, 21129), (679, 21213), (705, 21312),

Gene: DumpsterDude_22 Start: 19471, Stop: 21993, Start Num: 38

Candidate Starts for DumpsterDude_22:

(Start: 38 @19471 has 2 MA's), (54, 19531), (113, 19705), (128, 19774), (136, 19813), (137, 19816), (171, 19987), (207, 20122), (213, 20158), (226, 20209), (237, 20248), (251, 20284), (256, 20311), (263, 20335), (265, 20350), (268, 20368), (305, 20506), (309, 20527), (310, 20536), (338, 20620), (342, 20641), (344, 20650), (346, 20659), (357, 20710), (358, 20716), (367, 20752), (423, 20917), (449, 20998), (490, 21142), (494, 21154), (512, 21211), (531, 21277), (542, 21325), (553, 21361), (557, 21376), (601, 21553), (689, 21814), (705, 21877), (709, 21910), (719, 21982),

Gene: DyoEdafos_21 Start: 19029, Stop: 21665, Start Num: 31

Candidate Starts for DyoEdafos_21:

(Start: 31 @19029 has 6 MA's), (33, 19035), (36, 19056), (75, 19206), (104, 19293), (121, 19347), (144, 19455), (154, 19494), (169, 19566), (174, 19602), (179, 19629), (183, 19635), (189, 19662), (204, 19713), (218, 19773), (231, 19809), (250, 19887), (251, 19890), (253, 19902), (261, 19929), (274, 20010), (282, 20052), (295, 20112), (322, 20226), (329, 20250), (349, 20328), (350, 20331), (355, 20361), (362, 20385), (381, 20448), (395, 20517), (425, 20589), (438, 20631), (450, 20685), (452, 20700), (454, 20706), (479, 20784), (488, 20814), (498, 20847), (508, 20886), (512, 20895), (524, 20937), (526, 20940), (550, 21045), (557, 21057), (562, 21069), (563, 21072), (577, 21135), (579, 21144), (634, 21336), (647, 21366), (666, 21423), (679, 21462), (686, 21474), (690, 21507), (713, 21648),

Gene: Eaglehorse_32 Start: 30001, Stop: 32721, Start Num: 58

Candidate Starts for Eaglehorse_32:

(Start: 58 @30001 has 36 MA's), (74, 30055), (89, 30094), (102, 30139), (110, 30163), (111, 30166), (120, 30199), (143, 30307), (147, 30328), (148, 30331), (162, 30385), (173, 30445), (177, 30469), (184, 30505), (198, 30553), (204, 30574), (212, 30613), (222, 30652), (228, 30667), (241, 30721), (243, 30733), (251, 30757), (255, 30781), (260, 30793), (263, 30808), (265, 30823), (271, 30865), (275, 30883), (282, 30922), (287, 30946), (325, 31117), (345, 31195), (358, 31255), (366, 31291), (367, 31294), (384, 31372), (392, 31408), (399, 31432), (407, 31453), (447, 31624), (478, 31741), (485, 31768), (499, 31831), (500, 31837), (505, 31852), (519, 31894), (541, 31981), (546, 32008), (555, 32038), (562, 32056), (566, 32077), (567, 32086), (569, 32092), (572, 32098), (574, 32110),

(594, 32215), (598, 32233), (603, 32266), (635, 32353), (647, 32383), (650, 32389), (664, 32449),
(690, 32542), (693, 32557), (705, 32599), (721, 32713),

Gene: Edugator_25 Start: 21193, Stop: 23697, Start Num: 64

Candidate Starts for Edugator_25:

(Start: 64 @21193 has 25 MA's), (77, 21241), (82, 21253), (126, 21400), (142, 21469), (163, 21553),
(197, 21706), (204, 21730), (210, 21757), (236, 21841), (237, 21850), (239, 21859), (244, 21886),
(251, 21907), (256, 21940), (261, 21952), (265, 21979), (288, 22108), (307, 22186), (311, 22207),
(323, 22252), (333, 22288), (336, 22300), (341, 22324), (352, 22375), (355, 22387), (375, 22465),
(386, 22507), (405, 22570), (414, 22594), (445, 22708), (448, 22723), (452, 22744), (463, 22783),
(503, 22924), (532, 23011), (535, 23020), (546, 23077), (561, 23113), (570, 23146), (575, 23167),
(600, 23278), (601, 23281), (605, 23305), (614, 23329), (617, 23335), (619, 23338), (630, 23365),
(640, 23386), (646, 23404), (663, 23455), (689, 23536), (713, 23683),

Gene: Emianna_43 Start: 33608, Stop: 35974, Start Num: 66

Candidate Starts for Emianna_43:

(Start: 66 @33608 has 24 MA's), (80, 33650), (112, 33737), (188, 34076), (256, 34316), (265, 34355),
(267, 34370), (283, 34454), (284, 34460), (326, 34598), (350, 34691), (357, 34727), (419, 34919),
(428, 34943), (442, 34973), (444, 34982), (456, 35027), (512, 35195), (533, 35258), (543, 35303),
(548, 35327), (588, 35492), (589, 35495), (597, 35528), (607, 35570), (626, 35621), (647, 35672),
(650, 35678), (655, 35699), (658, 35708), (660, 35723), (676, 35768), (714, 35954),

Gene: Enceladus_20 Start: 18981, Stop: 21662, Start Num: 79

Candidate Starts for Enceladus_20:

(Start: 79 @18981 has 19 MA's), (81, 18987), (130, 19164), (134, 19194), (150, 19257), (167, 19332),
(186, 19446), (191, 19452), (208, 19518), (222, 19581), (233, 19614), (235, 19617), (240, 19641),
(244, 19665), (246, 19671), (248, 19677), (258, 19725), (263, 19746), (265, 19761), (269, 19782),
(275, 19821), (278, 19833), (280, 19851), (296, 19926), (303, 19956), (306, 19980), (307, 19983),
(317, 20028), (331, 20079), (337, 20097), (348, 20151), (364, 20223), (366, 20235), (369, 20244),
(372, 20262), (378, 20286), (384, 20316), (392, 20352), (404, 20385), (406, 20391), (418, 20457),
(437, 20523), (447, 20562), (466, 20643), (478, 20679), (479, 20685), (505, 20790), (509, 20799),
(514, 20814), (519, 20832), (531, 20874), (554, 20970), (555, 20976), (569, 21030), (572, 21036),
(574, 21048), (596, 21159), (601, 21189), (602, 21195), (635, 21291), (638, 21297), (647, 21321),
(650, 21327), (651, 21333), (661, 21378), (664, 21387), (667, 21396), (680, 21435), (689, 21471),
(690, 21480), (693, 21495), (711, 21591), (719, 21642), (720, 21648),

Gene: Eponine_28 Start: 22173, Stop: 24917, Start Num: 40

Candidate Starts for Eponine_28:

(37, 22164), (Start: 40 @22173 has 3 MA's), (72, 22263), (92, 22308), (100, 22332), (137, 22488),
(141, 22500), (145, 22521), (158, 22566), (182, 22701), (196, 22749), (200, 22764), (206, 22785),
(209, 22803), (213, 22827), (219, 22842), (222, 22851), (232, 22878), (234, 22884), (243, 22929),
(251, 22953), (253, 22965), (254, 22974), (256, 22980), (260, 22989), (264, 23016), (267, 23034),
(285, 23127), (287, 23139), (288, 23148), (308, 23238), (313, 23259), (318, 23277), (325, 23310),
(334, 23337), (345, 23388), (352, 23424), (358, 23448), (366, 23484), (369, 23493), (371, 23508),
(378, 23535), (384, 23565), (392, 23601), (396, 23619), (397, 23622), (402, 23631), (439, 23781),
(447, 23820), (478, 23937), (485, 23964), (499, 24027), (500, 24033), (505, 24048), (519, 24090),
(541, 24177), (546, 24204), (555, 24234), (562, 24252), (567, 24282), (572, 24294), (574, 24306),
(595, 24414), (598, 24429), (603, 24462), (610, 24483), (635, 24549), (647, 24579), (650, 24585),
(664, 24645), (669, 24663), (690, 24738), (694, 24759), (705, 24795), (721, 24909),

Gene: Estes_35 Start: 25339, Stop: 28020, Start Num: 20

Candidate Starts for Estes_35:

(Start: 20 @25339 has 6 MA's), (45, 25456), (63, 25522), (70, 25540), (71, 25543), (78, 25576), (97, 25633), (139, 25807), (140, 25810), (156, 25873), (169, 25939), (170, 25948), (181, 26011), (206, 26092), (207, 26098), (208, 26101), (218, 26134), (235, 26179), (254, 26263), (256, 26269), (257, 26272), (264, 26305), (271, 26347), (272, 26356), (274, 26362), (286, 26425), (287, 26428), (291, 26449), (301, 26482), (311, 26539), (318, 26560), (324, 26590), (329, 26602), (339, 26635), (345, 26665), (356, 26716), (362, 26737), (387, 26830), (392, 26854), (397, 26872), (400, 26878), (449, 27034), (469, 27100), (479, 27133), (480, 27136), (505, 27232), (509, 27241), (526, 27292), (529, 27310), (544, 27376), (558, 27412), (559, 27415), (642, 27709), (652, 27739), (675, 27808), (690, 27862), (705, 27916),

Gene: Ewald_29 Start: 24069, Stop: 26642, Start Num: 14

Candidate Starts for Ewald_29:

(Start: 14 @24069 has 4 MA's), (41, 24183), (43, 24192), (136, 24495), (144, 24537), (171, 24669), (207, 24804), (213, 24840), (226, 24891), (237, 24930), (251, 24966), (256, 24993), (263, 25017), (265, 25032), (271, 25074), (304, 25185), (305, 25188), (309, 25209), (310, 25218), (338, 25302), (344, 25332), (346, 25341), (357, 25392), (358, 25398), (367, 25434), (417, 25551), (423, 25566), (449, 25647), (460, 25701), (485, 25773), (490, 25791), (494, 25803), (498, 25818), (512, 25860), (518, 25878), (531, 25926), (544, 25986), (553, 26010), (572, 26076), (601, 26202), (639, 26313), (689, 26463), (705, 26526), (709, 26559), (719, 26631),

Gene: FarmResident_20 Start: 18971, Stop: 21502, Start Num: 51

Candidate Starts for FarmResident_20:

(Start: 31 @18866 has 6 MA's), (33, 18872), (36, 18893), (51, 18971), (91, 19091), (104, 19130), (144, 19292), (154, 19331), (156, 19337), (163, 19367), (169, 19403), (174, 19439), (189, 19499), (204, 19550), (207, 19562), (218, 19610), (231, 19646), (250, 19724), (259, 19760), (261, 19766), (270, 19829), (274, 19847), (277, 19859), (285, 19901), (295, 19949), (322, 20063), (329, 20087), (349, 20165), (355, 20198), (361, 20219), (362, 20222), (381, 20285), (392, 20339), (395, 20354), (438, 20468), (450, 20522), (452, 20537), (454, 20543), (484, 20639), (488, 20651), (495, 20672), (498, 20684), (499, 20696), (508, 20723), (512, 20732), (523, 20768), (524, 20774), (526, 20777), (550, 20882), (557, 20894), (562, 20906), (563, 20909), (577, 20972), (579, 20981), (585, 21017), (631, 21167), (634, 21173), (647, 21203), (652, 21221), (671, 21278), (679, 21299), (681, 21302), (686, 21311), (690, 21344), (705, 21398),

Gene: Faze9_32 Start: 30097, Stop: 32817, Start Num: 58

Candidate Starts for Faze9_32:

(Start: 58 @30097 has 36 MA's), (74, 30151), (89, 30190), (102, 30235), (110, 30259), (111, 30262), (120, 30295), (143, 30403), (147, 30424), (148, 30427), (162, 30481), (173, 30541), (177, 30565), (184, 30601), (198, 30649), (204, 30670), (212, 30709), (222, 30748), (228, 30763), (241, 30817), (243, 30829), (251, 30853), (255, 30877), (260, 30889), (263, 30904), (265, 30919), (271, 30961), (275, 30979), (282, 31018), (287, 31042), (325, 31213), (345, 31291), (358, 31351), (366, 31387), (367, 31390), (384, 31468), (392, 31504), (399, 31528), (407, 31549), (447, 31720), (448, 31726), (478, 31837), (485, 31864), (499, 31927), (500, 31933), (505, 31948), (519, 31990), (541, 32077), (546, 32104), (555, 32134), (562, 32152), (566, 32173), (567, 32182), (569, 32188), (572, 32194), (574, 32206), (594, 32311), (598, 32329), (603, 32362), (635, 32449), (647, 32479), (650, 32485), (664, 32545), (690, 32638), (693, 32653), (705, 32695), (721, 32809),

Gene: Feyre_25 Start: 21078, Stop: 23576, Start Num: 64

Candidate Starts for Feyre_25:

(Start: 64 @21078 has 25 MA's), (82, 21138), (86, 21147), (126, 21288), (142, 21357), (163, 21441), (197, 21594), (204, 21618), (210, 21645), (220, 21687), (231, 21714), (235, 21726), (236, 21729), (237, 21738), (239, 21747), (244, 21774), (252, 21807), (256, 21828), (265, 21867), (273, 21918), (288, 21996), (307, 22074), (311, 22095), (333, 22176), (341, 22212), (346, 22233), (352, 22263), (355, 22275), (393, 22434), (415, 22494), (420, 22503), (425, 22518), (430, 22539), (448, 22611),

(451, 22626), (459, 22656), (461, 22659), (472, 22683), (477, 22698), (484, 22725), (497, 22773), (501, 22803), (504, 22806), (510, 22818), (515, 22830), (532, 22887), (537, 22908), (540, 22920), (549, 22968), (561, 22995), (580, 23073), (581, 23076), (597, 23151), (601, 23163), (612, 23205), (614, 23208), (622, 23220), (690, 23421), (696, 23445), (701, 23454), (703, 23469), (713, 23562), (715, 23565),

Gene: Foxboro_44 Start: 34114, Stop: 36480, Start Num: 66

Candidate Starts for Foxboro_44:

(Start: 66 @34114 has 24 MA's), (112, 34243), (188, 34582), (256, 34822), (265, 34861), (267, 34876), (283, 34960), (284, 34966), (326, 35104), (350, 35197), (357, 35233), (419, 35425), (428, 35449), (442, 35479), (444, 35488), (456, 35533), (512, 35701), (533, 35764), (543, 35809), (548, 35833), (588, 35998), (589, 36001), (597, 36034), (607, 36076), (626, 36127), (647, 36178), (650, 36184), (655, 36205), (658, 36214), (660, 36229), (676, 36274), (714, 36460),

Gene: FrenchFry_32 Start: 30091, Stop: 32811, Start Num: 58

Candidate Starts for FrenchFry_32:

(Start: 58 @30091 has 36 MA's), (74, 30145), (89, 30184), (102, 30229), (110, 30253), (111, 30256), (120, 30289), (143, 30397), (147, 30418), (148, 30421), (162, 30475), (173, 30535), (177, 30559), (184, 30595), (198, 30643), (204, 30664), (212, 30703), (222, 30742), (228, 30757), (241, 30811), (243, 30823), (251, 30847), (255, 30871), (260, 30883), (263, 30898), (265, 30913), (271, 30955), (275, 30973), (282, 31012), (287, 31036), (325, 31207), (345, 31285), (358, 31345), (366, 31381), (367, 31384), (384, 31462), (392, 31498), (399, 31522), (407, 31543), (447, 31714), (448, 31720), (478, 31831), (485, 31858), (499, 31921), (500, 31927), (505, 31942), (519, 31984), (541, 32071), (546, 32098), (555, 32128), (562, 32146), (566, 32167), (567, 32176), (569, 32182), (572, 32188), (574, 32200), (594, 32305), (598, 32323), (603, 32356), (635, 32443), (647, 32473), (650, 32479), (664, 32539), (690, 32632), (693, 32647), (705, 32689), (721, 32803),

Gene: GMA2_32 Start: 33886, Stop: 36579, Start Num: 15

Candidate Starts for GMA2_32:

(15, 33886), (44, 34003), (83, 34135), (90, 34150), (103, 34198), (185, 34552), (193, 34567), (225, 34699), (262, 34819), (266, 34840), (276, 34897), (279, 34909), (300, 35002), (312, 35071), (320, 35104), (357, 35257), (402, 35407), (486, 35677), (490, 35689), (511, 35767), (520, 35800), (525, 35815), (527, 35827), (528, 35830), (590, 36097), (604, 36157), (615, 36187), (635, 36238), (650, 36271), (651, 36277), (657, 36304), (695, 36442), (709, 36502), (718, 36568),

Gene: GMA3_19 Start: 28749, Stop: 31493, Start Num: 13

Candidate Starts for GMA3_19:

(13, 28749), (60, 28968), (65, 28983), (111, 29127), (115, 29139), (124, 29184), (160, 29328), (162, 29343), (166, 29373), (201, 29514), (238, 29661), (279, 29826), (280, 29835), (287, 29871), (321, 30024), (334, 30069), (340, 30099), (353, 30162), (390, 30294), (402, 30324), (440, 30426), (458, 30498), (465, 30519), (475, 30549), (482, 30576), (486, 30594), (520, 30714), (604, 31071), (635, 31152), (650, 31185), (684, 31299), (695, 31356), (709, 31416), (718, 31482),

Gene: GMA7_22 Start: 27899, Stop: 30667, Start Num: 12

Candidate Starts for GMA7_22:

(Start: 12 @27899 has 3 MA's), (30, 27983), (Start: 40 @28040 has 3 MA's), (93, 28226), (129, 28340), (143, 28412), (173, 28553), (195, 28640), (273, 28952), (368, 29300), (396, 29429), (416, 29504), (420, 29516), (428, 29543), (442, 29594), (462, 29678), (513, 29846), (522, 29873), (557, 30017), (588, 30170), (603, 30224), (607, 30239), (613, 30257), (615, 30260), (620, 30272), (641, 30329), (644, 30338), (657, 30380), (668, 30425), (673, 30440), (708, 30593),

Gene: GRU1_33 Start: 25851, Stop: 28217, Start Num: 66

Candidate Starts for GRU1_33:

(Start: 66 @25851 has 24 MA's), (91, 25920), (188, 26319), (190, 26322), (207, 26379), (213, 26415), (216, 26430), (221, 26451), (226, 26466), (251, 26532), (254, 26553), (256, 26559), (265, 26598), (348, 26928), (357, 26970), (396, 27102), (442, 27216), (456, 27270), (489, 27375), (543, 27546), (548, 27570), (553, 27579), (581, 27687), (607, 27807), (647, 27906), (650, 27912), (655, 27933), (658, 27942), (660, 27957), (716, 28203),

Gene: GTE7_22 Start: 27930, Stop: 30698, Start Num: 12

Candidate Starts for GTE7_22:

(Start: 12 @27930 has 3 MA's), (30, 28014), (Start: 40 @28071 has 3 MA's), (93, 28257), (129, 28371), (143, 28443), (173, 28584), (195, 28671), (273, 28983), (340, 29211), (368, 29331), (396, 29460), (416, 29535), (420, 29547), (428, 29574), (442, 29625), (462, 29709), (513, 29877), (522, 29904), (540, 29979), (541, 29988), (557, 30048), (588, 30201), (603, 30255), (607, 30270), (613, 30288), (615, 30291), (620, 30303), (641, 30360), (644, 30369), (657, 30411), (668, 30456), (673, 30471), (708, 30624),

Gene: GTE8_32 Start: 26866, Stop: 29232, Start Num: 69

Candidate Starts for GTE8_32:

(69, 26866), (144, 27130), (188, 27331), (190, 27334), (207, 27391), (215, 27439), (221, 27463), (265, 27610), (267, 27625), (284, 27715), (336, 27886), (428, 28198), (442, 28228), (456, 28282), (543, 28558), (548, 28582), (553, 28591), (581, 28699), (588, 28750), (607, 28819), (650, 28927), (658, 28957), (660, 28972), (682, 29032), (716, 29218),

Gene: GardenSalsa_34 Start: 25163, Stop: 27844, Start Num: 20

Candidate Starts for GardenSalsa_34:

(Start: 20 @25163 has 6 MA's), (45, 25280), (60, 25334), (71, 25367), (78, 25400), (97, 25457), (139, 25631), (140, 25634), (156, 25697), (169, 25763), (170, 25772), (181, 25835), (206, 25916), (207, 25922), (208, 25925), (218, 25958), (233, 26000), (235, 26003), (254, 26087), (256, 26093), (257, 26096), (264, 26129), (271, 26171), (272, 26180), (274, 26186), (286, 26249), (287, 26252), (291, 26273), (301, 26306), (318, 26384), (329, 26426), (339, 26459), (345, 26489), (356, 26540), (362, 26561), (387, 26654), (392, 26678), (397, 26696), (400, 26702), (449, 26858), (469, 26924), (479, 26957), (480, 26960), (505, 27056), (509, 27065), (512, 27071), (523, 27107), (526, 27116), (529, 27134), (538, 27167), (544, 27200), (558, 27236), (559, 27239), (642, 27533), (675, 27632), (690, 27686), (705, 27740),

Gene: GenevaB15_34 Start: 25208, Stop: 27889, Start Num: 20

Candidate Starts for GenevaB15_34:

(Start: 20 @25208 has 6 MA's), (45, 25325), (70, 25409), (71, 25412), (78, 25445), (97, 25502), (139, 25676), (140, 25679), (147, 25709), (156, 25742), (169, 25808), (170, 25817), (181, 25880), (206, 25961), (207, 25967), (208, 25970), (218, 26003), (233, 26045), (235, 26048), (251, 26111), (254, 26132), (256, 26138), (257, 26141), (264, 26174), (271, 26216), (272, 26225), (286, 26294), (287, 26297), (291, 26318), (301, 26351), (318, 26429), (324, 26459), (329, 26471), (339, 26504), (345, 26534), (355, 26582), (362, 26606), (387, 26699), (392, 26723), (397, 26741), (400, 26747), (449, 26903), (454, 26927), (469, 26969), (480, 27005), (509, 27110), (526, 27161), (544, 27245), (558, 27281), (559, 27284), (642, 27578), (652, 27608), (690, 27731), (705, 27785),

Gene: Gengar_25 Start: 21185, Stop: 23683, Start Num: 64

Candidate Starts for Gengar_25:

(Start: 64 @21185 has 25 MA's), (82, 21245), (86, 21254), (126, 21395), (142, 21464), (163, 21548), (197, 21701), (204, 21725), (210, 21752), (220, 21794), (231, 21821), (235, 21833), (236, 21836), (237, 21845), (239, 21854), (244, 21881), (252, 21914), (256, 21935), (265, 21974), (273, 22025), (288, 22103), (307, 22181), (311, 22202), (323, 22247), (333, 22283), (341, 22319), (346, 22340), (352, 22370), (355, 22382), (393, 22541), (415, 22601), (420, 22610), (425, 22625), (430, 22646), (448, 22718), (451, 22733), (459, 22763), (461, 22766), (472, 22790), (477, 22805), (484, 22832),

(497, 22880), (501, 22910), (504, 22913), (510, 22925), (515, 22937), (532, 22994), (537, 23015), (540, 23027), (549, 23075), (561, 23102), (580, 23180), (581, 23183), (597, 23258), (601, 23270), (612, 23312), (614, 23315), (622, 23327), (690, 23528), (696, 23552), (701, 23561), (703, 23576), (713, 23669), (715, 23672),

Gene: Glass_32 Start: 30091, Stop: 32811, Start Num: 58

Candidate Starts for Glass_32:

(Start: 58 @30091 has 36 MA's), (74, 30145), (89, 30184), (102, 30229), (110, 30253), (111, 30256), (120, 30289), (143, 30397), (147, 30418), (148, 30421), (162, 30475), (173, 30535), (177, 30559), (184, 30595), (198, 30643), (204, 30664), (212, 30703), (222, 30742), (228, 30757), (241, 30811), (243, 30823), (251, 30847), (255, 30871), (260, 30883), (263, 30898), (265, 30913), (271, 30955), (275, 30973), (282, 31012), (287, 31036), (325, 31207), (345, 31285), (358, 31345), (366, 31381), (367, 31384), (384, 31462), (392, 31498), (399, 31522), (424, 31621), (435, 31660), (447, 31714), (478, 31831), (485, 31858), (499, 31921), (500, 31927), (505, 31942), (519, 31984), (541, 32071), (555, 32128), (562, 32146), (566, 32167), (567, 32176), (569, 32182), (572, 32188), (574, 32200), (594, 32305), (598, 32323), (603, 32356), (635, 32443), (647, 32473), (650, 32479), (664, 32539), (690, 32632), (693, 32647), (705, 32689), (721, 32803),

Gene: GodPhather_25 Start: 27493, Stop: 30207, Start Num: 59

Candidate Starts for GodPhather_25:

(Start: 59 @27493 has 4 MA's), (Start: 79 @27562 has 19 MA's), (94, 27595), (100, 27616), (118, 27673), (123, 27703), (127, 27721), (147, 27814), (148, 27817), (162, 27871), (177, 27955), (184, 27991), (187, 28009), (189, 28012), (204, 28060), (212, 28099), (228, 28153), (241, 28207), (243, 28219), (251, 28243), (255, 28267), (260, 28279), (263, 28294), (271, 28351), (276, 28375), (287, 28432), (299, 28477), (313, 28552), (325, 28603), (340, 28660), (345, 28681), (358, 28741), (366, 28777), (367, 28780), (384, 28858), (392, 28894), (402, 28924), (407, 28939), (432, 29047), (443, 29095), (445, 29101), (447, 29110), (448, 29116), (464, 29185), (478, 29227), (485, 29254), (499, 29317), (500, 29323), (505, 29338), (509, 29347), (519, 29380), (546, 29494), (555, 29524), (562, 29542), (566, 29563), (567, 29572), (569, 29578), (572, 29584), (574, 29596), (594, 29701), (598, 29719), (603, 29752), (610, 29773), (635, 29839), (647, 29869), (650, 29875), (664, 29935), (669, 29953), (690, 30028), (694, 30049), (705, 30085), (721, 30199),

Gene: Godines_32 Start: 29971, Stop: 32691, Start Num: 58

Candidate Starts for Godines_32:

(Start: 58 @29971 has 36 MA's), (74, 30025), (89, 30064), (94, 30082), (102, 30109), (110, 30133), (111, 30136), (120, 30169), (143, 30277), (147, 30298), (148, 30301), (162, 30355), (173, 30415), (177, 30439), (184, 30475), (198, 30523), (204, 30544), (212, 30583), (222, 30622), (228, 30637), (241, 30691), (243, 30703), (251, 30727), (255, 30751), (260, 30763), (263, 30778), (265, 30793), (271, 30835), (275, 30853), (282, 30892), (287, 30916), (325, 31087), (345, 31165), (358, 31225), (366, 31261), (367, 31264), (384, 31342), (392, 31378), (399, 31402), (407, 31423), (447, 31594), (448, 31600), (478, 31711), (485, 31738), (499, 31801), (500, 31807), (505, 31822), (519, 31864), (541, 31951), (546, 31978), (555, 32008), (562, 32026), (566, 32047), (567, 32056), (569, 32062), (572, 32068), (574, 32080), (594, 32185), (598, 32203), (603, 32236), (635, 32323), (647, 32353), (650, 32359), (664, 32419), (690, 32512), (693, 32527), (705, 32569), (721, 32683),

Gene: GrootJr_45 Start: 32990, Stop: 35356, Start Num: 66

Candidate Starts for GrootJr_45:

(Start: 66 @32990 has 24 MA's), (112, 33119), (188, 33458), (190, 33461), (256, 33698), (265, 33737), (267, 33752), (283, 33836), (284, 33842), (326, 33980), (350, 34073), (357, 34109), (419, 34301), (428, 34325), (442, 34355), (444, 34364), (456, 34409), (512, 34577), (533, 34640), (543, 34685), (548, 34709), (588, 34874), (589, 34877), (597, 34910), (607, 34952), (626, 35003), (647, 35054), (650, 35060), (655, 35081), (658, 35090), (660, 35105), (676, 35150), (714, 35336),

Gene: Guillsminger_25 Start: 21160, Stop: 23658, Start Num: 64

Candidate Starts for Guillsminger_25:

(Start: 64 @21160 has 25 MA's), (82, 21220), (86, 21229), (126, 21370), (142, 21439), (163, 21523), (197, 21676), (204, 21700), (210, 21727), (220, 21769), (231, 21796), (235, 21808), (236, 21811), (237, 21820), (239, 21829), (244, 21856), (252, 21889), (256, 21910), (265, 21949), (273, 22000), (288, 22078), (307, 22156), (319, 22213), (323, 22222), (333, 22258), (340, 22291), (341, 22294), (346, 22315), (352, 22345), (355, 22357), (393, 22516), (415, 22576), (420, 22585), (425, 22600), (430, 22621), (448, 22693), (451, 22708), (459, 22738), (461, 22741), (472, 22765), (477, 22780), (484, 22807), (497, 22855), (501, 22885), (504, 22888), (510, 22900), (515, 22912), (532, 22969), (537, 22990), (540, 23002), (549, 23050), (561, 23077), (580, 23155), (581, 23158), (597, 23233), (601, 23245), (612, 23287), (614, 23290), (622, 23302), (690, 23503), (696, 23527), (701, 23536), (703, 23551), (713, 23644), (715, 23647),

Gene: Halena_20 Start: 19008, Stop: 21689, Start Num: 79

Candidate Starts for Halena_20:

(Start: 79 @19008 has 19 MA's), (81, 19014), (130, 19191), (134, 19221), (150, 19284), (167, 19359), (176, 19413), (186, 19473), (191, 19479), (208, 19545), (222, 19608), (233, 19641), (235, 19644), (240, 19668), (244, 19692), (246, 19698), (248, 19704), (258, 19752), (263, 19773), (265, 19788), (269, 19809), (275, 19848), (278, 19860), (280, 19878), (296, 19953), (303, 19983), (306, 20007), (307, 20010), (317, 20055), (331, 20106), (337, 20124), (348, 20178), (364, 20250), (366, 20262), (369, 20271), (378, 20313), (384, 20343), (392, 20379), (396, 20397), (404, 20412), (406, 20418), (411, 20451), (445, 20580), (447, 20589), (466, 20670), (478, 20706), (479, 20712), (505, 20817), (509, 20826), (514, 20841), (519, 20859), (531, 20901), (554, 20997), (555, 21003), (569, 21057), (572, 21063), (574, 21075), (596, 21186), (601, 21216), (602, 21222), (610, 21252), (635, 21318), (638, 21324), (647, 21348), (650, 21354), (651, 21360), (661, 21405), (664, 21414), (667, 21423), (680, 21462), (689, 21498), (690, 21507), (693, 21522), (711, 21618), (719, 21669), (720, 21675),

Gene: HayZem_31 Start: 33682, Stop: 36450, Start Num: 12

Candidate Starts for HayZem_31:

(Start: 12 @33682 has 3 MA's), (30, 33766), (Start: 40 @33823 has 3 MA's), (93, 34009), (129, 34123), (143, 34195), (173, 34336), (195, 34423), (273, 34735), (340, 34963), (368, 35083), (396, 35212), (416, 35287), (420, 35299), (428, 35326), (442, 35377), (462, 35461), (513, 35629), (522, 35656), (557, 35800), (588, 35953), (603, 36007), (607, 36022), (613, 36040), (615, 36043), (620, 36055), (641, 36112), (644, 36121), (657, 36163), (668, 36208), (673, 36223), (708, 36376),

Gene: Hedgerow_32 Start: 30073, Stop: 32793, Start Num: 58

Candidate Starts for Hedgerow_32:

(Start: 58 @30073 has 36 MA's), (74, 30127), (89, 30166), (102, 30211), (110, 30235), (111, 30238), (120, 30271), (143, 30379), (147, 30400), (148, 30403), (162, 30457), (173, 30517), (177, 30541), (184, 30577), (198, 30625), (204, 30646), (212, 30685), (222, 30724), (228, 30739), (241, 30793), (243, 30805), (251, 30829), (255, 30853), (260, 30865), (263, 30880), (265, 30895), (271, 30937), (275, 30955), (282, 30994), (287, 31018), (325, 31189), (345, 31267), (358, 31327), (366, 31363), (367, 31366), (384, 31444), (392, 31480), (399, 31504), (407, 31525), (447, 31696), (448, 31702), (478, 31813), (485, 31840), (499, 31903), (500, 31909), (505, 31924), (519, 31966), (541, 32053), (546, 32080), (555, 32110), (562, 32128), (566, 32149), (567, 32158), (569, 32164), (572, 32170), (574, 32182), (594, 32287), (598, 32305), (603, 32338), (635, 32425), (647, 32455), (650, 32461), (664, 32521), (690, 32614), (693, 32629), (705, 32671), (721, 32785),

Gene: Heftyboy_25 Start: 21308, Stop: 23806, Start Num: 64

Candidate Starts for Heftyboy_25:

(Start: 64 @21308 has 25 MA's), (82, 21368), (86, 21377), (126, 21518), (142, 21587), (163, 21671), (197, 21824), (204, 21848), (210, 21875), (220, 21917), (231, 21944), (235, 21956), (236, 21959), (237, 21968), (239, 21977), (244, 22004), (252, 22037), (265, 22097), (273, 22148), (288, 22226),

(307, 22304), (311, 22325), (323, 22370), (333, 22406), (341, 22442), (346, 22463), (352, 22493), (355, 22505), (393, 22664), (415, 22724), (420, 22733), (425, 22748), (430, 22769), (448, 22841), (451, 22856), (459, 22886), (461, 22889), (472, 22913), (477, 22928), (484, 22955), (497, 23003), (501, 23033), (504, 23036), (510, 23048), (515, 23060), (532, 23117), (537, 23138), (540, 23150), (549, 23198), (561, 23225), (580, 23303), (581, 23306), (597, 23381), (601, 23393), (612, 23435), (614, 23438), (622, 23450), (690, 23651), (696, 23675), (701, 23684), (703, 23699), (713, 23792), (715, 23795),

Gene: Holeinone_32 Start: 29953, Stop: 32673, Start Num: 58

Candidate Starts for Holeinone_32:

(Start: 58 @29953 has 36 MA's), (74, 30007), (89, 30046), (102, 30091), (110, 30115), (111, 30118), (120, 30151), (143, 30259), (147, 30280), (148, 30283), (162, 30337), (173, 30397), (177, 30421), (184, 30457), (198, 30505), (204, 30526), (212, 30565), (222, 30604), (228, 30619), (241, 30673), (243, 30685), (251, 30709), (255, 30733), (260, 30745), (263, 30760), (265, 30775), (271, 30817), (275, 30835), (282, 30874), (287, 30898), (325, 31069), (345, 31147), (358, 31207), (366, 31243), (367, 31246), (384, 31324), (392, 31360), (399, 31384), (407, 31405), (447, 31576), (448, 31582), (478, 31693), (485, 31720), (499, 31783), (500, 31789), (505, 31804), (519, 31846), (555, 31990), (562, 32008), (566, 32029), (567, 32038), (569, 32044), (572, 32050), (574, 32062), (594, 32167), (598, 32185), (603, 32218), (607, 32233), (635, 32305), (647, 32335), (650, 32341), (664, 32401), (690, 32494), (693, 32509), (705, 32551), (718, 32653), (721, 32665),

Gene: HubbaBubba_41 Start: 29354, Stop: 31720, Start Num: 66

Candidate Starts for HubbaBubba_41:

(Start: 66 @29354 has 24 MA's), (147, 29633), (188, 29822), (190, 29825), (193, 29828), (207, 29882), (214, 29924), (216, 29933), (228, 29975), (251, 30035), (256, 30062), (276, 30164), (283, 30200), (309, 30284), (334, 30368), (348, 30431), (357, 30473), (360, 30482), (382, 30557), (442, 30719), (444, 30728), (476, 30833), (489, 30878), (543, 31049), (548, 31073), (553, 31082), (560, 31106), (607, 31307), (647, 31406), (650, 31412), (658, 31442), (660, 31457), (704, 31604), (716, 31703),

Gene: IDyn_44 Start: 30750, Stop: 33152, Start Num: 66

Candidate Starts for IDyn_44:

(Start: 66 @30750 has 24 MA's), (153, 31053), (171, 31143), (188, 31218), (214, 31320), (216, 31329), (227, 31368), (251, 31431), (256, 31458), (259, 31464), (267, 31512), (284, 31602), (348, 31827), (357, 31869), (390, 31983), (396, 32001), (408, 32028), (431, 32091), (441, 32112), (442, 32115), (468, 32205), (489, 32274), (531, 32397), (533, 32400), (548, 32472), (565, 32529), (573, 32556), (610, 32721), (618, 32742), (627, 32766), (648, 32817), (658, 32850), (660, 32865), (665, 32877), (686, 32934),

Gene: InvictusManeo_25 Start: 21260, Stop: 23770, Start Num: 64

Candidate Starts for InvictusManeo_25:

(Start: 64 @21260 has 25 MA's), (77, 21308), (82, 21320), (86, 21329), (142, 21539), (163, 21623), (197, 21776), (204, 21800), (211, 21830), (236, 21911), (237, 21920), (239, 21929), (244, 21956), (251, 21977), (256, 22010), (261, 22022), (265, 22049), (266, 22055), (273, 22100), (288, 22178), (307, 22256), (311, 22277), (323, 22322), (333, 22358), (341, 22394), (346, 22415), (352, 22445), (355, 22457), (386, 22577), (405, 22640), (414, 22664), (430, 22721), (445, 22778), (448, 22793), (452, 22814), (463, 22853), (503, 22994), (532, 23081), (546, 23147), (561, 23183), (570, 23216), (575, 23237), (582, 23273), (600, 23348), (601, 23351), (605, 23375), (619, 23408), (630, 23435), (640, 23456), (646, 23474), (663, 23528), (713, 23756),

Gene: ItsyBitsy1_32 Start: 29955, Stop: 32675, Start Num: 58

Candidate Starts for ItsyBitsy1_32:

(Start: 58 @29955 has 36 MA's), (74, 30009), (89, 30048), (102, 30093), (110, 30117), (111, 30120), (120, 30153), (143, 30261), (147, 30282), (148, 30285), (162, 30339), (173, 30399), (177, 30423),

(184, 30459), (198, 30507), (204, 30528), (212, 30567), (228, 30621), (241, 30675), (243, 30687), (251, 30711), (255, 30735), (260, 30747), (263, 30762), (265, 30777), (271, 30819), (275, 30837), (282, 30876), (287, 30900), (325, 31071), (345, 31149), (358, 31209), (366, 31245), (367, 31248), (384, 31326), (392, 31362), (399, 31386), (407, 31407), (447, 31578), (478, 31695), (485, 31722), (499, 31785), (500, 31791), (505, 31806), (519, 31848), (541, 31935), (546, 31962), (555, 31992), (562, 32010), (566, 32031), (567, 32040), (569, 32046), (572, 32052), (574, 32064), (594, 32169), (598, 32187), (603, 32220), (635, 32307), (647, 32337), (650, 32343), (664, 32403), (690, 32496), (693, 32511), (705, 32553), (721, 32667),

Gene: Jennelsea_18 Start: 17353, Stop: 20217, Start Num: 18

Candidate Starts for Jennelsea_18:

(16, 17341), (Start: 18 @17353 has 10 MA's), (Start: 23 @17374 has 1 MA's), (29, 17395), (36, 17434), (52, 17503), (56, 17512), (57, 17515), (76, 17566), (107, 17656), (120, 17701), (137, 17791), (139, 17800), (141, 17803), (145, 17824), (148, 17836), (158, 17869), (182, 18004), (196, 18052), (200, 18067), (206, 18088), (213, 18130), (219, 18145), (222, 18154), (232, 18181), (234, 18187), (243, 18232), (247, 18241), (251, 18256), (253, 18268), (254, 18277), (256, 18283), (260, 18292), (264, 18319), (267, 18337), (285, 18430), (288, 18451), (294, 18475), (308, 18541), (313, 18562), (318, 18580), (325, 18613), (332, 18637), (334, 18640), (345, 18691), (352, 18727), (358, 18751), (366, 18787), (369, 18796), (371, 18811), (378, 18838), (384, 18868), (392, 18904), (399, 18928), (424, 19027), (435, 19066), (447, 19120), (478, 19237), (485, 19264), (499, 19327), (500, 19333), (505, 19348), (519, 19390), (541, 19477), (546, 19504), (555, 19534), (562, 19552), (567, 19582), (572, 19594), (574, 19606), (594, 19711), (598, 19729), (603, 19762), (635, 19849), (647, 19879), (650, 19885), (664, 19945), (667, 19954), (669, 19963), (690, 20038), (694, 20059), (705, 20095), (721, 20209),

Gene: Jeon_24 Start: 27235, Stop: 29949, Start Num: 59

Candidate Starts for Jeon_24:

(Start: 59 @27235 has 4 MA's), (Start: 79 @27304 has 19 MA's), (94, 27337), (100, 27358), (118, 27415), (123, 27445), (127, 27463), (147, 27556), (148, 27559), (162, 27613), (177, 27697), (184, 27733), (187, 27751), (189, 27754), (204, 27802), (212, 27841), (228, 27895), (241, 27949), (243, 27961), (251, 27985), (255, 28009), (260, 28021), (263, 28036), (271, 28093), (276, 28117), (287, 28174), (289, 28189), (299, 28219), (313, 28294), (325, 28345), (340, 28402), (345, 28423), (358, 28483), (366, 28519), (367, 28522), (384, 28600), (392, 28636), (402, 28666), (407, 28681), (432, 28789), (443, 28837), (445, 28843), (447, 28852), (448, 28858), (464, 28927), (478, 28969), (485, 28996), (499, 29059), (500, 29065), (505, 29080), (509, 29089), (519, 29122), (546, 29236), (555, 29266), (562, 29284), (567, 29314), (569, 29320), (572, 29326), (574, 29338), (594, 29443), (598, 29461), (603, 29494), (610, 29515), (635, 29581), (647, 29611), (650, 29617), (664, 29677), (669, 29695), (690, 29770), (705, 29827), (721, 29941),

Gene: Jifall16_42 Start: 33262, Stop: 35628, Start Num: 66

Candidate Starts for Jifall16_42:

(Start: 66 @33262 has 24 MA's), (80, 33304), (112, 33391), (188, 33730), (256, 33970), (265, 34009), (267, 34024), (283, 34108), (284, 34114), (326, 34252), (350, 34345), (357, 34381), (419, 34573), (428, 34597), (442, 34627), (444, 34636), (456, 34681), (512, 34849), (533, 34912), (543, 34957), (548, 34981), (588, 35146), (589, 35149), (597, 35182), (607, 35224), (626, 35275), (647, 35326), (650, 35332), (655, 35353), (658, 35362), (660, 35377), (676, 35422), (714, 35608),

Gene: JoeDirt_20 Start: 18979, Stop: 21660, Start Num: 79

Candidate Starts for JoeDirt_20:

(Start: 79 @18979 has 19 MA's), (81, 18985), (130, 19162), (134, 19192), (150, 19255), (167, 19330), (186, 19444), (191, 19450), (208, 19516), (222, 19579), (233, 19612), (235, 19615), (240, 19639), (244, 19663), (246, 19669), (248, 19675), (258, 19723), (263, 19744), (265, 19759), (269, 19780), (275, 19819), (278, 19831), (280, 19849), (296, 19924), (303, 19954), (306, 19978), (307, 19981),

(317, 20026), (331, 20077), (337, 20095), (348, 20149), (364, 20221), (366, 20233), (369, 20242), (372, 20260), (378, 20284), (384, 20314), (392, 20350), (404, 20383), (406, 20389), (418, 20455), (437, 20521), (447, 20560), (466, 20641), (478, 20677), (479, 20683), (505, 20788), (509, 20797), (514, 20812), (519, 20830), (531, 20872), (554, 20968), (555, 20974), (569, 21028), (572, 21034), (574, 21046), (596, 21157), (601, 21187), (602, 21193), (635, 21289), (638, 21295), (647, 21319), (650, 21325), (651, 21331), (661, 21376), (664, 21385), (667, 21394), (680, 21433), (689, 21469), (690, 21478), (693, 21493), (711, 21589), (719, 21640), (720, 21646),

Gene: JohnLord_29 Start: 26190, Stop: 28943, Start Num: 53

Candidate Starts for JohnLord_29:

(34, 26097), (Start: 53 @26190 has 3 MA's), (80, 26268), (94, 26304), (102, 26331), (110, 26355), (125, 26424), (131, 26460), (139, 26493), (143, 26505), (148, 26529), (171, 26643), (185, 26721), (198, 26763), (202, 26775), (205, 26790), (212, 26826), (223, 26868), (239, 26922), (251, 26970), (255, 27000), (256, 27003), (277, 27111), (287, 27165), (289, 27180), (293, 27195), (308, 27264), (313, 27285), (318, 27303), (325, 27336), (332, 27360), (334, 27363), (345, 27414), (352, 27450), (358, 27474), (366, 27510), (369, 27519), (371, 27534), (378, 27561), (384, 27591), (392, 27627), (396, 27645), (397, 27648), (402, 27657), (432, 27783), (443, 27831), (478, 27963), (485, 27990), (498, 28041), (499, 28053), (500, 28059), (519, 28116), (530, 28155), (541, 28203), (546, 28230), (547, 28233), (555, 28260), (562, 28278), (567, 28308), (572, 28320), (574, 28332), (595, 28440), (598, 28455), (603, 28488), (610, 28509), (635, 28575), (647, 28605), (650, 28611), (664, 28671), (667, 28680), (669, 28689), (690, 28764), (693, 28779), (694, 28785), (705, 28821), (721, 28935),

Gene: Jumbo_24 Start: 33519, Stop: 36377, Start Num: 28

Candidate Starts for Jumbo_24:

(Start: 28 @33519 has 1 MA's), (30, 33528), (39, 33579), (88, 33753), (133, 33948), (190, 34227), (207, 34284), (216, 34335), (253, 34446), (285, 34611), (295, 34659), (315, 34752), (320, 34773), (328, 34800), (333, 34818), (350, 34890), (355, 34926), (372, 35001), (374, 35007), (376, 35010), (379, 35028), (389, 35079), (427, 35232), (443, 35295), (445, 35301), (467, 35391), (474, 35409), (481, 35436), (483, 35442), (494, 35487), (506, 35538), (514, 35559), (564, 35748), (566, 35754), (568, 35766), (578, 35805), (629, 36003), (649, 36051), (656, 36078), (662, 36099), (667, 36114), (671, 36129), (697, 36228), (699, 36231), (707, 36285), (712, 36318), (718, 36360),

Gene: JustASigh_21 Start: 19828, Stop: 22794, Start Num: 24

Candidate Starts for JustASigh_21:

(Start: 24 @19828 has 1 MA's), (27, 19837), (65, 19999), (83, 20059), (106, 20134), (135, 20269), (146, 20326), (178, 20494), (186, 20542), (191, 20548), (194, 20551), (212, 20638), (222, 20686), (239, 20746), (251, 20794), (259, 20827), (265, 20860), (314, 21124), (325, 21172), (345, 21259), (348, 21271), (351, 21292), (358, 21319), (365, 21352), (366, 21355), (384, 21436), (387, 21448), (392, 21472), (433, 21637), (434, 21640), (443, 21682), (448, 21703), (451, 21718), (453, 21727), (466, 21778), (478, 21814), (499, 21904), (505, 21925), (519, 21967), (522, 21976), (531, 22009), (546, 22081), (562, 22129), (572, 22171), (574, 22183), (586, 22252), (603, 22339), (608, 22357), (635, 22426), (657, 22489), (659, 22495), (669, 22537), (680, 22570), (700, 22648), (705, 22672),

Gene: Kaleb_32 Start: 30088, Stop: 32808, Start Num: 58

Candidate Starts for Kaleb_32:

(Start: 58 @30088 has 36 MA's), (74, 30142), (89, 30181), (102, 30226), (110, 30250), (111, 30253), (120, 30286), (143, 30394), (147, 30415), (148, 30418), (162, 30472), (173, 30532), (177, 30556), (184, 30592), (198, 30640), (204, 30661), (212, 30700), (222, 30739), (228, 30754), (241, 30808), (243, 30820), (251, 30844), (255, 30868), (260, 30880), (263, 30895), (265, 30910), (271, 30952), (275, 30970), (282, 31009), (287, 31033), (325, 31204), (345, 31282), (358, 31342), (366, 31378), (367, 31381), (384, 31459), (392, 31495), (399, 31519), (407, 31540), (447, 31711), (448, 31717), (478, 31828), (485, 31855), (499, 31918), (500, 31924), (505, 31939), (519, 31981), (541, 32068), (555, 32125), (562, 32143), (566, 32164), (567, 32173), (569, 32179), (572, 32185), (574, 32197),

(594, 32302), (598, 32320), (603, 32353), (635, 32440), (647, 32470), (650, 32476), (664, 32536), (690, 32629), (693, 32644), (705, 32686), (721, 32800),

Gene: Kheth_32 Start: 29973, Stop: 32693, Start Num: 58

Candidate Starts for Kheth_32:

(Start: 58 @29973 has 36 MA's), (74, 30027), (89, 30066), (102, 30111), (110, 30135), (111, 30138), (120, 30171), (143, 30279), (147, 30300), (148, 30303), (162, 30357), (173, 30417), (177, 30441), (184, 30477), (198, 30525), (204, 30546), (212, 30585), (222, 30624), (228, 30639), (241, 30693), (243, 30705), (251, 30729), (255, 30753), (260, 30765), (263, 30780), (265, 30795), (271, 30837), (275, 30855), (282, 30894), (287, 30918), (325, 31089), (345, 31167), (358, 31227), (366, 31263), (367, 31266), (384, 31344), (392, 31380), (399, 31404), (407, 31425), (447, 31596), (448, 31602), (478, 31713), (485, 31740), (499, 31803), (500, 31809), (505, 31824), (519, 31866), (541, 31953), (546, 31980), (555, 32010), (562, 32028), (566, 32049), (567, 32058), (569, 32064), (572, 32070), (574, 32082), (594, 32187), (598, 32205), (603, 32238), (635, 32325), (647, 32355), (650, 32361), (664, 32421), (690, 32514), (693, 32529), (705, 32571), (721, 32685),

Gene: KidneyBean_43 Start: 33386, Stop: 35752, Start Num: 66

Candidate Starts for KidneyBean_43:

(Start: 66 @33386 has 24 MA's), (80, 33428), (112, 33515), (188, 33854), (256, 34094), (265, 34133), (267, 34148), (283, 34232), (284, 34238), (326, 34376), (350, 34469), (357, 34505), (419, 34697), (428, 34721), (442, 34751), (444, 34760), (456, 34805), (512, 34973), (533, 35036), (543, 35081), (548, 35105), (588, 35270), (589, 35273), (597, 35306), (607, 35348), (626, 35399), (647, 35450), (650, 35456), (655, 35477), (658, 35486), (660, 35501), (676, 35546), (714, 35732),

Gene: Koella_18 Start: 17365, Stop: 20229, Start Num: 18

Candidate Starts for Koella_18:

(16, 17353), (Start: 18 @17365 has 10 MA's), (Start: 23 @17386 has 1 MA's), (29, 17407), (36, 17446), (52, 17515), (56, 17524), (57, 17527), (76, 17578), (107, 17668), (120, 17713), (137, 17803), (139, 17812), (141, 17815), (145, 17836), (148, 17848), (158, 17881), (182, 18016), (196, 18064), (200, 18079), (206, 18100), (213, 18142), (219, 18157), (222, 18166), (232, 18193), (234, 18199), (243, 18244), (247, 18253), (251, 18268), (253, 18280), (254, 18289), (256, 18295), (260, 18304), (264, 18331), (267, 18349), (285, 18442), (288, 18463), (294, 18487), (308, 18553), (313, 18574), (318, 18592), (325, 18625), (332, 18649), (334, 18652), (345, 18703), (352, 18739), (358, 18763), (366, 18799), (369, 18808), (371, 18823), (378, 18850), (384, 18880), (392, 18916), (399, 18940), (424, 19039), (435, 19078), (447, 19132), (478, 19249), (485, 19276), (499, 19339), (500, 19345), (505, 19360), (519, 19402), (541, 19489), (546, 19516), (555, 19546), (562, 19564), (567, 19594), (572, 19606), (574, 19618), (594, 19723), (598, 19741), (603, 19774), (635, 19861), (647, 19891), (650, 19897), (664, 19957), (667, 19966), (669, 19975), (690, 20050), (694, 20071), (705, 20107), (721, 20221),

Gene: Kolhan_32 Start: 29967, Stop: 32687, Start Num: 58

Candidate Starts for Kolhan_32:

(Start: 58 @29967 has 36 MA's), (74, 30021), (89, 30060), (102, 30105), (110, 30129), (111, 30132), (120, 30165), (143, 30273), (147, 30294), (148, 30297), (162, 30351), (173, 30411), (177, 30435), (184, 30471), (198, 30519), (204, 30540), (212, 30579), (222, 30618), (228, 30633), (241, 30687), (243, 30699), (251, 30723), (255, 30747), (260, 30759), (263, 30774), (265, 30789), (271, 30831), (275, 30849), (282, 30888), (287, 30912), (325, 31083), (345, 31161), (358, 31221), (366, 31257), (367, 31260), (384, 31338), (392, 31374), (399, 31398), (407, 31419), (447, 31590), (448, 31596), (478, 31707), (485, 31734), (499, 31797), (500, 31803), (505, 31818), (519, 31860), (541, 31947), (555, 32004), (562, 32022), (566, 32043), (567, 32052), (569, 32058), (572, 32064), (574, 32076), (594, 32181), (598, 32199), (603, 32232), (635, 32319), (647, 32349), (650, 32355), (664, 32415), (690, 32508), (693, 32523), (705, 32565), (721, 32679),

Gene: Kratio_24 Start: 20891, Stop: 23401, Start Num: 64

Candidate Starts for Kratio_24:

(Start: 64 @20891 has 25 MA's), (77, 20939), (82, 20951), (86, 20960), (116, 21059), (142, 21170), (163, 21254), (197, 21407), (204, 21431), (211, 21461), (236, 21542), (237, 21551), (239, 21560), (244, 21587), (251, 21608), (256, 21641), (261, 21653), (265, 21680), (266, 21686), (273, 21731), (288, 21809), (307, 21887), (311, 21908), (323, 21953), (333, 21989), (341, 22025), (346, 22046), (352, 22076), (355, 22088), (386, 22208), (405, 22271), (414, 22295), (430, 22352), (445, 22409), (448, 22424), (452, 22445), (463, 22484), (503, 22625), (532, 22712), (546, 22778), (561, 22814), (570, 22847), (575, 22868), (582, 22904), (600, 22979), (601, 22982), (605, 23006), (619, 23039), (630, 23066), (640, 23087), (646, 23105), (663, 23159), (713, 23387),

Gene: Kropertea_20 Start: 18836, Stop: 21472, Start Num: 31

Candidate Starts for Kropertea_20:

(Start: 31 @18836 has 6 MA's), (33, 18842), (36, 18863), (75, 19013), (104, 19100), (121, 19154), (138, 19241), (144, 19262), (152, 19292), (154, 19301), (156, 19307), (164, 19340), (183, 19442), (189, 19469), (192, 19472), (198, 19499), (207, 19532), (217, 19574), (218, 19580), (243, 19673), (259, 19730), (274, 19817), (280, 19847), (295, 19919), (329, 20057), (349, 20135), (350, 20138), (355, 20168), (362, 20192), (381, 20255), (395, 20324), (438, 20438), (450, 20492), (452, 20507), (454, 20513), (479, 20591), (488, 20621), (498, 20654), (508, 20693), (512, 20702), (524, 20744), (526, 20747), (550, 20852), (557, 20864), (562, 20876), (563, 20879), (577, 20942), (579, 20951), (634, 21143), (647, 21173), (666, 21230), (679, 21269), (686, 21281), (690, 21314), (713, 21455),

Gene: Kurt_43 Start: 33623, Stop: 35989, Start Num: 66

Candidate Starts for Kurt_43:

(Start: 66 @33623 has 24 MA's), (80, 33665), (112, 33752), (188, 34091), (256, 34331), (265, 34370), (267, 34385), (283, 34469), (284, 34475), (326, 34613), (350, 34706), (357, 34742), (419, 34934), (428, 34958), (442, 34988), (444, 34997), (456, 35042), (512, 35210), (533, 35273), (543, 35318), (548, 35342), (588, 35507), (589, 35510), (597, 35543), (607, 35585), (626, 35636), (647, 35687), (650, 35693), (655, 35714), (658, 35723), (660, 35738), (676, 35783), (714, 35969),

Gene: Labelle_36 Start: 28741, Stop: 32043, Start Num: 3

Candidate Starts for Labelle_36:

(Start: 3 @28741 has 3 MA's), (4, 28753), (6, 28882), (7, 28891), (8, 28903), (22, 29071), (25, 29077), (42, 29161), (85, 29314), (97, 29356), (109, 29389), (117, 29416), (120, 29428), (163, 29644), (172, 29701), (175, 29722), (199, 29827), (208, 29863), (242, 30001), (256, 30070), (263, 30094), (284, 30220), (287, 30235), (292, 30262), (298, 30283), (301, 30298), (302, 30307), (366, 30613), (367, 30616), (371, 30637), (384, 30694), (392, 30730), (396, 30748), (397, 30751), (402, 30760), (407, 30775), (432, 30883), (447, 30946), (464, 31021), (478, 31063), (519, 31216), (530, 31255), (555, 31360), (562, 31378), (567, 31408), (572, 31420), (574, 31432), (613, 31621), (650, 31711), (664, 31771), (669, 31789), (690, 31864), (694, 31885), (705, 31921), (719, 32026), (720, 32032), (721, 32035),

Gene: Lars_32 Start: 30078, Stop: 32798, Start Num: 58

Candidate Starts for Lars_32:

(Start: 58 @30078 has 36 MA's), (74, 30132), (89, 30171), (102, 30216), (110, 30240), (111, 30243), (120, 30276), (143, 30384), (147, 30405), (148, 30408), (162, 30462), (173, 30522), (177, 30546), (184, 30582), (198, 30630), (204, 30651), (212, 30690), (222, 30729), (228, 30744), (241, 30798), (243, 30810), (251, 30834), (255, 30858), (260, 30870), (263, 30885), (265, 30900), (271, 30942), (275, 30960), (282, 30999), (287, 31023), (325, 31194), (345, 31272), (358, 31332), (366, 31368), (367, 31371), (384, 31449), (392, 31485), (399, 31509), (407, 31530), (447, 31701), (448, 31707), (478, 31818), (485, 31845), (499, 31908), (500, 31914), (505, 31929), (519, 31971), (541, 32058), (546, 32085), (555, 32115), (562, 32133), (566, 32154), (567, 32163), (569, 32169), (572, 32175), (574, 32187), (594, 32292), (598, 32310), (603, 32343), (635, 32430), (647, 32460), (650, 32466),

(664, 32526), (690, 32619), (693, 32634), (705, 32676), (721, 32790),

Gene: Larva_26 Start: 21061, Stop: 23565, Start Num: 64

Candidate Starts for Larva_26:

(Start: 64 @21061 has 25 MA's), (77, 21109), (82, 21121), (126, 21268), (142, 21337), (163, 21421), (197, 21574), (204, 21598), (210, 21625), (236, 21709), (237, 21718), (239, 21727), (244, 21754), (251, 21775), (256, 21808), (261, 21820), (265, 21847), (288, 21976), (307, 22054), (311, 22075), (323, 22120), (333, 22156), (336, 22168), (341, 22192), (352, 22243), (355, 22255), (375, 22333), (386, 22375), (405, 22438), (414, 22462), (445, 22576), (448, 22591), (452, 22612), (463, 22651), (503, 22792), (532, 22879), (535, 22888), (546, 22945), (561, 22981), (570, 23014), (575, 23035), (600, 23146), (601, 23149), (605, 23173), (614, 23197), (617, 23203), (619, 23206), (630, 23233), (640, 23254), (646, 23272), (663, 23323), (689, 23404), (713, 23551),

Gene: LastJedi_18 Start: 17396, Stop: 20260, Start Num: 18

Candidate Starts for LastJedi_18:

(16, 17384), (Start: 18 @17396 has 10 MA's), (Start: 23 @17417 has 1 MA's), (29, 17438), (36, 17477), (52, 17546), (56, 17555), (57, 17558), (76, 17609), (107, 17699), (120, 17744), (137, 17834), (139, 17843), (141, 17846), (145, 17867), (148, 17879), (158, 17912), (182, 18047), (196, 18095), (200, 18110), (206, 18131), (213, 18173), (219, 18188), (222, 18197), (232, 18224), (234, 18230), (243, 18275), (247, 18284), (251, 18299), (253, 18311), (254, 18320), (256, 18326), (260, 18335), (264, 18362), (267, 18380), (285, 18473), (288, 18494), (294, 18518), (308, 18584), (313, 18605), (318, 18623), (325, 18656), (332, 18680), (334, 18683), (345, 18734), (352, 18770), (358, 18794), (366, 18830), (369, 18839), (371, 18854), (378, 18881), (384, 18911), (392, 18947), (399, 18971), (424, 19070), (435, 19109), (447, 19163), (478, 19280), (485, 19307), (499, 19370), (500, 19376), (505, 19391), (519, 19433), (541, 19520), (546, 19547), (555, 19577), (562, 19595), (567, 19625), (572, 19637), (574, 19649), (594, 19754), (598, 19772), (603, 19805), (635, 19892), (647, 19922), (650, 19928), (664, 19988), (667, 19997), (669, 20006), (690, 20081), (694, 20102), (705, 20138), (721, 20252),

Gene: LeBron_20 Start: 19023, Stop: 21704, Start Num: 79

Candidate Starts for LeBron_20:

(Start: 79 @19023 has 19 MA's), (81, 19029), (130, 19206), (134, 19236), (150, 19299), (167, 19374), (176, 19428), (186, 19488), (191, 19494), (208, 19560), (222, 19623), (233, 19656), (235, 19659), (240, 19683), (244, 19707), (246, 19713), (248, 19719), (258, 19767), (263, 19788), (265, 19803), (269, 19824), (275, 19863), (278, 19875), (280, 19893), (296, 19968), (303, 19998), (306, 20022), (307, 20025), (317, 20070), (331, 20121), (337, 20139), (348, 20193), (364, 20265), (366, 20277), (369, 20286), (372, 20304), (378, 20328), (384, 20358), (392, 20394), (404, 20427), (406, 20433), (418, 20499), (437, 20565), (447, 20604), (466, 20685), (478, 20721), (479, 20727), (505, 20832), (509, 20841), (514, 20856), (519, 20874), (531, 20916), (554, 21012), (555, 21018), (569, 21072), (572, 21078), (574, 21090), (596, 21201), (601, 21231), (602, 21237), (635, 21333), (638, 21339), (647, 21363), (650, 21369), (651, 21375), (661, 21420), (664, 21429), (667, 21438), (680, 21477), (689, 21513), (690, 21522), (693, 21537), (711, 21633), (719, 21684), (720, 21690),

Gene: Lephleur_32 Start: 29971, Stop: 32691, Start Num: 58

Candidate Starts for Lephleur_32:

(Start: 58 @29971 has 36 MA's), (74, 30025), (89, 30064), (102, 30109), (110, 30133), (111, 30136), (120, 30169), (143, 30277), (147, 30298), (148, 30301), (162, 30355), (173, 30415), (177, 30439), (184, 30475), (198, 30523), (204, 30544), (212, 30583), (222, 30622), (228, 30637), (241, 30691), (243, 30703), (251, 30727), (255, 30751), (260, 30763), (263, 30778), (265, 30793), (271, 30835), (275, 30853), (282, 30892), (287, 30916), (325, 31087), (345, 31165), (358, 31225), (366, 31261), (367, 31264), (384, 31342), (392, 31378), (399, 31402), (407, 31423), (447, 31594), (448, 31600), (478, 31711), (485, 31738), (499, 31801), (500, 31807), (505, 31822), (519, 31864), (541, 31951), (555, 32008), (562, 32026), (566, 32047), (567, 32056), (569, 32062), (572, 32068), (574, 32080),

(594, 32185), (598, 32203), (603, 32236), (635, 32323), (647, 32353), (650, 32359), (664, 32419), (690, 32512), (693, 32527), (705, 32569), (721, 32683),

Gene: Leston_25 Start: 21290, Stop: 23788, Start Num: 64

Candidate Starts for Leston_25:

(Start: 64 @21290 has 25 MA's), (82, 21350), (86, 21359), (126, 21500), (142, 21569), (163, 21653), (197, 21806), (204, 21830), (210, 21857), (220, 21899), (231, 21926), (235, 21938), (236, 21941), (237, 21950), (239, 21959), (244, 21986), (252, 22019), (256, 22040), (265, 22079), (273, 22130), (288, 22208), (307, 22286), (319, 22343), (323, 22352), (333, 22388), (340, 22421), (341, 22424), (346, 22445), (352, 22475), (355, 22487), (393, 22646), (415, 22706), (420, 22715), (425, 22730), (430, 22751), (448, 22823), (451, 22838), (459, 22868), (461, 22871), (472, 22895), (477, 22910), (484, 22937), (497, 22985), (501, 23015), (504, 23018), (510, 23030), (515, 23042), (532, 23099), (537, 23120), (540, 23132), (549, 23180), (561, 23207), (580, 23285), (581, 23288), (597, 23363), (601, 23375), (612, 23417), (614, 23420), (622, 23432), (690, 23633), (696, 23657), (701, 23666), (703, 23681), (713, 23774), (715, 23777),

Gene: LilDirt_24 Start: 21017, Stop: 23527, Start Num: 64

Candidate Starts for LilDirt_24:

(Start: 64 @21017 has 25 MA's), (77, 21065), (82, 21077), (86, 21086), (142, 21296), (163, 21380), (197, 21533), (204, 21557), (211, 21587), (236, 21668), (237, 21677), (239, 21686), (244, 21713), (251, 21734), (256, 21767), (261, 21779), (265, 21806), (266, 21812), (273, 21857), (288, 21935), (307, 22013), (311, 22034), (323, 22079), (333, 22115), (341, 22151), (346, 22172), (352, 22202), (355, 22214), (386, 22334), (405, 22397), (414, 22421), (430, 22478), (445, 22535), (448, 22550), (452, 22571), (463, 22610), (503, 22751), (532, 22838), (546, 22904), (561, 22940), (570, 22973), (575, 22994), (582, 23030), (600, 23105), (601, 23108), (605, 23132), (619, 23165), (630, 23192), (640, 23213), (646, 23231), (663, 23285), (713, 23513),

Gene: LilSmirk_32 Start: 29965, Stop: 32685, Start Num: 58

Candidate Starts for LilSmirk_32:

(Start: 58 @29965 has 36 MA's), (74, 30019), (89, 30058), (102, 30103), (110, 30127), (111, 30130), (120, 30163), (143, 30271), (147, 30292), (148, 30295), (162, 30349), (173, 30409), (177, 30433), (184, 30469), (198, 30517), (204, 30538), (212, 30577), (222, 30616), (228, 30631), (241, 30685), (243, 30697), (251, 30721), (255, 30745), (260, 30757), (263, 30772), (265, 30787), (271, 30829), (275, 30847), (282, 30886), (287, 30910), (325, 31081), (345, 31159), (358, 31219), (366, 31255), (367, 31258), (384, 31336), (392, 31372), (399, 31396), (407, 31417), (447, 31588), (478, 31705), (485, 31732), (499, 31795), (500, 31801), (505, 31816), (519, 31858), (541, 31945), (555, 32002), (562, 32020), (566, 32041), (567, 32050), (569, 32056), (572, 32062), (574, 32074), (594, 32179), (598, 32197), (603, 32230), (635, 32317), (647, 32347), (650, 32353), (664, 32413), (690, 32506), (693, 32521), (705, 32563), (721, 32677),

Gene: LizLemon_32 Start: 30087, Stop: 32807, Start Num: 58

Candidate Starts for LizLemon_32:

(Start: 58 @30087 has 36 MA's), (74, 30141), (89, 30180), (102, 30225), (110, 30249), (111, 30252), (120, 30285), (143, 30393), (147, 30414), (148, 30417), (162, 30471), (173, 30531), (177, 30555), (184, 30591), (198, 30639), (204, 30660), (212, 30699), (222, 30738), (228, 30753), (241, 30807), (243, 30819), (251, 30843), (255, 30867), (260, 30879), (263, 30894), (265, 30909), (271, 30951), (275, 30969), (282, 31008), (287, 31032), (325, 31203), (345, 31281), (358, 31341), (366, 31377), (367, 31380), (384, 31458), (392, 31494), (399, 31518), (424, 31617), (435, 31656), (447, 31710), (478, 31827), (485, 31854), (499, 31917), (500, 31923), (505, 31938), (519, 31980), (541, 32067), (555, 32124), (562, 32142), (566, 32163), (567, 32172), (569, 32178), (572, 32184), (574, 32196), (594, 32301), (598, 32319), (603, 32352), (635, 32439), (647, 32469), (650, 32475), (664, 32535), (690, 32628), (693, 32643), (705, 32685), (721, 32799),

Gene: MAckerman_20 Start: 18997, Stop: 21678, Start Num: 79

Candidate Starts for MAckerman_20:

(Start: 79 @18997 has 19 MA's), (81, 19003), (130, 19180), (134, 19210), (150, 19273), (167, 19348), (176, 19402), (186, 19462), (191, 19468), (208, 19534), (222, 19597), (233, 19630), (235, 19633), (240, 19657), (246, 19687), (248, 19693), (258, 19741), (263, 19762), (265, 19777), (269, 19798), (275, 19837), (278, 19849), (280, 19867), (290, 19924), (296, 19942), (303, 19972), (306, 19996), (307, 19999), (317, 20044), (331, 20095), (337, 20113), (348, 20167), (364, 20239), (366, 20251), (369, 20260), (378, 20302), (384, 20332), (392, 20368), (396, 20386), (404, 20401), (406, 20407), (411, 20440), (445, 20569), (447, 20578), (466, 20659), (478, 20695), (479, 20701), (505, 20806), (509, 20815), (514, 20830), (519, 20848), (531, 20890), (554, 20986), (555, 20992), (569, 21046), (572, 21052), (574, 21064), (596, 21175), (601, 21205), (602, 21211), (635, 21307), (638, 21313), (647, 21337), (650, 21343), (651, 21349), (661, 21394), (664, 21403), (667, 21412), (680, 21451), (689, 21487), (690, 21496), (693, 21511), (711, 21607), (719, 21658), (720, 21664),

Gene: Madruga_35 Start: 28410, Stop: 31712, Start Num: 3

Candidate Starts for Madruga_35:

(Start: 3 @28410 has 3 MA's), (4, 28422), (6, 28551), (7, 28560), (8, 28572), (25, 28746), (42, 28830), (81, 28974), (85, 28983), (97, 29025), (109, 29058), (120, 29097), (163, 29313), (172, 29370), (175, 29391), (199, 29496), (208, 29532), (242, 29670), (256, 29739), (263, 29763), (284, 29889), (287, 29904), (292, 29931), (298, 29952), (301, 29967), (302, 29976), (366, 30282), (367, 30285), (371, 30306), (384, 30363), (392, 30399), (399, 30423), (402, 30429), (407, 30444), (429, 30546), (432, 30552), (447, 30615), (464, 30690), (478, 30732), (519, 30885), (530, 30924), (537, 30951), (555, 31029), (562, 31047), (567, 31077), (572, 31089), (574, 31101), (613, 31290), (650, 31380), (664, 31440), (667, 31449), (693, 31548), (719, 31695), (720, 31701), (721, 31704),

Gene: Mao1_26 Start: 25993, Stop: 28746, Start Num: 53

Candidate Starts for Mao1_26:

(34, 25900), (Start: 53 @25993 has 3 MA's), (80, 26071), (94, 26107), (102, 26134), (110, 26158), (125, 26227), (139, 26296), (145, 26320), (148, 26332), (198, 26566), (202, 26578), (205, 26593), (212, 26629), (223, 26671), (239, 26725), (251, 26773), (255, 26803), (256, 26806), (277, 26914), (287, 26968), (289, 26983), (293, 26998), (308, 27067), (313, 27088), (318, 27106), (325, 27139), (332, 27163), (334, 27166), (345, 27217), (352, 27253), (358, 27277), (366, 27313), (369, 27322), (371, 27337), (378, 27364), (384, 27394), (392, 27430), (396, 27448), (397, 27451), (402, 27460), (432, 27586), (443, 27634), (478, 27766), (485, 27793), (498, 27844), (499, 27856), (500, 27862), (519, 27919), (530, 27958), (541, 28006), (546, 28033), (555, 28063), (562, 28081), (567, 28111), (572, 28123), (574, 28135), (595, 28243), (598, 28258), (603, 28291), (610, 28312), (635, 28378), (647, 28408), (650, 28414), (664, 28474), (667, 28483), (669, 28492), (690, 28567), (693, 28582), (694, 28588), (705, 28624), (721, 28738),

Gene: Marietta_45 Start: 30666, Stop: 33041, Start Num: 66

Candidate Starts for Marietta_45:

(Start: 66 @30666 has 24 MA's), (188, 31134), (207, 31194), (214, 31236), (216, 31245), (228, 31287), (251, 31347), (256, 31374), (283, 31512), (284, 31518), (309, 31596), (326, 31656), (334, 31680), (348, 31743), (357, 31785), (396, 31917), (406, 31938), (431, 32007), (442, 32031), (444, 32040), (456, 32082), (480, 32163), (486, 32184), (489, 32190), (501, 32232), (531, 32313), (548, 32388), (606, 32628), (607, 32631), (639, 32709), (648, 32733), (658, 32766), (686, 32850), (692, 32898), (695, 32907),

Gene: Mask_27 Start: 25986, Stop: 28739, Start Num: 53

Candidate Starts for Mask_27:

(34, 25893), (Start: 53 @25986 has 3 MA's), (80, 26064), (94, 26100), (102, 26127), (110, 26151), (125, 26220), (139, 26289), (145, 26313), (148, 26325), (198, 26559), (202, 26571), (205, 26586), (212, 26622), (223, 26664), (239, 26718), (251, 26766), (255, 26796), (256, 26799), (277, 26907),

(287, 26961), (289, 26976), (293, 26991), (308, 27060), (313, 27081), (318, 27099), (325, 27132), (332, 27156), (334, 27159), (345, 27210), (352, 27246), (358, 27270), (366, 27306), (369, 27315), (371, 27330), (378, 27357), (384, 27387), (392, 27423), (396, 27441), (397, 27444), (402, 27453), (432, 27579), (443, 27627), (478, 27759), (485, 27786), (498, 27837), (499, 27849), (500, 27855), (519, 27912), (530, 27951), (541, 27999), (546, 28026), (555, 28056), (562, 28074), (567, 28104), (572, 28116), (574, 28128), (595, 28236), (598, 28251), (603, 28284), (610, 28305), (635, 28371), (647, 28401), (650, 28407), (664, 28467), (667, 28476), (669, 28485), (690, 28560), (693, 28575), (694, 28581), (705, 28617), (721, 28731),

Gene: MasterPo_32 Start: 29974, Stop: 32694, Start Num: 58

Candidate Starts for MasterPo_32:

(Start: 58 @29974 has 36 MA's), (74, 30028), (89, 30067), (102, 30112), (110, 30136), (111, 30139), (120, 30172), (143, 30280), (147, 30301), (148, 30304), (162, 30358), (173, 30418), (177, 30442), (184, 30478), (198, 30526), (204, 30547), (212, 30586), (222, 30625), (228, 30640), (241, 30694), (243, 30706), (251, 30730), (255, 30754), (260, 30766), (263, 30781), (265, 30796), (271, 30838), (275, 30856), (282, 30895), (287, 30919), (325, 31090), (345, 31168), (358, 31228), (366, 31264), (367, 31267), (384, 31345), (392, 31381), (399, 31405), (407, 31426), (447, 31597), (448, 31603), (478, 31714), (485, 31741), (499, 31804), (500, 31810), (505, 31825), (519, 31867), (541, 31954), (546, 31981), (555, 32011), (562, 32029), (566, 32050), (567, 32059), (569, 32065), (572, 32071), (574, 32083), (594, 32188), (598, 32206), (603, 32239), (635, 32326), (647, 32356), (650, 32362), (664, 32422), (690, 32515), (693, 32530), (694, 32536), (705, 32572), (721, 32686),

Gene: Meyran_28 Start: 24535, Stop: 27102, Start Num: 14

Candidate Starts for Meyran_28:

(Start: 14 @24535 has 4 MA's), (41, 24649), (43, 24658), (136, 24961), (171, 25135), (188, 25210), (207, 25270), (213, 25306), (215, 25318), (224, 25354), (226, 25357), (237, 25396), (251, 25432), (256, 25459), (263, 25483), (265, 25498), (268, 25516), (271, 25540), (305, 25654), (309, 25675), (338, 25768), (342, 25789), (417, 26023), (423, 26038), (449, 26119), (450, 26122), (451, 26131), (456, 26152), (460, 26173), (487, 26254), (490, 26263), (493, 26272), (494, 26275), (507, 26320), (512, 26332), (553, 26482), (572, 26548), (587, 26617), (588, 26629), (601, 26674), (603, 26689), (610, 26710), (623, 26743), (639, 26785), (683, 26914), (688, 26920), (710, 27037), (717, 27088),

Gene: Miryou_25 Start: 21145, Stop: 23643, Start Num: 64

Candidate Starts for Miryou_25:

(Start: 64 @21145 has 25 MA's), (82, 21205), (86, 21214), (126, 21355), (142, 21424), (163, 21508), (197, 21661), (204, 21685), (210, 21712), (220, 21754), (231, 21781), (235, 21793), (236, 21796), (237, 21805), (239, 21814), (244, 21841), (252, 21874), (256, 21895), (265, 21934), (273, 21985), (288, 22063), (307, 22141), (311, 22162), (323, 22207), (333, 22243), (341, 22279), (346, 22300), (352, 22330), (355, 22342), (393, 22501), (415, 22561), (420, 22570), (425, 22585), (430, 22606), (448, 22678), (451, 22693), (459, 22723), (461, 22726), (472, 22750), (477, 22765), (484, 22792), (497, 22840), (501, 22870), (504, 22873), (510, 22885), (515, 22897), (532, 22954), (537, 22975), (540, 22987), (549, 23035), (561, 23062), (580, 23140), (581, 23143), (597, 23218), (601, 23230), (612, 23272), (614, 23275), (622, 23287), (690, 23488), (696, 23512), (701, 23521), (703, 23536), (713, 23629), (715, 23632),

Gene: MrMagoo_34 Start: 25163, Stop: 27844, Start Num: 20

Candidate Starts for MrMagoo_34:

(Start: 20 @25163 has 6 MA's), (45, 25280), (60, 25334), (71, 25367), (78, 25400), (97, 25457), (139, 25631), (140, 25634), (156, 25697), (169, 25763), (170, 25772), (181, 25835), (206, 25916), (207, 25922), (208, 25925), (218, 25958), (233, 26000), (235, 26003), (254, 26087), (256, 26093), (257, 26096), (264, 26129), (271, 26171), (272, 26180), (274, 26186), (286, 26249), (287, 26252), (291, 26273), (301, 26306), (318, 26384), (329, 26426), (339, 26459), (345, 26489), (356, 26540), (362, 26561), (387, 26654), (392, 26678), (397, 26696), (400, 26702), (449, 26858), (469, 26924), (479,

26957), (480, 26960), (505, 27056), (509, 27065), (512, 27071), (523, 27107), (526, 27116), (529, 27134), (538, 27167), (544, 27200), (558, 27236), (559, 27239), (642, 27533), (675, 27632), (690, 27686), (705, 27740),

Gene: NadineRae_43 Start: 29919, Stop: 32300, Start Num: 66

Candidate Starts for NadineRae_43:

(Start: 66 @29919 has 24 MA's), (188, 30387), (190, 30390), (207, 30447), (214, 30489), (216, 30498), (228, 30540), (251, 30600), (256, 30627), (276, 30729), (283, 30765), (309, 30849), (326, 30909), (330, 30921), (334, 30933), (344, 30978), (348, 30996), (357, 31038), (359, 31047), (431, 31260), (442, 31284), (444, 31293), (468, 31374), (480, 31416), (486, 31437), (489, 31443), (497, 31467), (531, 31566), (533, 31569), (548, 31641), (573, 31725), (588, 31806), (589, 31809), (627, 31935), (650, 31989), (658, 32019), (660, 32034), (686, 32109), (692, 32157),

Gene: Nanosmite_34 Start: 25036, Stop: 27726, Start Num: 23

Candidate Starts for Nanosmite_34:

(Start: 23 @25036 has 1 MA's), (26, 25042), (45, 25144), (60, 25198), (74, 25246), (75, 25252), (97, 25321), (101, 25330), (139, 25495), (144, 25516), (156, 25561), (169, 25630), (206, 25783), (233, 25879), (254, 25969), (256, 25975), (261, 25987), (280, 26098), (281, 26101), (322, 26284), (329, 26308), (345, 26371), (349, 26386), (350, 26389), (355, 26419), (396, 26581), (409, 26611), (451, 26755), (452, 26761), (499, 26920), (508, 26947), (512, 26956), (539, 27055), (558, 27118), (562, 27130), (622, 27364), (624, 27370), (634, 27397), (647, 27427), (705, 27622), (709, 27655),

Gene: NatB6_43 Start: 32659, Stop: 35025, Start Num: 66

Candidate Starts for NatB6_43:

(Start: 66 @32659 has 24 MA's), (112, 32788), (188, 33127), (190, 33130), (256, 33367), (265, 33406), (267, 33421), (283, 33505), (284, 33511), (326, 33649), (350, 33742), (357, 33778), (419, 33970), (428, 33994), (442, 34024), (444, 34033), (456, 34078), (512, 34246), (533, 34309), (543, 34354), (548, 34378), (588, 34543), (589, 34546), (597, 34579), (607, 34621), (626, 34672), (647, 34723), (650, 34729), (655, 34750), (658, 34759), (660, 34774), (676, 34819), (714, 35005),

Gene: Neighly_26 Start: 21060, Stop: 23564, Start Num: 64

Candidate Starts for Neighly_26:

(Start: 64 @21060 has 25 MA's), (77, 21108), (82, 21120), (126, 21267), (142, 21336), (163, 21420), (197, 21573), (204, 21597), (210, 21624), (236, 21708), (237, 21717), (239, 21726), (244, 21753), (251, 21774), (256, 21807), (261, 21819), (265, 21846), (288, 21975), (307, 22053), (311, 22074), (323, 22119), (333, 22155), (336, 22167), (341, 22191), (352, 22242), (355, 22254), (375, 22332), (386, 22374), (405, 22437), (414, 22461), (445, 22575), (448, 22590), (452, 22611), (463, 22650), (503, 22791), (532, 22878), (535, 22887), (546, 22944), (561, 22980), (570, 23013), (575, 23034), (600, 23145), (601, 23148), (605, 23172), (614, 23196), (617, 23202), (619, 23205), (630, 23232), (640, 23253), (646, 23271), (663, 23322), (689, 23403), (713, 23550),

Gene: NovumRegina_43 Start: 32989, Stop: 35355, Start Num: 66

Candidate Starts for NovumRegina_43:

(Start: 66 @32989 has 24 MA's), (112, 33118), (188, 33457), (190, 33460), (256, 33697), (265, 33736), (267, 33751), (283, 33835), (284, 33841), (326, 33979), (350, 34072), (357, 34108), (419, 34300), (428, 34324), (442, 34354), (444, 34363), (456, 34408), (512, 34576), (533, 34639), (543, 34684), (548, 34708), (588, 34873), (589, 34876), (597, 34909), (607, 34951), (626, 35002), (647, 35053), (650, 35059), (655, 35080), (658, 35089), (660, 35104), (676, 35149), (714, 35335),

Gene: Nyceirae_30 Start: 24275, Stop: 26842, Start Num: 14

Candidate Starts for Nyceirae_30:

(Start: 14 @24275 has 4 MA's), (41, 24389), (43, 24398), (55, 24440), (136, 24701), (171, 24875), (188, 24950), (207, 25010), (213, 25046), (226, 25097), (251, 25172), (254, 25193), (256, 25199),

(263, 25223), (265, 25238), (268, 25256), (271, 25280), (284, 25346), (305, 25394), (309, 25415), (338, 25508), (342, 25529), (417, 25763), (423, 25778), (449, 25859), (450, 25862), (451, 25871), (460, 25913), (490, 26003), (494, 26015), (507, 26060), (512, 26072), (518, 26090), (553, 26222), (572, 26288), (583, 26336), (588, 26369), (601, 26414), (603, 26429), (610, 26450), (639, 26525), (688, 26660), (698, 26702), (710, 26777),

Gene: OhShagHennessy_20 Start: 18962, Stop: 21643, Start Num: 79

Candidate Starts for OhShagHennessy_20:

(Start: 79 @18962 has 19 MA's), (81, 18968), (130, 19145), (134, 19175), (150, 19238), (167, 19313), (186, 19427), (191, 19433), (208, 19499), (222, 19562), (233, 19595), (235, 19598), (240, 19622), (244, 19646), (246, 19652), (248, 19658), (258, 19706), (263, 19727), (265, 19742), (269, 19763), (275, 19802), (278, 19814), (280, 19832), (296, 19907), (303, 19937), (306, 19961), (307, 19964), (317, 20009), (331, 20060), (337, 20078), (348, 20132), (364, 20204), (366, 20216), (369, 20225), (372, 20243), (378, 20267), (384, 20297), (392, 20333), (404, 20366), (406, 20372), (418, 20438), (437, 20504), (447, 20543), (466, 20624), (478, 20660), (479, 20666), (505, 20771), (509, 20780), (514, 20795), (519, 20813), (531, 20855), (554, 20951), (569, 21011), (572, 21017), (574, 21029), (596, 21140), (601, 21170), (602, 21176), (635, 21272), (638, 21278), (647, 21302), (650, 21308), (651, 21314), (661, 21359), (664, 21368), (667, 21377), (680, 21416), (689, 21452), (690, 21461), (693, 21476), (711, 21572), (719, 21623), (720, 21629),

Gene: OkiRoe_25 Start: 21161, Stop: 23659, Start Num: 64

Candidate Starts for OkiRoe_25:

(Start: 64 @21161 has 25 MA's), (82, 21221), (86, 21230), (126, 21371), (142, 21440), (163, 21524), (197, 21677), (204, 21701), (210, 21728), (220, 21770), (231, 21797), (235, 21809), (236, 21812), (237, 21821), (239, 21830), (244, 21857), (252, 21890), (265, 21950), (273, 22001), (288, 22079), (307, 22157), (311, 22178), (319, 22214), (323, 22223), (333, 22259), (340, 22292), (341, 22295), (346, 22316), (352, 22346), (355, 22358), (393, 22517), (415, 22577), (420, 22586), (425, 22601), (430, 22622), (448, 22694), (451, 22709), (459, 22739), (461, 22742), (477, 22781), (484, 22808), (497, 22856), (501, 22886), (504, 22889), (510, 22901), (515, 22913), (532, 22970), (537, 22991), (540, 23003), (549, 23051), (561, 23078), (580, 23156), (581, 23159), (597, 23234), (601, 23246), (612, 23288), (614, 23291), (622, 23303), (690, 23504), (696, 23528), (701, 23537), (703, 23552), (713, 23645), (715, 23648),

Gene: Omnicron_26 Start: 19980, Stop: 22484, Start Num: 64

Candidate Starts for Omnicron_26:

(Start: 64 @19980 has 25 MA's), (77, 20028), (82, 20040), (126, 20187), (142, 20256), (145, 20268), (197, 20493), (204, 20517), (206, 20523), (211, 20547), (218, 20580), (231, 20613), (236, 20628), (237, 20637), (239, 20646), (244, 20673), (251, 20694), (256, 20727), (261, 20739), (265, 20766), (270, 20802), (288, 20895), (307, 20973), (311, 20994), (319, 21030), (323, 21039), (333, 21075), (336, 21087), (340, 21108), (341, 21111), (346, 21132), (352, 21162), (355, 21174), (386, 21294), (388, 21300), (391, 21315), (405, 21357), (414, 21381), (430, 21438), (445, 21495), (448, 21510), (452, 21531), (455, 21540), (472, 21588), (484, 21633), (498, 21684), (503, 21711), (532, 21798), (561, 21900), (570, 21933), (575, 21954), (578, 21969), (582, 21990), (593, 22038), (600, 22065), (601, 22068), (605, 22092), (614, 22116), (617, 22122), (619, 22125), (621, 22128), (646, 22191), (663, 22242), (713, 22470),

Gene: Opia_32 Start: 29961, Stop: 32681, Start Num: 58

Candidate Starts for Opia_32:

(Start: 58 @29961 has 36 MA's), (74, 30015), (89, 30054), (102, 30099), (110, 30123), (111, 30126), (120, 30159), (143, 30267), (147, 30288), (148, 30291), (162, 30345), (173, 30405), (177, 30429), (184, 30465), (198, 30513), (204, 30534), (212, 30573), (222, 30612), (228, 30627), (241, 30681), (243, 30693), (251, 30717), (255, 30741), (260, 30753), (263, 30768), (265, 30783), (271, 30825), (275, 30843), (282, 30882), (287, 30906), (325, 31077), (345, 31155), (358, 31215), (366, 31251),

(367, 31254), (384, 31332), (392, 31368), (399, 31392), (407, 31413), (447, 31584), (448, 31590), (478, 31701), (485, 31728), (499, 31791), (500, 31797), (505, 31812), (519, 31854), (541, 31941), (546, 31968), (555, 31998), (562, 32016), (566, 32037), (567, 32046), (569, 32052), (572, 32058), (574, 32070), (594, 32175), (598, 32193), (603, 32226), (635, 32313), (647, 32343), (650, 32349), (664, 32409), (690, 32502), (693, 32517), (705, 32559), (721, 32673),

Gene: PR_24 Start: 27208, Stop: 29922, Start Num: 59

Candidate Starts for PR_24:

(Start: 59 @27208 has 4 MA's), (Start: 79 @27277 has 19 MA's), (94, 27310), (100, 27331), (118, 27388), (123, 27418), (127, 27436), (147, 27529), (148, 27532), (162, 27586), (163, 27592), (177, 27670), (184, 27706), (189, 27727), (204, 27775), (212, 27814), (228, 27868), (241, 27922), (243, 27934), (251, 27958), (255, 27982), (256, 27985), (265, 28024), (271, 28066), (287, 28147), (289, 28162), (299, 28192), (318, 28285), (325, 28318), (340, 28375), (343, 28387), (345, 28396), (358, 28456), (366, 28492), (367, 28495), (384, 28573), (392, 28609), (402, 28639), (407, 28654), (432, 28762), (443, 28810), (445, 28816), (447, 28825), (448, 28831), (478, 28942), (485, 28969), (499, 29032), (500, 29038), (505, 29053), (519, 29095), (555, 29239), (562, 29257), (572, 29299), (574, 29311), (594, 29416), (598, 29434), (603, 29467), (635, 29554), (647, 29584), (650, 29590), (654, 29611), (664, 29650), (669, 29668), (690, 29743), (694, 29764), (705, 29800), (721, 29914),

Gene: PYPDinur_20 Start: 18813, Stop: 21416, Start Num: 31

Candidate Starts for PYPDinur_20:

(Start: 31 @18813 has 6 MA's), (33, 18819), (36, 18840), (51, 18918), (91, 19038), (104, 19077), (154, 19278), (156, 19284), (164, 19317), (165, 19320), (206, 19500), (208, 19509), (211, 19524), (218, 19542), (229, 19572), (245, 19626), (251, 19644), (257, 19674), (274, 19764), (276, 19773), (277, 19776), (285, 19818), (295, 19866), (316, 19959), (322, 19980), (329, 20004), (336, 20028), (347, 20073), (355, 20115), (385, 20226), (389, 20247), (392, 20256), (396, 20274), (426, 20346), (452, 20448), (471, 20499), (473, 20505), (484, 20547), (487, 20559), (498, 20598), (512, 20646), (518, 20664), (519, 20670), (552, 20796), (556, 20805), (577, 20886), (634, 21087), (645, 21114), (651, 21129), (679, 21213), (705, 21312),

Gene: Paola_25 Start: 21160, Stop: 23658, Start Num: 64

Candidate Starts for Paola_25:

(Start: 64 @21160 has 25 MA's), (82, 21220), (86, 21229), (126, 21370), (142, 21439), (163, 21523), (197, 21676), (204, 21700), (210, 21727), (220, 21769), (231, 21796), (235, 21808), (236, 21811), (237, 21820), (239, 21829), (244, 21856), (252, 21889), (256, 21910), (265, 21949), (273, 22000), (288, 22078), (307, 22156), (319, 22213), (323, 22222), (333, 22258), (340, 22291), (341, 22294), (346, 22315), (352, 22345), (355, 22357), (393, 22516), (415, 22576), (420, 22585), (425, 22600), (430, 22621), (448, 22693), (451, 22708), (459, 22738), (461, 22741), (472, 22765), (477, 22780), (484, 22807), (497, 22855), (501, 22885), (504, 22888), (510, 22900), (515, 22912), (532, 22969), (537, 22990), (540, 23002), (549, 23050), (561, 23077), (580, 23155), (581, 23158), (597, 23233), (601, 23245), (612, 23287), (614, 23290), (622, 23302), (690, 23503), (696, 23527), (701, 23536), (703, 23551), (713, 23644), (715, 23647),

Gene: Patience_37 Start: 29291, Stop: 32593, Start Num: 3

Candidate Starts for Patience_37:

(Start: 3 @29291 has 3 MA's), (4, 29303), (6, 29432), (7, 29441), (8, 29453), (25, 29627), (42, 29711), (81, 29855), (85, 29864), (97, 29906), (109, 29939), (117, 29966), (120, 29978), (163, 30194), (172, 30251), (175, 30272), (199, 30377), (208, 30413), (242, 30551), (256, 30620), (263, 30644), (284, 30770), (287, 30785), (292, 30812), (298, 30833), (301, 30848), (302, 30857), (366, 31163), (367, 31166), (371, 31187), (384, 31244), (392, 31280), (399, 31304), (402, 31310), (432, 31433), (447, 31496), (464, 31571), (478, 31613), (519, 31766), (530, 31805), (555, 31910), (562, 31928), (567, 31958), (572, 31970), (574, 31982), (613, 32171), (650, 32261), (664, 32321), (667, 32330), (693, 32429), (719, 32576), (720, 32582), (721, 32585),

Gene: Pemberton_46 Start: 30659, Stop: 33034, Start Num: 66

Candidate Starts for Pemberton_46:

(Start: 66 @30659 has 24 MA's), (188, 31127), (207, 31187), (214, 31229), (216, 31238), (228, 31280), (251, 31340), (256, 31367), (283, 31505), (284, 31511), (309, 31589), (326, 31649), (334, 31673), (348, 31736), (357, 31778), (396, 31910), (406, 31931), (431, 32000), (442, 32024), (444, 32033), (456, 32075), (480, 32156), (486, 32177), (489, 32183), (501, 32225), (531, 32306), (548, 32381), (606, 32621), (607, 32624), (639, 32702), (648, 32726), (658, 32759), (686, 32843), (695, 32900), (706, 32933),

Gene: Phantasmagoria_32 Start: 29972, Stop: 32692, Start Num: 58

Candidate Starts for Phantasmagoria_32:

(Start: 58 @29972 has 36 MA's), (74, 30026), (89, 30065), (102, 30110), (110, 30134), (111, 30137), (120, 30170), (143, 30278), (147, 30299), (148, 30302), (162, 30356), (173, 30416), (177, 30440), (184, 30476), (198, 30524), (204, 30545), (212, 30584), (222, 30623), (228, 30638), (241, 30692), (243, 30704), (251, 30728), (255, 30752), (260, 30764), (263, 30779), (265, 30794), (271, 30836), (275, 30854), (282, 30893), (287, 30917), (325, 31088), (345, 31166), (358, 31226), (366, 31262), (367, 31265), (384, 31343), (392, 31379), (399, 31403), (407, 31424), (447, 31595), (448, 31601), (478, 31712), (485, 31739), (499, 31802), (500, 31808), (505, 31823), (519, 31865), (541, 31952), (546, 31979), (555, 32009), (562, 32027), (566, 32048), (567, 32057), (569, 32063), (572, 32069), (574, 32081), (594, 32186), (598, 32204), (603, 32237), (635, 32324), (647, 32354), (650, 32360), (664, 32420), (690, 32513), (693, 32528), (705, 32570), (721, 32684),

Gene: Phishy_29 Start: 24193, Stop: 26796, Start Num: 14

Candidate Starts for Phishy_29:

(Start: 14 @24193 has 4 MA's), (41, 24307), (43, 24316), (136, 24619), (154, 24700), (171, 24793), (188, 24868), (207, 24928), (213, 24964), (215, 24976), (224, 25012), (226, 25015), (237, 25054), (251, 25090), (254, 25111), (256, 25117), (263, 25141), (265, 25156), (268, 25174), (271, 25198), (305, 25312), (309, 25333), (338, 25426), (342, 25447), (378, 25591), (413, 25693), (417, 25717), (421, 25726), (423, 25732), (449, 25813), (450, 25816), (451, 25825), (456, 25846), (460, 25867), (490, 25957), (494, 25969), (507, 26014), (512, 26026), (553, 26176), (572, 26242), (588, 26323), (601, 26368), (603, 26383), (610, 26404), (683, 26608), (688, 26614), (710, 26731), (717, 26782), (718, 26785),

Gene: Phomeo_42 Start: 33258, Stop: 35624, Start Num: 66

Candidate Starts for Phomeo_42:

(Start: 66 @33258 has 24 MA's), (80, 33300), (112, 33387), (188, 33726), (256, 33966), (265, 34005), (267, 34020), (283, 34104), (284, 34110), (326, 34248), (350, 34341), (357, 34377), (419, 34569), (428, 34593), (442, 34623), (444, 34632), (456, 34677), (512, 34845), (533, 34908), (543, 34953), (548, 34977), (588, 35142), (589, 35145), (597, 35178), (607, 35220), (626, 35271), (647, 35322), (650, 35328), (655, 35349), (658, 35358), (660, 35373), (676, 35418), (714, 35604),

Gene: Phrann_20 Start: 17560, Stop: 20412, Start Num: 19

Candidate Starts for Phrann_20:

(Start: 17 @17548 has 2 MA's), (Start: 19 @17560 has 2 MA's), (Start: 23 @17572 has 1 MA's), (48, 17683), (56, 17707), (57, 17710), (62, 17719), (107, 17857), (119, 17899), (120, 17902), (137, 17992), (141, 18004), (145, 18025), (151, 18049), (168, 18124), (180, 18196), (189, 18226), (200, 18262), (213, 18325), (219, 18340), (232, 18373), (251, 18448), (254, 18472), (256, 18478), (267, 18532), (269, 18538), (285, 18625), (288, 18646), (294, 18670), (308, 18736), (313, 18757), (318, 18775), (325, 18808), (334, 18835), (345, 18886), (352, 18922), (358, 18946), (366, 18982), (369, 18991), (371, 19006), (378, 19033), (384, 19063), (392, 19099), (399, 19123), (424, 19222), (435, 19261), (443, 19300), (448, 19321), (478, 19432), (485, 19459), (492, 19489), (498, 19510), (499, 19522), (500, 19528), (519, 19585), (530, 19624), (555, 19729), (562, 19747), (572, 19789), (574, 19801),

(603, 19957), (635, 20044), (647, 20074), (650, 20080), (664, 20140), (669, 20158), (690, 20233), (694, 20254), (705, 20290), (721, 20404),

Gene: Pimento_26 Start: 20304, Stop: 22793, Start Num: 38

Candidate Starts for Pimento_26:

(Start: 38 @20304 has 2 MA's), (78, 20436), (84, 20451), (98, 20496), (105, 20514), (143, 20679), (155, 20733), (159, 20742), (164, 20769), (171, 20820), (173, 20826), (213, 20991), (216, 21006), (226, 21042), (227, 21045), (251, 21117), (253, 21129), (254, 21138), (256, 21144), (261, 21156), (263, 21168), (265, 21183), (269, 21204), (274, 21240), (304, 21336), (305, 21339), (309, 21360), (338, 21453), (344, 21483), (357, 21543), (358, 21549), (363, 21570), (367, 21585), (417, 21702), (423, 21717), (449, 21798), (450, 21801), (460, 21852), (484, 21921), (485, 21924), (490, 21942), (494, 21954), (498, 21969), (512, 22011), (518, 22029), (531, 22077), (553, 22161), (572, 22227), (601, 22353), (639, 22464), (689, 22614), (705, 22677), (709, 22710), (719, 22782),

Gene: Pippy_18 Start: 17389, Stop: 20253, Start Num: 18

Candidate Starts for Pippy_18:

(16, 17377), (Start: 18 @17389 has 10 MA's), (Start: 23 @17410 has 1 MA's), (29, 17431), (36, 17470), (52, 17539), (56, 17548), (57, 17551), (76, 17602), (107, 17692), (120, 17737), (137, 17827), (139, 17836), (141, 17839), (145, 17860), (148, 17872), (158, 17905), (182, 18040), (196, 18088), (200, 18103), (206, 18124), (213, 18166), (219, 18181), (222, 18190), (232, 18217), (234, 18223), (243, 18268), (247, 18277), (251, 18292), (254, 18313), (256, 18319), (260, 18328), (264, 18355), (267, 18373), (285, 18466), (288, 18487), (294, 18511), (308, 18577), (313, 18598), (318, 18616), (325, 18649), (332, 18673), (334, 18676), (345, 18727), (352, 18763), (358, 18787), (366, 18823), (369, 18832), (371, 18847), (378, 18874), (384, 18904), (392, 18940), (399, 18964), (424, 19063), (435, 19102), (447, 19156), (478, 19273), (485, 19300), (499, 19363), (500, 19369), (505, 19384), (519, 19426), (541, 19513), (546, 19540), (555, 19570), (562, 19588), (567, 19618), (572, 19630), (574, 19642), (594, 19747), (598, 19765), (603, 19798), (635, 19885), (647, 19915), (650, 19921), (664, 19981), (667, 19990), (669, 19999), (690, 20074), (694, 20095), (705, 20131), (721, 20245),

Gene: Poochiewood_20 Start: 18997, Stop: 21678, Start Num: 79

Candidate Starts for Poochiewood_20:

(Start: 79 @18997 has 19 MA's), (81, 19003), (130, 19180), (134, 19210), (150, 19273), (167, 19348), (176, 19402), (186, 19462), (191, 19468), (208, 19534), (222, 19597), (233, 19630), (235, 19633), (240, 19657), (246, 19687), (248, 19693), (258, 19741), (263, 19762), (265, 19777), (269, 19798), (275, 19837), (278, 19849), (280, 19867), (290, 19924), (296, 19942), (303, 19972), (306, 19996), (307, 19999), (317, 20044), (331, 20095), (337, 20113), (348, 20167), (364, 20239), (366, 20251), (369, 20260), (378, 20302), (384, 20332), (392, 20368), (396, 20386), (404, 20401), (406, 20407), (411, 20440), (445, 20569), (447, 20578), (466, 20659), (478, 20695), (479, 20701), (505, 20806), (509, 20815), (514, 20830), (519, 20848), (531, 20890), (554, 20986), (555, 20992), (569, 21046), (572, 21052), (574, 21064), (596, 21175), (601, 21205), (602, 21211), (635, 21307), (638, 21313), (647, 21337), (650, 21343), (651, 21349), (661, 21394), (664, 21403), (667, 21412), (680, 21451), (689, 21487), (690, 21496), (693, 21511), (711, 21607), (719, 21658), (720, 21664),

Gene: PrinceCharming_32 Start: 30078, Stop: 32798, Start Num: 58

Candidate Starts for PrinceCharming_32:

(Start: 58 @30078 has 36 MA's), (74, 30132), (89, 30171), (102, 30216), (110, 30240), (111, 30243), (120, 30276), (143, 30384), (147, 30405), (148, 30408), (162, 30462), (173, 30522), (177, 30546), (184, 30582), (198, 30630), (204, 30651), (212, 30690), (222, 30729), (228, 30744), (241, 30798), (243, 30810), (251, 30834), (255, 30858), (260, 30870), (263, 30885), (265, 30900), (271, 30942), (275, 30960), (282, 30999), (287, 31023), (325, 31194), (345, 31272), (358, 31332), (366, 31368), (367, 31371), (384, 31449), (392, 31485), (399, 31509), (424, 31608), (435, 31647), (447, 31701), (478, 31818), (485, 31845), (499, 31908), (500, 31914), (505, 31929), (519, 31971), (541, 32058), (546, 32085), (555, 32115), (562, 32133), (566, 32154), (567, 32163), (569, 32169), (572, 32175),

(574, 32187), (594, 32292), (598, 32310), (603, 32343), (635, 32430), (647, 32460), (650, 32466), (664, 32526), (690, 32619), (693, 32634), (705, 32676), (721, 32790),

Gene: Psycho_26 Start: 21191, Stop: 23695, Start Num: 64

Candidate Starts for Psycho_26:

(Start: 64 @21191 has 25 MA's), (77, 21239), (82, 21251), (126, 21398), (142, 21467), (163, 21551), (197, 21704), (204, 21728), (210, 21755), (236, 21839), (237, 21848), (239, 21857), (244, 21884), (251, 21905), (256, 21938), (261, 21950), (265, 21977), (288, 22106), (307, 22184), (311, 22205), (323, 22250), (333, 22286), (336, 22298), (341, 22322), (352, 22373), (355, 22385), (375, 22463), (386, 22505), (405, 22568), (414, 22592), (445, 22706), (448, 22721), (452, 22742), (463, 22781), (503, 22922), (532, 23009), (535, 23018), (546, 23075), (561, 23111), (570, 23144), (575, 23165), (600, 23276), (601, 23279), (605, 23303), (614, 23327), (617, 23333), (619, 23336), (630, 23363), (640, 23384), (646, 23402), (663, 23453), (689, 23534), (713, 23681),

Gene: Quby_20 Start: 18821, Stop: 21457, Start Num: 31

Candidate Starts for Quby_20:

(Start: 31 @18821 has 6 MA's), (33, 18827), (36, 18848), (51, 18926), (91, 19046), (104, 19085), (144, 19247), (154, 19286), (156, 19292), (163, 19322), (169, 19358), (174, 19394), (189, 19454), (204, 19505), (207, 19517), (218, 19565), (231, 19601), (250, 19679), (259, 19715), (261, 19721), (270, 19784), (274, 19802), (277, 19814), (285, 19856), (295, 19904), (322, 20018), (329, 20042), (349, 20120), (355, 20153), (361, 20174), (362, 20177), (381, 20240), (392, 20294), (395, 20309), (438, 20423), (450, 20477), (452, 20492), (454, 20498), (484, 20594), (488, 20606), (495, 20627), (498, 20639), (499, 20651), (508, 20678), (512, 20687), (523, 20723), (524, 20729), (526, 20732), (550, 20837), (557, 20849), (562, 20861), (563, 20864), (577, 20927), (579, 20936), (585, 20972), (631, 21122), (634, 21128), (647, 21158), (652, 21176), (671, 21233), (679, 21254), (681, 21257), (686, 21266), (690, 21299), (705, 21353),

Gene: Qyrzula_30 Start: 30056, Stop: 32776, Start Num: 58

Candidate Starts for Qyrzula_30:

(Start: 58 @30056 has 36 MA's), (74, 30110), (89, 30149), (102, 30194), (110, 30218), (111, 30221), (120, 30254), (143, 30362), (147, 30383), (148, 30386), (162, 30440), (173, 30500), (177, 30524), (184, 30560), (187, 30578), (189, 30581), (198, 30608), (204, 30629), (212, 30668), (222, 30707), (228, 30722), (241, 30776), (243, 30788), (251, 30812), (255, 30836), (260, 30848), (263, 30863), (265, 30878), (271, 30920), (275, 30938), (282, 30977), (287, 31001), (325, 31172), (345, 31250), (358, 31310), (366, 31346), (367, 31349), (384, 31427), (392, 31463), (399, 31487), (424, 31586), (435, 31625), (447, 31679), (478, 31796), (485, 31823), (499, 31886), (500, 31892), (505, 31907), (519, 31949), (541, 32036), (546, 32063), (555, 32093), (562, 32111), (566, 32132), (567, 32141), (569, 32147), (572, 32153), (574, 32165), (594, 32270), (598, 32288), (603, 32321), (635, 32408), (647, 32438), (650, 32444), (664, 32504), (690, 32597), (705, 32654), (721, 32768),

Gene: Rando14_26 Start: 19880, Stop: 22384, Start Num: 64

Candidate Starts for Rando14_26:

(50, 19835), (Start: 64 @19880 has 25 MA's), (77, 19928), (82, 19940), (126, 20087), (142, 20156), (197, 20393), (204, 20417), (206, 20423), (211, 20447), (231, 20513), (236, 20528), (237, 20537), (239, 20546), (244, 20573), (251, 20594), (256, 20627), (265, 20666), (307, 20873), (311, 20894), (319, 20930), (323, 20939), (333, 20975), (340, 21008), (341, 21011), (346, 21032), (352, 21062), (355, 21074), (386, 21194), (388, 21200), (391, 21215), (393, 21230), (403, 21251), (405, 21257), (414, 21281), (430, 21338), (445, 21395), (448, 21410), (452, 21431), (455, 21440), (466, 21479), (472, 21488), (503, 21611), (532, 21698), (561, 21800), (570, 21833), (575, 21854), (578, 21869), (582, 21890), (592, 21932), (593, 21938), (600, 21965), (601, 21968), (605, 21992), (614, 22016), (617, 22022), (619, 22025), (621, 22028), (663, 22142), (670, 22160), (689, 22223), (713, 22370),

Gene: RavenCo17_25 Start: 21406, Stop: 23838, Start Num: 67

Candidate Starts for RavenCo17_25:

(15, 21181), (21, 21217), (34, 21274), (35, 21277), (Start: 67 @21406 has 1 MA's), (90, 21472), (99, 21508), (159, 21754), (171, 21832), (207, 21967), (213, 22003), (216, 22018), (226, 22054), (237, 22093), (251, 22129), (256, 22156), (263, 22180), (265, 22195), (268, 22213), (282, 22294), (304, 22348), (305, 22351), (309, 22372), (310, 22381), (338, 22465), (344, 22495), (357, 22555), (358, 22561), (367, 22597), (398, 22696), (423, 22762), (460, 22897), (485, 22969), (490, 22987), (494, 22999), (498, 23014), (512, 23056), (518, 23074), (531, 23122), (553, 23206), (572, 23272), (601, 23398), (639, 23509), (689, 23659), (705, 23722), (709, 23755),

Gene: Raymond7_20 Start: 17560, Stop: 20415, Start Num: 19

Candidate Starts for Raymond7_20:

(Start: 17 @17548 has 2 MA's), (Start: 19 @17560 has 2 MA's), (Start: 23 @17572 has 1 MA's), (48, 17683), (56, 17707), (57, 17710), (62, 17719), (137, 17992), (141, 18004), (145, 18025), (151, 18049), (168, 18124), (180, 18196), (189, 18226), (200, 18262), (213, 18325), (219, 18340), (232, 18373), (251, 18448), (254, 18472), (256, 18478), (261, 18490), (267, 18532), (269, 18538), (285, 18625), (288, 18646), (294, 18670), (308, 18736), (313, 18757), (318, 18775), (325, 18808), (332, 18832), (334, 18835), (345, 18886), (352, 18922), (358, 18946), (366, 18982), (392, 19099), (396, 19117), (397, 19120), (422, 19219), (447, 19318), (448, 19324), (478, 19435), (485, 19462), (499, 19525), (500, 19531), (505, 19546), (519, 19588), (530, 19627), (541, 19675), (546, 19702), (555, 19732), (562, 19750), (567, 19780), (569, 19786), (572, 19792), (574, 19804), (594, 19909), (598, 19927), (603, 19960), (607, 19975), (647, 20077), (650, 20083), (664, 20143), (667, 20152), (669, 20161), (677, 20188), (690, 20236), (693, 20251), (694, 20257), (705, 20293), (721, 20407),

Gene: Rey_34 Start: 25395, Stop: 28076, Start Num: 20

Candidate Starts for Rey_34:

(Start: 20 @25395 has 6 MA's), (45, 25512), (60, 25566), (70, 25596), (71, 25599), (74, 25614), (78, 25632), (97, 25689), (139, 25863), (140, 25866), (156, 25929), (161, 25950), (169, 25995), (170, 26004), (181, 26067), (206, 26148), (207, 26154), (208, 26157), (218, 26190), (233, 26232), (235, 26235), (254, 26319), (256, 26325), (257, 26328), (261, 26337), (271, 26403), (272, 26412), (274, 26418), (276, 26427), (288, 26493), (310, 26592), (311, 26595), (318, 26616), (324, 26646), (329, 26658), (339, 26691), (345, 26721), (350, 26739), (356, 26772), (362, 26793), (387, 26886), (392, 26910), (397, 26928), (400, 26934), (406, 26946), (449, 27090), (454, 27114), (469, 27156), (480, 27192), (491, 27234), (505, 27288), (509, 27297), (526, 27348), (529, 27366), (545, 27435), (547, 27441), (558, 27468), (559, 27471), (674, 27861), (705, 27972),

Gene: Rhinoforte_32 Start: 30081, Stop: 32801, Start Num: 58

Candidate Starts for Rhinoforte_32:

(Start: 58 @30081 has 36 MA's), (74, 30135), (89, 30174), (102, 30219), (110, 30243), (111, 30246), (120, 30279), (143, 30387), (147, 30408), (148, 30411), (162, 30465), (173, 30525), (177, 30549), (184, 30585), (198, 30633), (204, 30654), (212, 30693), (222, 30732), (228, 30747), (241, 30801), (243, 30813), (251, 30837), (255, 30861), (260, 30873), (263, 30888), (265, 30903), (271, 30945), (275, 30963), (282, 31002), (287, 31026), (325, 31197), (345, 31275), (358, 31335), (366, 31371), (367, 31374), (384, 31452), (392, 31488), (399, 31512), (407, 31533), (447, 31704), (448, 31710), (478, 31821), (485, 31848), (499, 31911), (500, 31917), (505, 31932), (519, 31974), (541, 32061), (546, 32088), (555, 32118), (562, 32136), (566, 32157), (567, 32166), (569, 32172), (572, 32178), (574, 32190), (594, 32295), (598, 32313), (603, 32346), (635, 32433), (647, 32463), (650, 32469), (664, 32529), (690, 32622), (693, 32637), (705, 32679), (721, 32793),

Gene: Rose5_20 Start: 18997, Stop: 21678, Start Num: 79

Candidate Starts for Rose5_20:

(Start: 79 @18997 has 19 MA's), (81, 19003), (130, 19180), (134, 19210), (150, 19273), (167, 19348), (176, 19402), (186, 19462), (191, 19468), (208, 19534), (222, 19597), (233, 19630), (235, 19633), (240, 19657), (246, 19687), (248, 19693), (258, 19741), (263, 19762), (265, 19777), (269, 19798),

(275, 19837), (278, 19849), (280, 19867), (290, 19924), (296, 19942), (303, 19972), (306, 19996), (307, 19999), (317, 20044), (331, 20095), (337, 20113), (348, 20167), (364, 20239), (366, 20251), (369, 20260), (378, 20302), (384, 20332), (392, 20368), (396, 20386), (404, 20401), (406, 20407), (411, 20440), (445, 20569), (447, 20578), (466, 20659), (478, 20695), (479, 20701), (505, 20806), (509, 20815), (514, 20830), (519, 20848), (531, 20890), (554, 20986), (555, 20992), (569, 21046), (572, 21052), (574, 21064), (596, 21175), (601, 21205), (602, 21211), (635, 21307), (638, 21313), (647, 21337), (650, 21343), (651, 21349), (661, 21394), (664, 21403), (667, 21412), (680, 21451), (689, 21487), (690, 21496), (693, 21511), (711, 21607), (719, 21658), (720, 21664),

Gene: RoseMarie_31 Start: 26484, Stop: 29183, Start Num: 19

Candidate Starts for RoseMarie_31:

(Start: 19 @26484 has 2 MA's), (45, 26604), (49, 26619), (68, 26682), (71, 26691), (76, 26715), (91, 26760), (96, 26769), (108, 26811), (139, 26955), (144, 26976), (169, 27090), (196, 27207), (233, 27339), (236, 27345), (256, 27435), (260, 27444), (261, 27447), (263, 27459), (273, 27525), (281, 27561), (324, 27756), (329, 27768), (370, 27936), (392, 28020), (395, 28035), (397, 28041), (435, 28137), (450, 28203), (452, 28218), (454, 28224), (471, 28272), (483, 28314), (484, 28320), (499, 28377), (509, 28407), (512, 28413), (521, 28443), (545, 28548), (558, 28575), (562, 28587), (563, 28590), (613, 28806), (632, 28851), (634, 28854), (671, 28959), (675, 28971), (705, 29079), (713, 29166),

Gene: Rosebush_32 Start: 30088, Stop: 32808, Start Num: 58

Candidate Starts for Rosebush_32:

(Start: 58 @30088 has 36 MA's), (74, 30142), (89, 30181), (102, 30226), (110, 30250), (111, 30253), (120, 30286), (143, 30394), (147, 30415), (148, 30418), (162, 30472), (173, 30532), (177, 30556), (184, 30592), (198, 30640), (204, 30661), (212, 30700), (222, 30739), (228, 30754), (241, 30808), (243, 30820), (251, 30844), (255, 30868), (260, 30880), (263, 30895), (265, 30910), (271, 30952), (275, 30970), (282, 31009), (287, 31033), (325, 31204), (345, 31282), (358, 31342), (366, 31378), (367, 31381), (384, 31459), (392, 31495), (399, 31519), (407, 31540), (447, 31711), (448, 31717), (478, 31828), (485, 31855), (499, 31918), (500, 31924), (505, 31939), (519, 31981), (541, 32068), (546, 32095), (555, 32125), (562, 32143), (566, 32164), (567, 32173), (569, 32179), (572, 32185), (574, 32197), (594, 32302), (598, 32320), (603, 32353), (635, 32440), (647, 32470), (650, 32476), (664, 32536), (690, 32629), (693, 32644), (705, 32686), (721, 32800),

Gene: Sabella_32 Start: 29965, Stop: 32685, Start Num: 58

Candidate Starts for Sabella_32:

(Start: 58 @29965 has 36 MA's), (74, 30019), (89, 30058), (102, 30103), (110, 30127), (111, 30130), (120, 30163), (143, 30271), (147, 30292), (148, 30295), (162, 30349), (173, 30409), (177, 30433), (184, 30469), (187, 30487), (189, 30490), (198, 30517), (204, 30538), (212, 30577), (228, 30631), (241, 30685), (243, 30697), (251, 30721), (255, 30745), (260, 30757), (263, 30772), (265, 30787), (271, 30829), (275, 30847), (282, 30886), (287, 30910), (325, 31081), (345, 31159), (358, 31219), (366, 31255), (367, 31258), (384, 31336), (392, 31372), (399, 31396), (407, 31417), (447, 31588), (448, 31594), (478, 31705), (485, 31732), (499, 31795), (500, 31801), (505, 31816), (519, 31858), (541, 31945), (546, 31972), (555, 32002), (562, 32020), (566, 32041), (567, 32050), (569, 32056), (572, 32062), (574, 32074), (594, 32179), (598, 32197), (603, 32230), (635, 32317), (647, 32347), (650, 32353), (664, 32413), (690, 32506), (693, 32521), (705, 32563), (721, 32677),

Gene: SamScheppers_26 Start: 21811, Stop: 24555, Start Num: 40

Candidate Starts for SamScheppers_26:

(Start: 40 @21811 has 3 MA's), (72, 21901), (Start: 79 @21922 has 19 MA's), (92, 21946), (95, 21952), (100, 21970), (120, 22036), (137, 22126), (139, 22135), (141, 22138), (145, 22159), (148, 22171), (158, 22204), (182, 22339), (196, 22387), (200, 22402), (206, 22423), (209, 22441), (213, 22465), (219, 22480), (222, 22489), (232, 22516), (234, 22522), (243, 22567), (251, 22591), (253, 22603), (254, 22612), (256, 22618), (260, 22627), (264, 22654), (267, 22672), (285, 22765), (287, 22777),

(288, 22786), (308, 22876), (313, 22897), (318, 22915), (325, 22948), (334, 22975), (345, 23026), (352, 23062), (358, 23086), (366, 23122), (369, 23131), (371, 23146), (378, 23173), (384, 23203), (392, 23239), (396, 23257), (397, 23260), (402, 23269), (439, 23419), (447, 23458), (478, 23575), (485, 23602), (499, 23665), (500, 23671), (505, 23686), (519, 23728), (541, 23815), (546, 23842), (555, 23872), (562, 23890), (567, 23920), (572, 23932), (574, 23944), (595, 24052), (598, 24067), (603, 24100), (610, 24121), (635, 24187), (647, 24217), (650, 24223), (664, 24283), (669, 24301), (690, 24376), (694, 24397), (705, 24433), (721, 24547),

Gene: Sarma624_19 Start: 17226, Stop: 20090, Start Num: 18

Candidate Starts for Sarma624_19:

(Start: 18 @17226 has 10 MA's), (Start: 23 @17247 has 1 MA's), (29, 17268), (36, 17307), (52, 17376), (56, 17385), (57, 17388), (76, 17439), (107, 17529), (122, 17580), (137, 17664), (141, 17676), (145, 17697), (154, 17730), (182, 17877), (200, 17940), (209, 17979), (213, 18003), (219, 18018), (222, 18027), (232, 18054), (234, 18060), (251, 18129), (254, 18150), (256, 18156), (264, 18192), (267, 18210), (285, 18303), (288, 18324), (294, 18348), (308, 18414), (313, 18435), (318, 18453), (325, 18486), (334, 18513), (345, 18564), (352, 18600), (358, 18624), (366, 18660), (369, 18669), (371, 18684), (378, 18711), (384, 18741), (392, 18777), (399, 18801), (424, 18900), (435, 18939), (443, 18978), (448, 18999), (478, 19110), (485, 19137), (492, 19167), (498, 19188), (499, 19200), (500, 19206), (519, 19263), (555, 19407), (562, 19425), (572, 19467), (574, 19479), (603, 19635), (635, 19722), (647, 19752), (650, 19758), (664, 19818), (669, 19836), (690, 19911), (694, 19932), (705, 19968), (721, 20082),

Gene: Sejanus_27 Start: 26927, Stop: 29680, Start Num: 53

Candidate Starts for Sejanus_27:

(34, 26834), (Start: 53 @26927 has 3 MA's), (80, 27005), (94, 27041), (102, 27068), (110, 27092), (125, 27161), (139, 27230), (145, 27254), (148, 27266), (198, 27500), (202, 27512), (205, 27527), (212, 27563), (223, 27605), (239, 27659), (251, 27707), (255, 27737), (256, 27740), (277, 27848), (287, 27902), (289, 27917), (293, 27932), (308, 28001), (313, 28022), (318, 28040), (325, 28073), (332, 28097), (334, 28100), (345, 28151), (352, 28187), (358, 28211), (366, 28247), (369, 28256), (371, 28271), (378, 28298), (384, 28328), (392, 28364), (396, 28382), (397, 28385), (402, 28394), (432, 28520), (443, 28568), (478, 28700), (485, 28727), (498, 28778), (499, 28790), (500, 28796), (519, 28853), (530, 28892), (541, 28940), (546, 28967), (555, 28997), (562, 29015), (567, 29045), (572, 29057), (574, 29069), (595, 29177), (598, 29192), (603, 29225), (610, 29246), (635, 29312), (647, 29342), (650, 29348), (664, 29408), (667, 29417), (669, 29426), (690, 29501), (693, 29516), (694, 29522), (705, 29558), (721, 29672),

Gene: Sheng711_20 Start: 18813, Stop: 21416, Start Num: 31

Candidate Starts for Sheng711_20:

(Start: 31 @18813 has 6 MA's), (33, 18819), (36, 18840), (51, 18918), (91, 19038), (104, 19077), (154, 19278), (156, 19284), (164, 19317), (165, 19320), (206, 19500), (208, 19509), (211, 19524), (218, 19542), (229, 19572), (245, 19626), (251, 19644), (257, 19674), (274, 19764), (276, 19773), (277, 19776), (285, 19818), (295, 19866), (316, 19959), (322, 19980), (329, 20004), (336, 20028), (347, 20073), (355, 20115), (385, 20226), (389, 20247), (392, 20256), (396, 20274), (426, 20346), (452, 20448), (471, 20499), (473, 20505), (480, 20532), (484, 20547), (487, 20559), (498, 20598), (512, 20646), (519, 20670), (552, 20796), (556, 20805), (577, 20886), (634, 21087), (645, 21114), (651, 21129), (679, 21213), (705, 21312),

Gene: Silverleaf_20 Start: 18997, Stop: 21678, Start Num: 79

Candidate Starts for Silverleaf_20:

(Start: 79 @18997 has 19 MA's), (81, 19003), (130, 19180), (134, 19210), (150, 19273), (167, 19348), (176, 19402), (186, 19462), (191, 19468), (208, 19534), (222, 19597), (233, 19630), (235, 19633), (240, 19657), (244, 19681), (246, 19687), (248, 19693), (258, 19741), (263, 19762), (265, 19777), (269, 19798), (275, 19837), (278, 19849), (280, 19867), (290, 19924), (296, 19942), (303, 19972),

(306, 19996), (307, 19999), (317, 20044), (331, 20095), (337, 20113), (348, 20167), (364, 20239), (366, 20251), (369, 20260), (378, 20302), (384, 20332), (392, 20368), (396, 20386), (404, 20401), (406, 20407), (411, 20440), (445, 20569), (447, 20578), (466, 20659), (478, 20695), (479, 20701), (505, 20806), (509, 20815), (514, 20830), (519, 20848), (531, 20890), (554, 20986), (555, 20992), (569, 21046), (572, 21052), (574, 21064), (596, 21175), (601, 21205), (602, 21211), (610, 21241), (635, 21307), (638, 21313), (647, 21337), (650, 21343), (651, 21349), (661, 21394), (664, 21403), (667, 21412), (680, 21451), (689, 21487), (690, 21496), (693, 21511), (711, 21607), (719, 21658), (720, 21664),

Gene: SoSeph_25 Start: 21308, Stop: 23806, Start Num: 64

Candidate Starts for SoSeph_25:

(Start: 64 @21308 has 25 MA's), (82, 21368), (86, 21377), (126, 21518), (142, 21587), (163, 21671), (197, 21824), (204, 21848), (210, 21875), (220, 21917), (231, 21944), (235, 21956), (236, 21959), (237, 21968), (239, 21977), (244, 22004), (252, 22037), (265, 22097), (273, 22148), (288, 22226), (307, 22304), (311, 22325), (323, 22370), (333, 22406), (341, 22442), (346, 22463), (352, 22493), (355, 22505), (393, 22664), (415, 22724), (420, 22733), (425, 22748), (430, 22769), (448, 22841), (451, 22856), (459, 22886), (461, 22889), (472, 22913), (477, 22928), (484, 22955), (497, 23003), (501, 23033), (504, 23036), (510, 23048), (515, 23060), (532, 23117), (537, 23138), (540, 23150), (549, 23198), (561, 23225), (580, 23303), (581, 23306), (597, 23381), (601, 23393), (612, 23435), (614, 23438), (622, 23450), (690, 23651), (696, 23675), (701, 23684), (703, 23699), (713, 23792), (715, 23795),

Gene: Sprinklemunch_21 Start: 19351, Stop: 21831, Start Num: 32

Candidate Starts for Sprinklemunch_21:

(Start: 32 @19351 has 1 MA's), (47, 19411), (128, 19654), (136, 19693), (143, 19726), (171, 19867), (207, 20002), (213, 20038), (224, 20086), (226, 20089), (237, 20128), (256, 20191), (263, 20215), (265, 20230), (305, 20386), (309, 20407), (335, 20491), (338, 20500), (342, 20521), (344, 20530), (401, 20728), (421, 20761), (423, 20767), (449, 20848), (450, 20851), (451, 20860), (456, 20881), (460, 20902), (490, 20992), (494, 21004), (507, 21049), (512, 21061), (553, 21211), (572, 21277), (588, 21358), (601, 21403), (602, 21409), (610, 21439), (616, 21457), (639, 21514), (650, 21541), (672, 21619), (683, 21643), (710, 21766), (711, 21772),

Gene: Sukkupi_45 Start: 32233, Stop: 34608, Start Num: 66

Candidate Starts for Sukkupi_45:

(Start: 66 @32233 has 24 MA's), (188, 32701), (207, 32761), (214, 32803), (216, 32812), (228, 32854), (251, 32914), (256, 32941), (276, 33043), (283, 33079), (284, 33085), (334, 33247), (348, 33310), (357, 33352), (373, 33412), (396, 33484), (406, 33505), (431, 33574), (442, 33598), (444, 33607), (486, 33751), (489, 33757), (501, 33799), (531, 33880), (548, 33955), (606, 34195), (607, 34198), (639, 34276), (648, 34300), (658, 34333), (685, 34414), (692, 34465), (695, 34474),

Gene: SuperSonics_36 Start: 28479, Stop: 31769, Start Num: 4

Candidate Starts for SuperSonics_36:

(Start: 3 @28467 has 3 MA's), (4, 28479), (6, 28608), (7, 28617), (8, 28629), (22, 28797), (25, 28803), (42, 28887), (85, 29040), (97, 29082), (109, 29115), (117, 29142), (120, 29154), (163, 29370), (172, 29427), (175, 29448), (199, 29553), (208, 29589), (242, 29727), (256, 29796), (263, 29820), (284, 29946), (287, 29961), (292, 29988), (298, 30009), (301, 30024), (302, 30033), (366, 30339), (367, 30342), (371, 30363), (384, 30420), (392, 30456), (396, 30474), (397, 30477), (402, 30486), (407, 30501), (432, 30609), (447, 30672), (464, 30747), (478, 30789), (519, 30942), (530, 30981), (555, 31086), (562, 31104), (567, 31134), (572, 31146), (574, 31158), (613, 31347), (650, 31437), (664, 31497), (667, 31506), (690, 31590), (693, 31605), (719, 31752), (720, 31758), (721, 31761),

Gene: TA17A_33 Start: 29955, Stop: 32675, Start Num: 58

Candidate Starts for TA17A_33:

(Start: 58 @29955 has 36 MA's), (74, 30009), (89, 30048), (94, 30066), (102, 30093), (110, 30117), (111, 30120), (120, 30153), (143, 30261), (147, 30282), (148, 30285), (162, 30339), (173, 30399), (177, 30423), (184, 30459), (198, 30507), (204, 30528), (212, 30567), (228, 30621), (241, 30675), (243, 30687), (251, 30711), (255, 30735), (260, 30747), (263, 30762), (265, 30777), (271, 30819), (275, 30837), (282, 30876), (287, 30900), (325, 31071), (345, 31149), (358, 31209), (366, 31245), (367, 31248), (384, 31326), (392, 31362), (399, 31386), (424, 31485), (435, 31524), (447, 31578), (478, 31695), (485, 31722), (499, 31785), (500, 31791), (519, 31848), (541, 31935), (546, 31962), (555, 31992), (562, 32010), (566, 32031), (567, 32040), (569, 32046), (572, 32052), (574, 32064), (594, 32169), (598, 32187), (603, 32220), (635, 32307), (647, 32337), (650, 32343), (664, 32403), (690, 32496), (693, 32511), (705, 32553), (721, 32667),

Gene: Taquito_26 Start: 21892, Stop: 24636, Start Num: 40

Candidate Starts for Taquito_26:

(Start: 40 @21892 has 3 MA's), (72, 21982), (Start: 79 @22003 has 19 MA's), (92, 22027), (100, 22051), (120, 22117), (137, 22207), (139, 22216), (141, 22219), (145, 22240), (148, 22252), (158, 22285), (182, 22420), (196, 22468), (200, 22483), (206, 22504), (209, 22522), (213, 22546), (219, 22561), (222, 22570), (232, 22597), (234, 22603), (243, 22648), (251, 22672), (253, 22684), (254, 22693), (256, 22699), (260, 22708), (264, 22735), (267, 22753), (285, 22846), (287, 22858), (288, 22867), (308, 22957), (313, 22978), (318, 22996), (325, 23029), (334, 23056), (345, 23107), (352, 23143), (358, 23167), (366, 23203), (369, 23212), (371, 23227), (378, 23254), (384, 23284), (392, 23320), (396, 23338), (397, 23341), (402, 23350), (439, 23500), (447, 23539), (478, 23656), (485, 23683), (499, 23746), (500, 23752), (505, 23767), (519, 23809), (541, 23896), (546, 23923), (555, 23953), (562, 23971), (572, 24013), (574, 24025), (595, 24133), (598, 24148), (603, 24181), (610, 24202), (635, 24268), (647, 24298), (650, 24304), (664, 24364), (669, 24382), (690, 24457), (694, 24478), (705, 24514), (721, 24628),

Gene: Thyatira_25 Start: 21160, Stop: 23658, Start Num: 64

Candidate Starts for Thyatira_25:

(Start: 64 @21160 has 25 MA's), (82, 21220), (86, 21229), (126, 21370), (142, 21439), (163, 21523), (197, 21676), (204, 21700), (210, 21727), (220, 21769), (231, 21796), (235, 21808), (236, 21811), (237, 21820), (239, 21829), (244, 21856), (256, 21910), (265, 21949), (273, 22000), (288, 22078), (307, 22156), (311, 22177), (323, 22222), (333, 22258), (341, 22294), (346, 22315), (352, 22345), (355, 22357), (393, 22516), (415, 22576), (420, 22585), (425, 22600), (430, 22621), (448, 22693), (451, 22708), (459, 22738), (461, 22741), (472, 22765), (477, 22780), (484, 22807), (497, 22855), (501, 22885), (504, 22888), (510, 22900), (515, 22912), (532, 22969), (537, 22990), (540, 23002), (549, 23050), (561, 23077), (580, 23155), (581, 23158), (597, 23233), (601, 23245), (612, 23287), (614, 23290), (622, 23302), (690, 23503), (696, 23527), (701, 23536), (703, 23551), (713, 23644), (715, 23647),

Gene: Tinciduntolum_33 Start: 30093, Stop: 32813, Start Num: 58

Candidate Starts for Tinciduntolum_33:

(Start: 58 @30093 has 36 MA's), (74, 30147), (89, 30186), (102, 30231), (110, 30255), (111, 30258), (120, 30291), (143, 30399), (147, 30420), (148, 30423), (162, 30477), (173, 30537), (177, 30561), (184, 30597), (198, 30645), (204, 30666), (212, 30705), (222, 30744), (228, 30759), (241, 30813), (243, 30825), (251, 30849), (255, 30873), (260, 30885), (263, 30900), (265, 30915), (271, 30957), (275, 30975), (282, 31014), (287, 31038), (325, 31209), (345, 31287), (358, 31347), (366, 31383), (367, 31386), (384, 31464), (392, 31500), (399, 31524), (407, 31545), (447, 31716), (448, 31722), (478, 31833), (485, 31860), (499, 31923), (500, 31929), (505, 31944), (519, 31986), (541, 32073), (546, 32100), (555, 32130), (562, 32148), (566, 32169), (567, 32178), (569, 32184), (572, 32190), (574, 32202), (594, 32307), (598, 32325), (603, 32358), (635, 32445), (647, 32475), (650, 32481), (664, 32541), (690, 32634), (693, 32649), (705, 32691), (721, 32805),

Gene: Towmatter_35 Start: 31267, Stop: 34443, Start Num: 1

Candidate Starts for Towmatter_35:

(Start: 1 @31267 has 2 MA's), (2, 31321), (5, 31429), (9, 31492), (10, 31561), (11, 31564), (87, 31903), (114, 31993), (142, 32134), (149, 32164), (157, 32194), (203, 32410), (251, 32605), (256, 32632), (274, 32728), (320, 32944), (359, 33106), (377, 33178), (380, 33187), (446, 33409), (465, 33490), (475, 33520), (492, 33589), (508, 33646), (534, 33730), (536, 33742), (599, 33988), (615, 34045), (625, 34072), (628, 34081), (633, 34093), (664, 34195),

Gene: Tracker_43 Start: 32386, Stop: 34752, Start Num: 66

Candidate Starts for Tracker_43:

(Start: 66 @32386 has 24 MA's), (112, 32515), (188, 32854), (256, 33094), (265, 33133), (267, 33148), (283, 33232), (284, 33238), (326, 33376), (350, 33469), (357, 33505), (419, 33697), (428, 33721), (442, 33751), (444, 33760), (456, 33805), (512, 33973), (533, 34036), (543, 34081), (548, 34105), (588, 34270), (589, 34273), (597, 34306), (607, 34348), (626, 34399), (647, 34450), (650, 34456), (655, 34477), (658, 34486), (660, 34501), (676, 34546), (714, 34732),

Gene: Tres_32 Start: 29968, Stop: 32688, Start Num: 58

Candidate Starts for Tres_32:

(Start: 58 @29968 has 36 MA's), (74, 30022), (89, 30061), (102, 30106), (110, 30130), (111, 30133), (120, 30166), (143, 30274), (147, 30295), (148, 30298), (162, 30352), (173, 30412), (177, 30436), (184, 30472), (198, 30520), (204, 30541), (212, 30580), (222, 30619), (228, 30634), (241, 30688), (251, 30724), (255, 30748), (260, 30760), (263, 30775), (265, 30790), (271, 30832), (275, 30850), (282, 30889), (287, 30913), (325, 31084), (345, 31162), (358, 31222), (366, 31258), (367, 31261), (384, 31339), (392, 31375), (399, 31399), (407, 31420), (447, 31591), (448, 31597), (478, 31708), (485, 31735), (499, 31798), (500, 31804), (505, 31819), (519, 31861), (541, 31948), (546, 31975), (555, 32005), (562, 32023), (566, 32044), (567, 32053), (569, 32059), (572, 32065), (574, 32077), (594, 32182), (598, 32200), (603, 32233), (635, 32320), (647, 32350), (650, 32356), (664, 32416), (690, 32509), (693, 32524), (705, 32566), (721, 32680),

Gene: Turuncu_47 Start: 33662, Stop: 36028, Start Num: 66

Candidate Starts for Turuncu_47:

(Start: 66 @33662 has 24 MA's), (188, 34130), (190, 34133), (207, 34190), (216, 34241), (221, 34262), (226, 34277), (254, 34364), (256, 34370), (265, 34409), (267, 34424), (276, 34472), (326, 34652), (348, 34739), (357, 34781), (442, 35027), (444, 35036), (476, 35141), (489, 35186), (543, 35357), (548, 35381), (553, 35390), (588, 35546), (607, 35615), (650, 35723), (658, 35753), (660, 35768), (716, 36014),

Gene: Tyson_20 Start: 18997, Stop: 21678, Start Num: 79

Candidate Starts for Tyson_20:

(Start: 79 @18997 has 19 MA's), (81, 19003), (130, 19180), (134, 19210), (150, 19273), (167, 19348), (186, 19462), (191, 19468), (208, 19534), (222, 19597), (233, 19630), (235, 19633), (240, 19657), (244, 19681), (246, 19687), (248, 19693), (258, 19741), (263, 19762), (265, 19777), (269, 19798), (275, 19837), (278, 19849), (280, 19867), (296, 19942), (303, 19972), (306, 19996), (307, 19999), (317, 20044), (331, 20095), (337, 20113), (348, 20167), (364, 20239), (366, 20251), (369, 20260), (378, 20302), (384, 20332), (392, 20368), (396, 20386), (404, 20401), (406, 20407), (411, 20440), (445, 20569), (447, 20578), (466, 20659), (478, 20695), (479, 20701), (505, 20806), (509, 20815), (514, 20830), (519, 20848), (531, 20890), (554, 20986), (555, 20992), (569, 21046), (572, 21052), (574, 21064), (596, 21175), (601, 21205), (602, 21211), (610, 21241), (635, 21307), (638, 21313), (647, 21337), (650, 21343), (651, 21349), (661, 21394), (664, 21403), (667, 21412), (680, 21451), (689, 21487), (690, 21496), (693, 21511), (711, 21607), (719, 21658), (720, 21664),

Gene: UPIE_20 Start: 18995, Stop: 21676, Start Num: 79

Candidate Starts for UPIE_20:

(Start: 79 @18995 has 19 MA's), (81, 19001), (130, 19178), (134, 19208), (150, 19271), (167, 19346), (176, 19400), (186, 19460), (191, 19466), (208, 19532), (222, 19595), (233, 19628), (235, 19631), (240, 19655), (246, 19685), (248, 19691), (258, 19739), (263, 19760), (265, 19775), (269, 19796), (275, 19835), (278, 19847), (280, 19865), (290, 19922), (296, 19940), (303, 19970), (306, 19994), (307, 19997), (317, 20042), (331, 20093), (337, 20111), (348, 20165), (364, 20237), (366, 20249), (369, 20258), (378, 20300), (384, 20330), (392, 20366), (396, 20384), (404, 20399), (406, 20405), (411, 20438), (445, 20567), (447, 20576), (466, 20657), (478, 20693), (479, 20699), (505, 20804), (509, 20813), (514, 20828), (519, 20846), (531, 20888), (554, 20984), (555, 20990), (569, 21044), (572, 21050), (574, 21062), (596, 21173), (601, 21203), (602, 21209), (610, 21239), (635, 21305), (638, 21311), (647, 21335), (650, 21341), (651, 21347), (661, 21392), (664, 21401), (667, 21410), (680, 21449), (689, 21485), (690, 21494), (693, 21509), (711, 21605), (719, 21656), (720, 21662),

Gene: Velveteen_19 Start: 17226, Stop: 20090, Start Num: 18

Candidate Starts for Velveteen_19:

(Start: 18 @17226 has 10 MA's), (Start: 23 @17247 has 1 MA's), (29, 17268), (36, 17307), (52, 17376), (56, 17385), (57, 17388), (76, 17439), (107, 17529), (122, 17580), (137, 17664), (141, 17676), (145, 17697), (154, 17730), (182, 17877), (200, 17940), (209, 17979), (213, 18003), (219, 18018), (222, 18027), (232, 18054), (234, 18060), (251, 18129), (254, 18150), (256, 18156), (264, 18192), (267, 18210), (285, 18303), (288, 18324), (294, 18348), (308, 18414), (313, 18435), (318, 18453), (325, 18486), (334, 18513), (345, 18564), (352, 18600), (358, 18624), (366, 18660), (369, 18669), (371, 18684), (378, 18711), (384, 18741), (392, 18777), (399, 18801), (424, 18900), (435, 18939), (443, 18978), (448, 18999), (478, 19110), (485, 19137), (492, 19167), (498, 19188), (499, 19200), (500, 19206), (519, 19263), (555, 19407), (562, 19425), (572, 19467), (574, 19479), (603, 19635), (635, 19722), (647, 19752), (650, 19758), (664, 19818), (669, 19836), (690, 19911), (694, 19932), (705, 19968), (721, 20082),

Gene: Vic9_00032 Start: 30412, Stop: 33132, Start Num: 58

Candidate Starts for Vic9_00032:

(Start: 58 @30412 has 36 MA's), (74, 30466), (89, 30505), (94, 30523), (102, 30550), (110, 30574), (111, 30577), (120, 30610), (143, 30718), (147, 30739), (148, 30742), (162, 30796), (173, 30856), (177, 30880), (184, 30916), (198, 30964), (204, 30985), (212, 31024), (222, 31063), (228, 31078), (241, 31132), (243, 31144), (251, 31168), (255, 31192), (260, 31204), (263, 31219), (265, 31234), (271, 31276), (275, 31294), (282, 31333), (287, 31357), (325, 31528), (345, 31606), (358, 31666), (366, 31702), (367, 31705), (384, 31783), (392, 31819), (399, 31843), (424, 31942), (435, 31981), (447, 32035), (478, 32152), (485, 32179), (499, 32242), (500, 32248), (505, 32263), (519, 32305), (541, 32392), (555, 32449), (562, 32467), (572, 32509), (574, 32521), (594, 32626), (598, 32644), (601, 32662), (603, 32677), (635, 32764), (647, 32794), (650, 32800), (664, 32860), (690, 32953), (693, 32968), (705, 33010), (721, 33124),

Gene: ViviJ_24 Start: 21017, Stop: 23527, Start Num: 64

Candidate Starts for ViviJ_24:

(Start: 64 @21017 has 25 MA's), (77, 21065), (82, 21077), (86, 21086), (142, 21296), (163, 21380), (197, 21533), (204, 21557), (211, 21587), (236, 21668), (237, 21677), (239, 21686), (244, 21713), (251, 21734), (256, 21767), (261, 21779), (265, 21806), (266, 21812), (273, 21857), (288, 21935), (307, 22013), (311, 22034), (323, 22079), (333, 22115), (341, 22151), (346, 22172), (352, 22202), (355, 22214), (386, 22334), (405, 22397), (414, 22421), (430, 22478), (445, 22535), (448, 22550), (452, 22571), (463, 22610), (503, 22751), (532, 22838), (546, 22904), (561, 22940), (570, 22973), (575, 22994), (582, 23030), (600, 23105), (601, 23108), (605, 23132), (619, 23165), (630, 23192), (640, 23213), (646, 23231), (663, 23285), (713, 23513),

Gene: Wamburgxpress_20 Start: 19010, Stop: 21691, Start Num: 79

Candidate Starts for Wamburgxpress_20:

(Start: 79 @19010 has 19 MA's), (81, 19016), (130, 19193), (134, 19223), (150, 19286), (167, 19361), (186, 19475), (191, 19481), (208, 19547), (222, 19610), (233, 19643), (235, 19646), (240, 19670), (244, 19694), (246, 19700), (248, 19706), (258, 19754), (263, 19775), (265, 19790), (269, 19811), (275, 19850), (278, 19862), (280, 19880), (296, 19955), (303, 19985), (306, 20009), (307, 20012), (317, 20057), (331, 20108), (337, 20126), (348, 20180), (364, 20252), (366, 20264), (369, 20273), (378, 20315), (384, 20345), (392, 20381), (396, 20399), (404, 20414), (406, 20420), (411, 20453), (445, 20582), (447, 20591), (466, 20672), (478, 20708), (479, 20714), (505, 20819), (509, 20828), (514, 20843), (519, 20861), (531, 20903), (554, 20999), (555, 21005), (569, 21059), (572, 21065), (574, 21077), (596, 21188), (601, 21218), (602, 21224), (610, 21254), (635, 21320), (638, 21326), (647, 21350), (650, 21356), (651, 21362), (661, 21407), (664, 21416), (667, 21425), (680, 21464), (689, 21500), (690, 21509), (693, 21524), (711, 21620), (719, 21671), (720, 21677),

Gene: Waterfoul_25 Start: 21181, Stop: 23679, Start Num: 64

Candidate Starts for Waterfoul_25:

(Start: 64 @21181 has 25 MA's), (82, 21241), (86, 21250), (126, 21391), (142, 21460), (163, 21544), (197, 21697), (204, 21721), (210, 21748), (220, 21790), (231, 21817), (235, 21829), (236, 21832), (237, 21841), (239, 21850), (244, 21877), (252, 21910), (256, 21931), (265, 21970), (273, 22021), (288, 22099), (307, 22177), (311, 22198), (323, 22243), (333, 22279), (341, 22315), (346, 22336), (352, 22366), (355, 22378), (393, 22537), (415, 22597), (420, 22606), (425, 22621), (430, 22642), (448, 22714), (451, 22729), (459, 22759), (461, 22762), (472, 22786), (477, 22801), (484, 22828), (497, 22876), (501, 22906), (504, 22909), (510, 22921), (515, 22933), (532, 22990), (537, 23011), (540, 23023), (549, 23071), (561, 23098), (580, 23176), (581, 23179), (597, 23254), (601, 23266), (612, 23308), (614, 23311), (622, 23323), (690, 23524), (696, 23548), (701, 23557), (703, 23572), (713, 23665), (715, 23668),

Gene: West99_32 Start: 30088, Stop: 32808, Start Num: 58

Candidate Starts for West99_32:

(Start: 58 @30088 has 36 MA's), (74, 30142), (89, 30181), (102, 30226), (110, 30250), (111, 30253), (120, 30286), (143, 30394), (147, 30415), (148, 30418), (162, 30472), (173, 30532), (177, 30556), (184, 30592), (198, 30640), (204, 30661), (212, 30700), (222, 30739), (228, 30754), (241, 30808), (243, 30820), (251, 30844), (255, 30868), (260, 30880), (263, 30895), (265, 30910), (271, 30952), (275, 30970), (282, 31009), (287, 31033), (325, 31204), (345, 31282), (358, 31342), (366, 31378), (367, 31381), (384, 31459), (392, 31495), (399, 31519), (407, 31540), (447, 31711), (448, 31717), (478, 31828), (485, 31855), (499, 31918), (500, 31924), (505, 31939), (519, 31981), (541, 32068), (546, 32095), (555, 32125), (562, 32143), (566, 32164), (567, 32173), (569, 32179), (572, 32185), (574, 32197), (594, 32302), (598, 32320), (603, 32353), (635, 32440), (647, 32470), (650, 32476), (664, 32536), (690, 32629), (693, 32644), (705, 32686), (721, 32800),

Gene: Wheezy_43 Start: 32591, Stop: 34957, Start Num: 66

Candidate Starts for Wheezy_43:

(Start: 66 @32591 has 24 MA's), (112, 32720), (188, 33059), (256, 33299), (265, 33338), (267, 33353), (283, 33437), (284, 33443), (326, 33581), (350, 33674), (357, 33710), (419, 33902), (428, 33926), (442, 33956), (444, 33965), (456, 34010), (512, 34178), (533, 34241), (543, 34286), (548, 34310), (588, 34475), (589, 34478), (597, 34511), (607, 34553), (626, 34604), (647, 34655), (650, 34661), (655, 34682), (658, 34691), (660, 34706), (676, 34751), (714, 34937),

Gene: WhoseManz_45 Start: 30279, Stop: 32654, Start Num: 66

Candidate Starts for WhoseManz_45:

(Start: 66 @30279 has 24 MA's), (153, 30582), (188, 30747), (207, 30807), (214, 30849), (216, 30858), (228, 30900), (251, 30960), (256, 30987), (283, 31125), (284, 31131), (309, 31209), (326, 31269), (334, 31293), (348, 31356), (357, 31398), (396, 31530), (406, 31551), (431, 31620), (442, 31644), (444, 31653), (456, 31695), (480, 31776), (486, 31797), (489, 31803), (501, 31845), (531, 31926), (548, 32001), (606, 32241), (607, 32244), (639, 32322), (648, 32346), (658, 32379), (686, 32463),

(692, 32511), (695, 32520),

Gene: Wyatt2_20 Start: 18997, Stop: 21678, Start Num: 79

Candidate Starts for Wyatt2_20:

(Start: 79 @18997 has 19 MA's), (81, 19003), (130, 19180), (134, 19210), (150, 19273), (167, 19348), (176, 19402), (186, 19462), (191, 19468), (208, 19534), (222, 19597), (233, 19630), (235, 19633), (240, 19657), (246, 19687), (248, 19693), (258, 19741), (263, 19762), (265, 19777), (269, 19798), (275, 19837), (278, 19849), (280, 19867), (290, 19924), (296, 19942), (303, 19972), (306, 19996), (307, 19999), (317, 20044), (331, 20095), (337, 20113), (348, 20167), (364, 20239), (366, 20251), (369, 20260), (378, 20302), (384, 20332), (392, 20368), (396, 20386), (404, 20401), (406, 20407), (411, 20440), (445, 20569), (447, 20578), (466, 20659), (478, 20695), (479, 20701), (505, 20806), (509, 20815), (514, 20830), (519, 20848), (531, 20890), (554, 20986), (555, 20992), (569, 21046), (572, 21052), (574, 21064), (596, 21175), (601, 21205), (602, 21211), (635, 21307), (638, 21313), (647, 21337), (650, 21343), (651, 21349), (661, 21394), (664, 21403), (667, 21412), (680, 21451), (689, 21487), (690, 21496), (693, 21511), (711, 21607), (719, 21658), (720, 21664),

Gene: Xavia_21 Start: 19042, Stop: 21888, Start Num: 17

Candidate Starts for Xavia_21:

(Start: 17 @19042 has 2 MA's), (57, 19195), (137, 19468), (141, 19480), (145, 19501), (151, 19525), (168, 19600), (180, 19672), (189, 19702), (200, 19738), (213, 19801), (219, 19816), (232, 19849), (251, 19924), (254, 19948), (256, 19954), (261, 19966), (267, 20008), (269, 20014), (285, 20101), (288, 20122), (294, 20146), (308, 20212), (313, 20233), (318, 20251), (325, 20284), (332, 20308), (334, 20311), (340, 20341), (345, 20362), (358, 20422), (366, 20458), (367, 20461), (369, 20467), (384, 20539), (392, 20575), (396, 20593), (397, 20596), (402, 20605), (407, 20620), (432, 20728), (447, 20791), (464, 20866), (478, 20908), (485, 20935), (499, 20998), (500, 21004), (505, 21019), (519, 21061), (530, 21100), (541, 21148), (546, 21175), (547, 21178), (555, 21205), (562, 21223), (567, 21253), (572, 21265), (574, 21277), (594, 21382), (598, 21400), (603, 21433), (635, 21520), (647, 21550), (650, 21556), (664, 21616), (667, 21625), (669, 21634), (677, 21661), (690, 21709), (693, 21724), (694, 21730), (705, 21766), (721, 21880),

Gene: Yndexa_45 Start: 32233, Stop: 34608, Start Num: 66

Candidate Starts for Yndexa_45:

(Start: 66 @32233 has 24 MA's), (188, 32701), (207, 32761), (214, 32803), (216, 32812), (228, 32854), (251, 32914), (256, 32941), (276, 33043), (283, 33079), (284, 33085), (334, 33247), (348, 33310), (357, 33352), (373, 33412), (396, 33484), (406, 33505), (431, 33574), (442, 33598), (444, 33607), (486, 33751), (489, 33757), (501, 33799), (531, 33880), (548, 33955), (606, 34195), (607, 34198), (639, 34276), (648, 34300), (658, 34333), (685, 34414), (692, 34465), (695, 34474),

Gene: Zaria_20 Start: 19011, Stop: 21692, Start Num: 79

Candidate Starts for Zaria_20:

(Start: 79 @19011 has 19 MA's), (81, 19017), (130, 19194), (134, 19224), (150, 19287), (167, 19362), (176, 19416), (186, 19476), (191, 19482), (208, 19548), (222, 19611), (233, 19644), (235, 19647), (240, 19671), (244, 19695), (246, 19701), (248, 19707), (258, 19755), (263, 19776), (265, 19791), (269, 19812), (275, 19851), (278, 19863), (280, 19881), (296, 19956), (303, 19986), (306, 20010), (307, 20013), (317, 20058), (331, 20109), (337, 20127), (348, 20181), (364, 20253), (366, 20265), (369, 20274), (378, 20316), (384, 20346), (392, 20382), (396, 20400), (404, 20415), (406, 20421), (411, 20454), (445, 20583), (447, 20592), (466, 20673), (478, 20709), (479, 20715), (505, 20820), (509, 20829), (514, 20844), (519, 20862), (531, 20904), (554, 21000), (555, 21006), (569, 21060), (572, 21066), (574, 21078), (596, 21189), (601, 21219), (602, 21225), (635, 21321), (638, 21327), (647, 21351), (650, 21357), (651, 21363), (661, 21408), (664, 21417), (667, 21426), (680, 21465), (689, 21501), (690, 21510), (693, 21525), (711, 21621), (719, 21672), (720, 21678),

Gene: Zodiariah_21 Start: 19427, Stop: 21907, Start Num: 32

Candidate Starts for Zodiariah_21:

(Start: 32 @19427 has 1 MA's), (73, 19550), (128, 19730), (136, 19769), (143, 19802), (171, 19943), (207, 20078), (213, 20114), (226, 20165), (237, 20204), (256, 20267), (263, 20291), (265, 20306), (271, 20348), (305, 20462), (309, 20483), (335, 20567), (338, 20576), (342, 20597), (344, 20606), (421, 20837), (423, 20843), (449, 20924), (450, 20927), (451, 20936), (460, 20978), (490, 21068), (494, 21080), (507, 21125), (512, 21137), (553, 21287), (572, 21353), (588, 21434), (601, 21479), (602, 21485), (610, 21515), (616, 21533), (639, 21590), (642, 21599), (650, 21617), (672, 21695), (683, 21719), (710, 21842), (711, 21848),