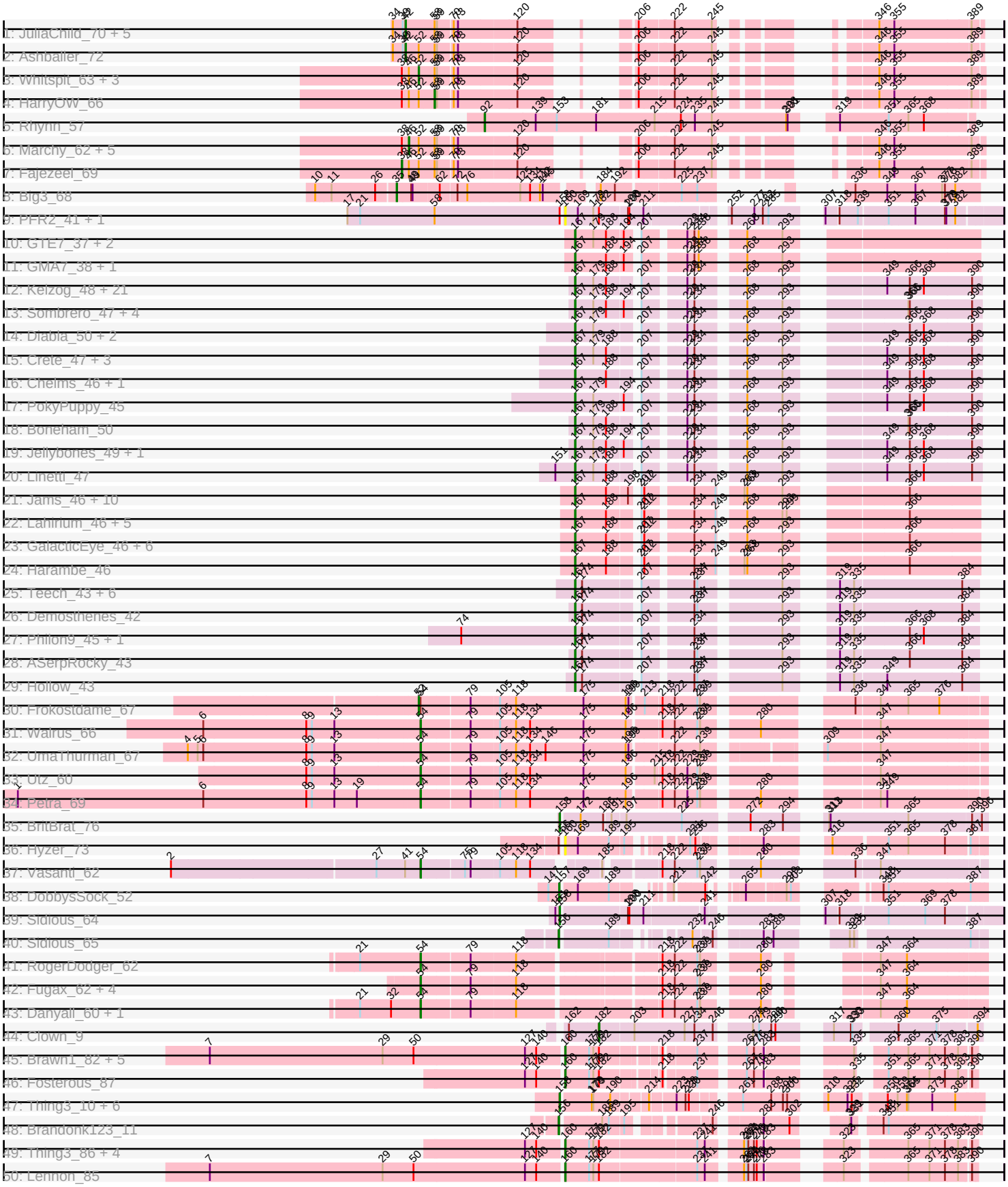
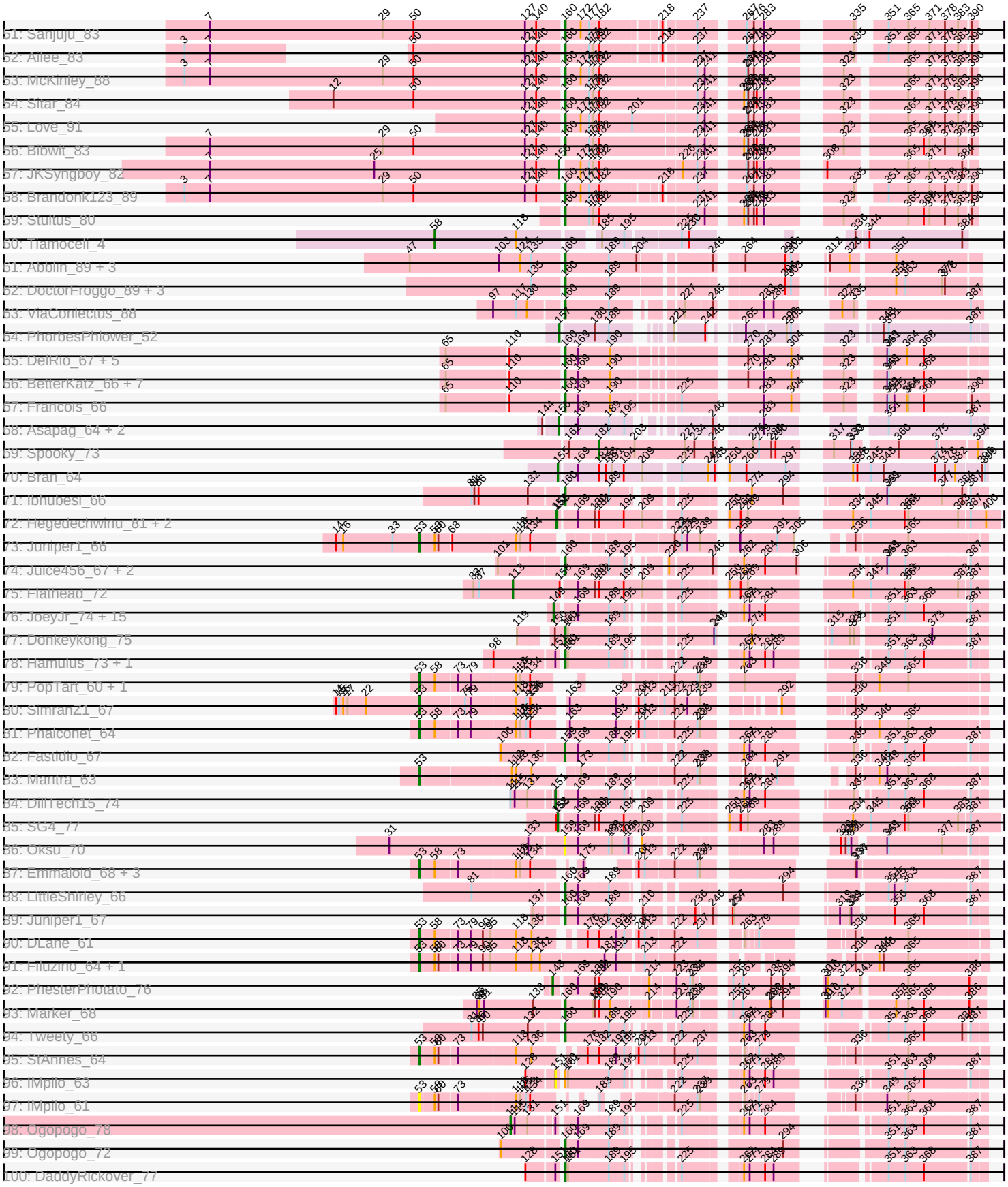
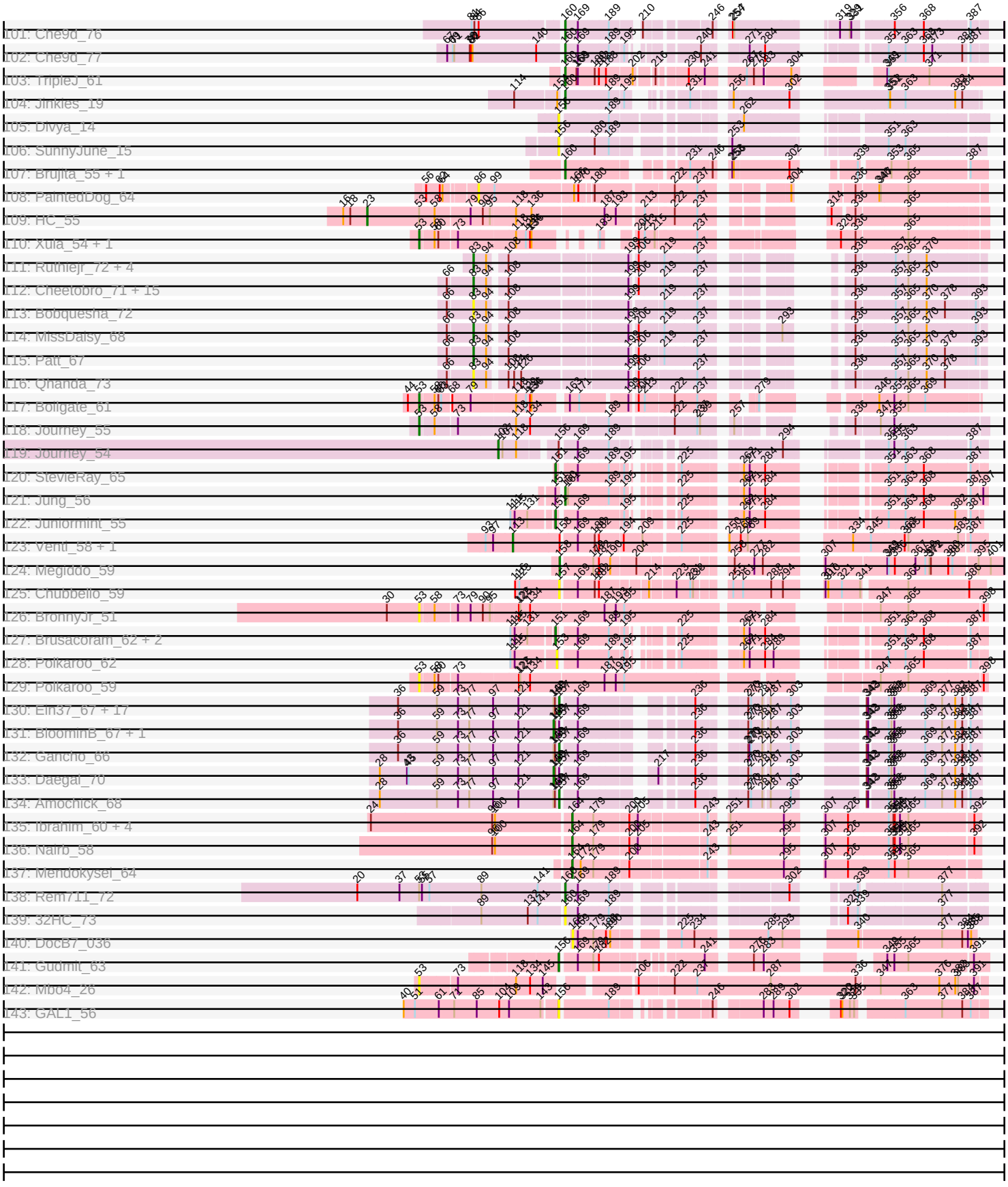
Pham 304644


1: JuliaChild_70 + 5
2: Ashballer_72
3: Whitspit_63 + 3
4: HarryOW_66
5: Rhynn_57
6: Marchy_62 + 5
7: Fajezeel_69
8: Big3_68
9: PFR2_41 + 1
10: GTE7_37 + 2
11: GMA7_38 + 1
12: Kelzog_48 + 21
13: Sombrero_47 + 4
14: Diabla_50 + 2
15: Crete_47 + 3
16: Cheims_46 + 1
17: PokyPuppy_45
18: Boneham_50
19: Jellybones_49 + 1
20: Linetti_47
21: Jams_46 + 10
22: Lahirium_46 + 5
23: GalacticEye_46 + 6
24: Harambe_46
25: Teech_43 + 6
26: Demosthenes_42
27: Phillon9_45 + 1
28: ASerpRocky_43
29: Hollow_43
30: Frokostdame_67
31: Walrus_66
32: OmaThurman_67
33: Utz_60
34: Petra_69
35: BritBrat_76
36: Ryzer_73
37: Vasanti_62
38: DobbysSock_52
39: Sidious_64
40: Sidious_65
41: RogerDodger_62
42: Fugax_62 + 4
43: Danyail_60 + 1
44: Clown_9
45: Brawn1_82 + 5
46: Fosterous_87
47: Thing3_10 + 6
48: BrandonK123_11
49: Thing3_86 + 4
50: Lennon_85

Pham 304644


51: Sanjuju_83
52: Allee_83
53: McKinley_88
54: Sitar_84
55: Love_91
56: Bidwit_83
57: JKSyngboy_82
58: Brandonk123_89
59: Stultus_80
60: Tiamocell_4
61: Abblin_89 + 3
62: DoctorFroggo_89 + 3
63: ViaConiectus_88
64: PhorbesPhlower_52
65: DelRio_67 + 5
66: BetterKatz_66 + 7
67: Francois_66
68: Asapag_64 + 2
69: Spooky_73
70: Bran_64
71: Ibhubesi_66
72: Hegedechwinu_81 + 2
73: Juniper1_66
74: Juice456_67 + 2
75: Flathead_72
76: JoeyJr_74 + 15
77: Donkeykong_75
78: Hamulus_73 + 1
79: PopTart_60 + 1
80: Simranz1_67
81: Phalconet_64
82: Fastidio_67
83: Mantra_63
84: DillTech15_74
85: SG4_77
86: Oksu_70
87: Emmaloid_68 + 3
88: LittleShirley_66
89: Juniper1_67
90: DLane_61
91: Fluzino_64 + 1
92: PhesterPhotato_76
93: Marker_68
94: Tweety_66
95: StAnnes_64
96: MpIio_63
97: MpIio_61
98: Ogopogo_78
99: Ogopogo_72
100: DaddyRickover_77

Pham 304644


I01: Che9d_76
I02: Che9d_77
I03: TripleJ_61
I04: Jinkies_19
I05: Divya_14
I06: SunnyJune_15
I07: Brujita_55 + 1
I08: PaintedDog_64
I09: RC_55
I10: Xula_54 + 1
I11: RuthieJr_72 + 4
I12: Cheetobro_71 + 15
I13: Bobquesha_72
I14: MissDaisy_68
I15: Patt_67
I16: Qhanda_73
I17: Boilgate_61
I18: Journey_55
I19: Journey_54
I20: StevieRay_65
I21: Jung_56
I22: Juniormint_55
I23: Venti_58 + 1
I24: Megiddo_59
I25: Chubbello_59
I26: BronnyJr_51
I27: Brusacoram_62 + 2
I28: Polkaroo_62
I29: Polkaroo_59
I30: Elh37_67 + 17
I31: BloominB_67 + 1
I32: Gancho_66
I33: Daegal_70
I34: Amochick_68
I35: Ibrahim_60 + 4
I36: Nairb_58
I37: Mendokysei_64
I38: Rem711_72
I39: 32HC_73
I40: DocB7_036
I41: Gudmit_63
I42: Mbo4_26
I43: GAL1_56

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 304644 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304644 has 331 members, 34 are drafts.

Phages represented in each track:
• Track 1 : JuliaChild_70, Lamina13_71, PSullivan_67, Pita2_70, Swole_70, Tote_65
• Track 2 : Ashballer_72
• Track 3 : Whitspit_63, Acme_70, Greg_69, Payneful_66
• Track 4 : HarryOW_66
• Track 5 : Rhynn_57
• Track 6 : Marchy_62, Trouble_68, Wheeler_71, Watermelon_68, KSSJEB_67, GrecoEtereo_68
• Track 7 : Fajezeel_69
• Track 8 : Big3_68
• Track 9 : PFR2_41, PFR1_39
• Track 10 : GTE7_37, Amore2_49, HayZem_48
• Track 11 : GMA7_38, Austin_49
• Track 12 : Kelzog_48, Beaver_50, Sam12_46, Lizzo_46, CathyBurgh_46, Poland_51, Adgers_48, John316_50, RemRem_47, Gorko_46, Barbochs_45, Flakey_46, Exiguo_46, Worcestershire_47, Hotorobo_46, GourdThymes_46, BirksAndSocks_51, Ekhein_47, Breezic_46, Monty_45, Squibbles_46, Msay19_51
• Track 13 : Sombrero_47, FelixAlejandro_51, CinnamonToast_52, Butterball_50, BillyBobJr_52
• Track 14 : Diabla_50, SteveFrench_46, RoyalG_47
• Track 15 : Crete_47, BigShaq_46, PierreThree_46, BenoitCattle_47
• Track 16 : Chelms_46, Dakiti_47
• Track 17 : PokyPuppy_45
• Track 18 : Boneham_50
• Track 19 : Jellybones_49, Eggsie_45
• Track 20 : Linetti_47
• Track 21 : Jams_46, Nimi13_46, Charianelly_46, Shelley_46, MrWormie_46, Newt_47, Kaseim_46, Teal_46, Lidong_46, Minos_47, Bianmat_46
• Track 22 : Lahirium_46, Anamika_46, Guillaume_46, Hail2Pitt_45, Jormungandr_46, Sticker17_46
• Track 23 : GalacticEye_46, Damp_46, Luker_47, Berries_46, Hello_46, Woes_46, Neoevie_46
• Track 24 : Harambe_46
• Track 25 : Teech_43, Katyusha_42, Niagara_42, Benczkowski14_42, Kvothe_42, Tredge_43, Teatealatte_43
• Track 26 : Demosthenes_42
• Track 27 : Philon9_45, Vitaenoii_45
• Track 28 : ASerpRocky_43

• Track 29 : Hollow_43
• Track 30 : Frokostdame_67
• Track 31 : Walrus_66
• Track 32 : UmaThurman_67
• Track 33 : Utz_60
• Track 34 : Petra_69
• Track 35 : BritBrat_76
• Track 36 : Hyzer_73
• Track 37 : Vasanti_62
• Track 38 : DobbysSock_52
• Track 39 : Sidious_64
• Track 40 : Sidious_65
• Track 41 : RogerDodger_62
• Track 42 : Fugax_62, ClamChowder_61, KimmyK_60, Barb_61, PinkCoffee_61
• Track 43 : Danyall_60, PullumCavea_58
• Track 44 : Clown_9
• Track 45 : Brawn1_82, BobBob_87, Fitzgerald_83, Jabberwocky_84, Keitabear_83, Sedona_83
• Track 46 : Fosterous_87
• Track 47 : Thing3_10, Paries_10, Love_11, MoontowerMania_8, Galadriel_11, McCrothy_10, Kamashten_10
• Track 48 : Brandonk123_11
• Track 49 : Thing3_86, McCrothy_84, Galadriel_86, Rofo_85, Kamashten_86
• Track 50 : Lennon_85
• Track 51 : Sanjuju_83
• Track 52 : Ailee_83
• Track 53 : McKinley_88
• Track 54 : Sitar_84
• Track 55 : Love_91
• Track 56 : Bibwit_83
• Track 57 : JKSyngboy_82
• Track 58 : Brandonk123_89
• Track 59 : Stultus_80
• Track 60 : Tiamoceli_4
• Track 61 : Abblin_89, Natkenzie_89, Sampson_91, Scioto_90
• Track 62 : DoctorFroggo_89, Verity_88, Zipp_89, Delrey21_89
• Track 63 : ViaConlectus_88
• Track 64 : PhorbesPhlower_52
• Track 65 : DelRio_67, Ayotoya_67, GrandSlam_68, Hamood_68, Chop_68, Pimento_69
• Track 66 : BetterKatz_66, Nadeem_66, Brylie_66, Parada_66, Bock_68, NancyRae_65, WheatThin_65, Mulch_66
• Track 67 : Francois_66
• Track 68 : Asapag_64, BotCity_67, Getalong_67
• Track 69 : Spooky_73
• Track 70 : Bran_64
• Track 71 : Ibhubesi_66
• Track 72 : Hegedechwinu_81, JalFarm20_88, Smooch_24
• Track 73 : Juniper1_66
• Track 74 : Juice456_67, KristaRAM_69, JalFarm20_79
• Track 75 : Flathead_72
• Track 76 : JoeyJr_74, Doomphist_77, KingMidas_73, PHappiness_74, Poenanya_77, Nimbo_66, Empress_72, Leperchaun_72, Geralt_67, Daenerys_73,

Inventum_72, Scottish_72, Polka14_78, OldBen_71, RitaG_74, Sassafras_75
• Track 77 : Donkeykong_75
• Track 78 : Hamulus_73, LittleShirley_73
• Track 79 : PopTart_60, SassyB_60
• Track 80 : SimranZ1_67
• Track 81 : Phalconet_64
• Track 82 : Fastidio_67
• Track 83 : Mantra_63
• Track 84 : DillTech15_74
• Track 85 : SG4_77
• Track 86 : Oksu_70
• Track 87 : Emmaloid_68, Peridot_67, Slim_68, Rialto_71
• Track 88 : LittleShirley_66
• Track 89 : Juniper1_67
• Track 90 : DLane_61
• Track 91 : Filuzino_64, Medindi_62
• Track 92 : PhesterPhotato_76
• Track 93 : Marker_68
• Track 94 : Tweety_66
• Track 95 : StAnnes_64
• Track 96 : IMpilo_63
• Track 97 : IMpilo_61
• Track 98 : Ogopogo_78
• Track 99 : Ogopogo_72
• Track 100 : DaddyRickover_77
• Track 101 : Che9d_76
• Track 102 : Che9d_77
• Track 103 : TripleJ_61
• Track 104 : Jinkies_19
• Track 105 : Divya_14
• Track 106 : SunnyJune_15
• Track 107 : Brujita_55, Island3_55
• Track 108 : PaintedDog_64
• Track 109 : HC_55
• Track 110 : Xula_54, QueenHazel_55
• Track 111 : Ruthiejr_72, Y2_68, Y10_68, JF1_71, OmniCritical_70
• Track 112 : Cheetobro_71, DanSyl44_74, Eponine_73, Chancellor_71, Reptar3000_68, Taquito_70, Fionnbharth_71, Mitti_71, Lebo14_70, Kraw_71, Slarp_71, Juliette_73, SamScheppers_69, Wintermute_71, YasnayaPolyana_70, Malthus_72
• Track 113 : Bobquesha_72
• Track 114 : MissDaisy_68
• Track 115 : Patt_67
• Track 116 : Qhanda_73
• Track 117 : Boilgate_61
• Track 118 : Journey_55
• Track 119 : Journey_54
• Track 120 : StevieRay_65
• Track 121 : Jung_56
• Track 122 : Juniormint_55
• Track 123 : Venti_58, Bartholomew_57
• Track 124 : Megiddo_59
• Track 125 : Chubbello_59

• Track 126 : BronnyJr_51
• Track 127 : Brusacoram_62, Atcoo_62, Thespis_62
• Track 128 : Polkaroo_62
• Track 129 : Polkaroo_59
• Track 130 : Ein37_67, HH92_66, Wishmaker_62, Kinbote_65, DeepSoil15_67, OBUpride_67, Amymech_67, Giles_62, Luke_66, Forge_62, LilHazelnut_67, Hail_62, Hadrien_66, Gravaillia_63, Ubuntu_67, Luna22_62, Dewey_62, Evanesce_66
• Track 131 : BloominB_67, Webster2_67
• Track 132 : Gancho_66
• Track 133 : Daegal_70
• Track 134 : Amochick_68
• Track 135 : Ibrahim_60, ZenTime222_66, Whitty_59, Bernal13_60, RonRayGun_60
• Track 136 : Nairb_58
• Track 137 : Mendokysei_64
• Track 138 : Rem711_72
• Track 139 : 32HC_73
• Track 140 : DocB7_036
• Track 141 : Gudmit_63
• Track 142 : Mbo4_26
• Track 143 : GAL1_56

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

The start number called the most often in the published annotations is 167, it was called in 76 of the 297 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ASerpRocky_43, Adgers_48, Amore2_49, Anamika_46, Austin_49, Barbochs_45, Beaver_50, Benczkowski14_42, BenoitCattle_47, Berries_46, Bianmat_46, BigShaq_46, BillyBobJr_52, BirksAndSocks_51, Boneham_50, Breezic_46, Butterball_50, CathyBurgh_46, Charianelly_46, Chelms_46, CinnamonToast_52, Crete_47, Dakiti_47, Damp_46, Demosthenes_42, Diabla_50, Eggsie_45, Ekhein_47, Exiguo_46, FelixAlejandro_51, Flakey_46, GMA7_38, GTE7_37, GalacticEye_46, Gorko_46, GourdThymes_46, Guillaume_46, Hail2Pitt_45, Harambe_46, HayZem_48, Hello_46, Hollow_43, Hotorobo_46, Jams_46, Jellybones_49, John316_50, Jormungandr_46, Kaseim_46, Katyusha_42, Kelzog_48, Kvothe_42, Lahirium_46, Lidong_46, Linetti_47, Lizzo_46, Luker_47, Minos_47, Monty_45, MrWormie_46, Msay19_51, Neoevie_46, Newt_47, Niagara_42, Nimi13_46, Philon9_45, PierreThree_46, PokyPuppy_45, Poland_51, RemRem_47, RoyalG_47, Sam12_46, Shelley_46, Sombrero_47, Squibbles_46, SteveFrench_46, Sticker17_46, Teal_46, Teatealatte_43, Teech_43, Tredge_43, Vitaenoii_45, Woes_46, Worcestershire_47,

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

Genes that do not have the "Most Annotated" start:
• 32HC_73, Abblin_89, Acme_70, Ailee_83, Amochick_68, Amymech_67, Asapag_64, Ashballer_72, Atcoo_62, Ayotoya_67, Barb_61, Bartholomew_57, Bernal13_60, BetterKatz_66, Bibwit_83, Big3_68, BloominB_67, BobBob_87,

Bobquesha_72, Bock_68, Boilgate_61, BotCity_67, Bran_64, Brandonk123_11, Brandonk123_89, Brawn1_82, BritBrat_76, BronnyJr_51, Brujita_55, Brusacoram_62, Brylie_66, Chancellor_71, Che9d_76, Che9d_77, Cheetobro_71, Chop_68, Chubbello_59, ClamChowder_61, Clown_9, DLane_61, DaddyRickover_77, Daegal_70, Daenerys_73, DanSyl44_74, Danyall_60, DeepSoil15_67, DelRio_67, Delrey21_89, Dewey_62, DillTech15_74, Divya_14, DobbysSock_52, DocB7_036, DoctorFroggo_89, Donkeykong_75, Doomphist_77, Ein37_67, Emmaloid_68, Empress_72, Eponine_73, Evanesce_66, Fajezeel_69, Fastidio_67, Filuzino_64, Fionnbharth_71, Fitzgerald_83, Flathead_72, Forge_62, Fosterous_87, Francois_66, Frokostdame_67, Fugax_62, GAL1_56, Galadriel_11, Galadriel_86, Gancho_66, Geralt_67, Getalong_67, Giles_62, GrandSlam_68, Gravaillia_63, GrecoEtereo_68, Greg_69, Gudmit_63, HC_55, HH92_66, Hadrien_66, Hail_62, Hamood_68, Hamulus_73, HarryOW_66, Hegedechwinu_81, Hyzer_73, IMpilo_61, IMpilo_63, Ibhubesi_66, Ibrahim_60, Inventum_72, Island3_55, JF1_71, JKSyngboy_82, Jabberwocky_84, JalFarm20_79, JalFarm20_88, Jinkies_19, JoeyJr_74, Journey_54, Journey_55, Juice456_67, JuliaChild_70, Juliette_73, Jung_56, Juniormint_55, Juniper1_66, Juniper1_67, KSSJEB_67, Kamashten_10, Kamashten_86, Keitabear_83, KimmyK_60, Kinbote_65, KingMidas_73, Kraw_71, KristaRAM_69, Lamina13_71, Lebo14_70, Lennon_85, Leperchaun_72, LilHazelnut_67, LittleShirley_66, LittleShirley_73, Love_11, Love_91, Luke_66, Luna22_62, Malthus_72, Mantra_63, Marchy_62, Marker_68, Mbo4_26, McCrothy_10, McCrothy_84, McKinley_88, Medindi_62, Megiddo_59, Mendokysei_64, MissDaisy_68, Mitti_71, MoontowerMania_8, Mulch_66, Nadeem_66, Nairb_58, NancyRae_65, Natkenzie_89, Nimbo_66, OBUpride_67, Ogopogo_72, Ogopogo_78, Oksu_70, OldBen_71, OmniCritical_70, PFR1_39, PFR2_41, PHappiness_74, PSullivan_67, PaintedDog_64, Parada_66, Paries_10, Patt_67, Payneful_66, Peridot_67, Petra_69, Phalconet_64, PhesterPhotato_76, PhorbesPhlower_52, Pimento_69, PinkCoffee_61, Pita2_70, Poenanya_77, Polka14_78, Polkaroo_59, Polkaroo_62, PopTart_60, PullumCavea_58, Qhanda_73, QueenHazel_55, Rem711_72, Reptar3000_68, Rhynn_57, Rialto_71, RitaG_74, Rofo_85, RogerDodger_62, RonRayGun_60, Ruthiejr_72, SG4_77, SamScheppers_69, Sampson_91, Sanjuju_83, Sassafras_75, SassyB_60, Scioto_90, Scottish_72, Sedona_83, Sidious_64, Sidious_65, SimranZ1_67, Sitar_84, Slarp_71, Slim_68, Smooch_24, Spooky_73, StAnnes_64, StevieRay_65, Stultus_80, SunnyJune_15, Swole_70, Taquito_70, Thespis_62, Thing3_10, Thing3_86, Tiamoceli_4, Tote_65, TripleJ_61, Trouble_68, Tweety_66, Ubuntu_67, UmaThurman_67, Utz_60, Vasanti_62, Venti_58, Verity_88, ViaConlectus_88, Walrus_66, Watermelon_68, Webster2_67, WheatThin_65, Wheeler_71, Whitspit_63, Whitty_59, Wintermute_71, Wishmaker_62, Xula_54, Y10_68, Y2_68, YasnayaPolyana_70, ZenTime222_66, Zipp_89,

Summary by start number:

Start 23:
• Found in 1 of 331 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: HC_55 (I1),

Start 35:
• Found in 1 of 331 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 297
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Big3_68 (A1),

Start 38:
• Found in 12 of 331 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 297
• Called 8.3% of time when present
• Phage (with cluster) where this start called: Fajezeel_69 (A1),

Start 42:
• Found in 7 of 331 (2.1%) of genes in pham
• Manual Annotations of this start: 7 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ashballer_72 (A1), JuliaChild_70 (A1), Lamina13_71 (A1), PSullivan_67 (A1), Pita2_70 (A1), Swole_70 (A1), Tote_65 (A1),

Start 46:
• Found in 12 of 331 (3.6%) of genes in pham
• Manual Annotations of this start: 6 of 297
• Called 50.0% of time when present
• Phage (with cluster) where this start called: GrecoEtereo_68 (A1), KSSJEB_67 (A1), Marchy_62 (A1), Trouble_68 (A1), Watermelon_68 (A1), Wheeler_71 (A1),

Start 52:
• Found in 14 of 331 (4.2%) of genes in pham
• Manual Annotations of this start: 4 of 297
• Called 35.7% of time when present
• Phage (with cluster) where this start called: Acme_70 (A1), Frokostdame_67 (CV), Greg_69 (A1), Payneful_66 (A1), Whitspit_63 (A1),

Start 53:
• Found in 24 of 331 (7.3%) of genes in pham
• Manual Annotations of this start: 16 of 297
• Called 91.7% of time when present
• Phage (with cluster) where this start called: Boilgate_61 (K8), BronnyJr_51 (P1), DLane_61 (F1), Emmaloid_68 (F1), Filuzino_64 (F1), IMpilo_61 (F1), Journey_55 (N), Juniper1_66 (F1), Mantra_63 (F1), Mbo4_26 (singleton), Medindi_62 (F1), Peridot_67 (F1), Phalconet_64 (F1), Polkaroo_59 (P1), PopTart_60 (F1), QueenHazel_55 (I1), Rialto_71 (F1), SassyB_60 (F1), SimranZ1_67 (F1), Slim_68 (F1), StAnnes_64 (F1), Xula_54 (I1),

Start 54:
• Found in 14 of 331 (4.2%) of genes in pham
• Manual Annotations of this start: 13 of 297
• Called 92.9% of time when present
• Phage (with cluster) where this start called: Barb_61 (DC1), ClamChowder_61 (DC1), Danyall_60 (DC1), Fugax_62 (DC1), KimmyK_60 (DC1), Petra_69 (CV), PinkCoffee_61 (DC1), PullumCavea_58 (DC1), RogerDodger_62 (DC1), UmaThurman_67 (CV), Utz_60 (CV), Vasanti_62 (CZ2), Walrus_66 (CV),

Start 58:
• Found in 42 of 331 (12.7%) of genes in pham
• Manual Annotations of this start: 2 of 297
• Called 4.8% of time when present

• Phage (with cluster) where this start called: HarryOW_66 (A1), Tiamoceli_4 (DE3),

Start 83:
• Found in 26 of 331 (7.9%) of genes in pham
• Manual Annotations of this start: 22 of 297
• Called 96.2% of time when present
• Phage (with cluster) where this start called: Bobquesha_72 (K4), Chancellor_71 (K4), Cheetobro_71 (K4), DanSyl44_74 (K4), Eponine_73 (K4), Fionnbharth_71 (K4), JF1_71 (K4), Juliette_73 (K4), Kraw_71 (K4), Lebo14_70 (K4), Malthus_72 (K4), MissDaisy_68 (K4), Mitti_71 (K4), OmniCritical_70 (K4), Patt_67 (K4), Qhanda_73 (K4), Reptar3000_68 (K4), Ruthiejr_72 (K4), SamScheppers_69 (K4), Slarp_71 (K4), Taquito_70 (K4), Wintermute_71 (K4), Y10_68 (K4), Y2_68 (K4), YasnayaPolyana_70 (K4),

Start 86:
• Found in 4 of 331 (1.2%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: PaintedDog_64 (I1),

Start 92:
• Found in 1 of 331 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rhynn_57 (A1),

Start 102:
• Found in 1 of 331 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Journey_54 (N),

Start 111:
• Found in 7 of 331 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 297
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Ogopogo_78 (F1),

Start 113:
• Found in 3 of 331 (0.9%) of genes in pham
• Manual Annotations of this start: 3 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bartholomew_57 (P1), Flathead_72 (F1), Venti_58 (P1),

Start 148:
• Found in 1 of 331 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PhesterPhotato_76 (F1),

Start 149:
• Found in 39 of 331 (11.8%) of genes in pham

• Manual Annotations of this start: 18 of 297
• Called 48.7% of time when present
• Phage (with cluster) where this start called: BloominB_67 (Q), Daegal_70 (Q), Daenerys_73 (F1), Doomphist_77 (F1), Empress_72 (F1), Geralt_67 (F1), Inventum_72 (F1), JoeyJr_74 (F1), KingMidas_73 (F1), Leperchaun_72 (F1), Nimbo_66 (F1), OldBen_71 (F1), PHappiness_74 (F1), Poenanya_77 (F1), Polka14_78 (F1), RitaG_74 (F1), Sassafras_75 (F1), Scottish_72 (F1), Webster2_67 (Q),

Start 151:
• Found in 14 of 331 (4.2%) of genes in pham
• Manual Annotations of this start: 6 of 297
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Atcoo_62 (P1), Brusacoram_62 (P1), DillTech15_74 (F1), IMpilo_63 (F1), Juniormint_55 (P1), StevieRay_65 (P1), Thespis_62 (P1),

Start 152:
• Found in 4 of 331 (1.2%) of genes in pham
• Manual Annotations of this start: 3 of 297
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Hegedechwinu_81 (F1), JalFarm20_88 (F1), Smooch_24 (O),

Start 153:
• Found in 2 of 331 (0.6%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Polkaroo_62 (P1),

Start 155:
• Found in 5 of 331 (1.5%) of genes in pham
• Manual Annotations of this start: 2 of 297
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Bran_64 (EP), SG4_77 (F1),

Start 156:
• Found in 12 of 331 (3.6%) of genes in pham
• Manual Annotations of this start: 7 of 297
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Asapag_64 (DN1), BotCity_67 (DN), Brandonk123_11 (DE1), Divya_14 (FL), GAL1_56 (singleton), Getalong_67 (DN1), Gudmit_63 (singleton), JKSyngboy_82 (DE1), Sidious_65 (CZ7), SunnyJune_15 (FL),

Start 157:
• Found in 26 of 331 (7.9%) of genes in pham
• Manual Annotations of this start: 22 of 297
• Called 88.5% of time when present
• Phage (with cluster) where this start called: Amochick_68 (Q), Amymech_67 (Q), Chubbello_59 (P1), DeepSoil15_67 (Q), Dewey_62 (Q), DobbysSock_52 (CZ4), Ein37_67 (Q), Evanesce_66 (Q), Forge_62 (Q), Gancho_66 (Q), Giles_62 (Q), Gravaillia_63 (Q), HH92_66 (Q), Hadrien_66 (Q), Hail_62 (Q), Kinbote_65 (Q), LilHazelnut_67 (Q), Luke_66 (Q), Luna22_62 (Q), OBUpride_67 (Q),

PhorbesPhlower_52 (DH), Ubuntu_67 (Q), Wishmaker_62 (Q),

Start 158:
• Found in 15 of 331 (4.5%) of genes in pham
• Manual Annotations of this start: 9 of 297
• Called 66.7% of time when present
• Phage (with cluster) where this start called: BritBrat_76 (CY2), Galadriel_11 (DE1), Kamashten_10 (DE1), Love_11 (DE1), McCrothy_10 (DE1), Megiddo_59 (P1), MoontowerMania_8 (DE1), Paries_10 (DE1), Sidious_64 (CZ7), Thing3_10 (DE1),

Start 159:
• Found in 2 of 331 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fastidio_67 (F1), Oksu_70 (F1),

Start 160:
• Found in 71 of 331 (21.5%) of genes in pham
• Manual Annotations of this start: 64 of 297
• Called 98.6% of time when present
• Phage (with cluster) where this start called: 32HC_73 (Z), Abblin_89 (DE4), Ailee_83 (DE1), Ayotoya_67 (DI), BetterKatz_66 (DI), Bibwit_83 (DE1), BobBob_87 (DE1), Bock_68 (DI), Brandonk123_89 (DE1), Brawn1_82 (DE1), Brujita_55 (I1), Brylie_66 (DI), Che9d_76 (F2), Che9d_77 (F2), Chop_68 (DI), DaddyRickover_77 (F1), DelRio_67 (DI), Delrey21_89 (DE4), DoctorFroggo_89 (DE4), Donkeykong_75 (F1), Fitzgerald_83 (DE1), Fosterous_87 (DE1), Francois_66 (DI), Galadriel_86 (DE1), GrandSlam_68 (DI), Hamood_68 (DI), Hamulus_73 (F1), Hyzer_73 (CZ1), Ibhubesi_66 (F1), Island3_55 (I1), Jabberwocky_84 (DE1), JalFarm20_79 (F1), Jinkies_19 (FL), Juice456_67 (F1), Jung_56 (P1), Juniper1_67 (F1), Kamashten_86 (DE1), Keitabear_83 (DE1), KristaRAM_69 (F1), Lennon_85 (DE1), LittleShirley_66 (F1), LittleShirley_73 (F1), Love_91 (DE1), Marker_68 (F1), McCrothy_84 (DE1), McKinley_88 (DE1), Mulch_66 (DI), Nadeem_66 (DI), NancyRae_65 (DI), Natkenzie_89 (DE4), Ogopogo_72 (F1), PFR1_39 (BX), PFR2_41 (BX), Parada_66 (DI), Pimento_69 (DI), Rem711_72 (Z), Rofo_85 (DE1), Sampson_91 (DE4), Sanjuju_83 (DE1), Scioto_90 (DE4), Sedona_83 (DE1), Sitar_84 (DE1), Stultus_80 (DE1), Thing3_86 (DE1), TripleJ_61 (FJ), Tweety_66 (F1), Verity_88 (DE4), ViaConlectus_88 (DE4), WheatThin_65 (DI), Zipp_89 (DE4),

Start 164:
• Found in 7 of 331 (2.1%) of genes in pham
• Manual Annotations of this start: 7 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bernal13_60 (T), Ibrahim_60 (T), Mendokysei_64 (T), Nairb_58 (T), RonRayGun_60 (T), Whitty_59 (T), ZenTime222_66 (T),

Start 165:
• Found in 1 of 331 (0.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DocB7_036 (singleton),

Start 167:

• Found in 83 of 331 (25.1%) of genes in pham
• Manual Annotations of this start: 76 of 297
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ASerpRocky_43 (CS4), Adgers_48 (CS2), Amore2_49 (CS1), Anamika_46 (CS3), Austin_49 (CS1), Barbochs_45 (CS2), Beaver_50 (CS2), Benczkowski14_42 (CS4), BenoitCattle_47 (CS2), Berries_46 (CS3), Bianmat_46 (CS3), BigShaq_46 (CS2), BillyBobJr_52 (CS2), BirksAndSocks_51 (CS2), Boneham_50 (CS2), Breezic_46 (CS2), Butterball_50 (CS2), CathyBurgh_46 (CS2), Charianelly_46 (CS3), Chelms_46 (CS2), CinnamonToast_52 (CS2), Crete_47 (CS2), Dakiti_47 (CS2), Damp_46 (CS3), Demosthenes_42 (CS4), Diabla_50 (CS2), Eggsie_45 (CS2), Ekhein_47 (CS2), Exiguo_46 (CS2), FelixAlejandro_51 (CS2), Flakey_46 (CS2), GMA7_38 (CS1), GTE7_37 (CS1), GalacticEye_46 (CS3), Gorko_46 (CS2), GourdThymes_46 (CS2), Guillaume_46 (CS3), Hail2Pitt_45 (CS3), Harambe_46 (CS3), HayZem_48 (CS1), Hello_46 (CS3), Hollow_43 (CS4), Hotorobo_46 (CS2), Jams_46 (CS3), Jellybones_49 (CS2), John316_50 (CS2), Jormungandr_46 (CS3), Kaseim_46 (CS3), Katyusha_42 (CS4), Kelzog_48 (CS2), Kvothe_42 (CS4), Lahirium_46 (CS3), Lidong_46 (CS3), Linetti_47 (CS2), Lizzo_46 (CS2), Luker_47 (CS3), Minos_47 (CS3), Monty_45 (CS2), MrWormie_46 (CS3), Msay19_51 (CS2), Neoevie_46 (CS3), Newt_47 (CS3), Niagara_42 (CS4), Nimi13_46 (CS3), Philon9_45 (CS4), PierreThree_46 (CS2), PokyPuppy_45 (CS2), Poland_51 (CS2), RemRem_47 (CS2), RoyalG_47 (CS2), Sam12_46 (CS2), Shelley_46 (CS3), Sombrero_47 (CS2), Squibbles_46 (CS2), SteveFrench_46 (CS2), Sticker17_46 (CS3), Teal_46 (CS3), Teatealatte_43 (CS4), Teech_43 (CS4), Tredge_43 (CS4), Vitaenoii_45 (CS4), Woes_46 (CS3), Worcestershire_47 (CS2),

Start 182:
• Found in 42 of 331 (12.7%) of genes in pham
• Manual Annotations of this start: 2 of 297
• Called 4.8% of time when present
• Phage (with cluster) where this start called: Clown_9 (DC2), Spooky_73 (DN2),

Summary by clusters:

There are 37 clusters represented in this pham: DN, singleton, DH, DI, CZ2, CZ1, CZ7, CZ4, K4, FJ, K8, FL, I1, BX, EP, A1, DN1, DN2, CS4, CS1, CS3, CS2, CY2, P1, O, N, Q, T, Z, DC2, CV, DC1, F1, F2, DE1, DE3, DE4,

Info for manual annotations of cluster A1:
•Start number 35 was manually annotated 1 time for cluster A1.
•Start number 38 was manually annotated 1 time for cluster A1.
•Start number 42 was manually annotated 7 times for cluster A1.
•Start number 46 was manually annotated 6 times for cluster A1.
•Start number 52 was manually annotated 3 times for cluster A1.
•Start number 58 was manually annotated 1 time for cluster A1.
•Start number 92 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster CS1:
•Start number 167 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 167 was manually annotated 36 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 167 was manually annotated 25 times for cluster CS3.

Info for manual annotations of cluster CS4:
•Start number 167 was manually annotated 12 times for cluster CS4.

Info for manual annotations of cluster CV:
•Start number 52 was manually annotated 1 time for cluster CV.
•Start number 54 was manually annotated 4 times for cluster CV.

Info for manual annotations of cluster CY2:
•Start number 158 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ2:
•Start number 54 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ4:
•Start number 157 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ7:
•Start number 156 was manually annotated 1 time for cluster CZ7.
•Start number 158 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DC1:
•Start number 54 was manually annotated 8 times for cluster DC1.

Info for manual annotations of cluster DC2:
•Start number 182 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:
•Start number 156 was manually annotated 2 times for cluster DE1.
•Start number 158 was manually annotated 6 times for cluster DE1.
•Start number 160 was manually annotated 19 times for cluster DE1.

Info for manual annotations of cluster DE3:
•Start number 58 was manually annotated 1 time for cluster DE3.

Info for manual annotations of cluster DE4:
•Start number 160 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DH:
•Start number 157 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DI:
•Start number 160 was manually annotated 15 times for cluster DI.

Info for manual annotations of cluster DN:
•Start number 156 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 156 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DN2:
•Start number 182 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster EP:
•Start number 155 was manually annotated 1 time for cluster EP.

Info for manual annotations of cluster F1:
•Start number 53 was manually annotated 12 times for cluster F1.
•Start number 111 was manually annotated 1 time for cluster F1.
•Start number 113 was manually annotated 1 time for cluster F1.
•Start number 148 was manually annotated 1 time for cluster F1.
•Start number 149 was manually annotated 16 times for cluster F1.
•Start number 151 was manually annotated 1 time for cluster F1.
•Start number 152 was manually annotated 2 times for cluster F1.
•Start number 155 was manually annotated 1 time for cluster F1.
•Start number 159 was manually annotated 1 time for cluster F1.
•Start number 160 was manually annotated 13 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 160 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster FJ:
•Start number 160 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FL:
•Start number 160 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster I1:
•Start number 23 was manually annotated 1 time for cluster I1.
•Start number 53 was manually annotated 2 times for cluster I1.
•Start number 160 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster K4:
•Start number 83 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K8:
•Start number 53 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster N:
•Start number 53 was manually annotated 1 time for cluster N.
•Start number 102 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster O:
•Start number 152 was manually annotated 1 time for cluster O.

Info for manual annotations of cluster P1:
•Start number 113 was manually annotated 2 times for cluster P1.
•Start number 151 was manually annotated 5 times for cluster P1.
•Start number 158 was manually annotated 1 time for cluster P1.
•Start number 160 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster Q:

•Start number 149 was manually annotated 2 times for cluster Q.
•Start number 157 was manually annotated 20 times for cluster Q.

Info for manual annotations of cluster T:
•Start number 164 was manually annotated 7 times for cluster T.

Info for manual annotations of cluster Z:
•Start number 160 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_73 Start: 44576, Stop: 45244, Start Num: 160
Candidate Starts for 32HC_73:
(89, 44408), (132, 44507), (141, 44528), (Start: 160 @44576 has 64 MA's), (169, 44603), (189, 44657), (326, 44987), (339, 45008), (377, 45161),

Gene: ASerpRocky_43 Start: 45618, Stop: 44902, Start Num: 167
Candidate Starts for ASerpRocky_43:
(Start: 167 @45618 has 76 MA's), (174, 45603), (207, 45501), (234, 45411), (237, 45405), (293, 45252), (319, 45189), (335, 45159), (366, 45048), (384, 44937),

Gene: Abblin_89 Start: 59142, Stop: 59831, Start Num: 160
Candidate Starts for Abblin_89:
(47, 58827), (103, 59016), (124, 59061), (135, 59085), (Start: 160 @59142 has 64 MA's), (189, 59223), (204, 59274), (246, 59400), (264, 59439), (296, 59517), (303, 59529), (312, 59550), (328, 59586), (358, 59667),

Gene: Acme_70 Start: 44165, Stop: 43323, Start Num: 52
Candidate Starts for Acme_70:
(Start: 38 @44201 has 1 MA's), (Start: 46 @44186 has 6 MA's), (Start: 52 @44165 has 4 MA's), (Start: 58 @44135 has 2 MA's), (59, 44132), (70, 44102), (73, 44093), (120, 43973), (206, 43865), (222, 43796), (245, 43721), (346, 43535), (355, 43505), (389, 43346),

Gene: Adgers_48 Start: 44794, Stop: 44072, Start Num: 167
Candidate Starts for Adgers_48:
(Start: 167 @44794 has 76 MA's), (179, 44755), (188, 44728), (207, 44677), (229, 44602), (234, 44587), (268, 44503), (293, 44428), (349, 44272), (366, 44224), (368, 44194), (390, 44092),

Gene: Ailee_83 Start: 57588, Stop: 58286, Start Num: 160
Candidate Starts for Ailee_83:
(3, 57051), (7, 57105), (50, 57276), (127, 57513), (140, 57537), (Start: 160 @57588 has 64 MA's), (177, 57636), (179, 57645), (Start: 182 @57657 has 2 MA's), (218, 57765), (237, 57825), (267, 57906), (276, 57921), (283, 57942), (335, 58074), (351, 58107), (365, 58149), (371, 58194), (378, 58227), (383, 58254), (390, 58275),

Gene: Amochick_68 Start: 45397, Stop: 46059, Start Num: 157
Candidate Starts for Amochick_68:
(28, 45019), (59, 45136), (73, 45181), (77, 45205), (97, 45256), (121, 45310), (Start: 149 @45385 has 18 MA's), (150, 45388), (Start: 157 @45397 has 22 MA's), (169, 45424), (236, 45598), (270, 45676), (273, 45682), (281, 45706), (287, 45715), (303, 45757), (342, 45841), (343, 45844), (351, 45877), (353, 45883), (355, 45889), (369, 45952), (377, 45988), (382, 46015), (384, 46030), (387, 46039),

Gene: Amore2_49 Start: 45293, Stop: 44574, Start Num: 167
Candidate Starts for Amore2_49:
(Start: 167 @45293 has 76 MA's), (179, 45254), (188, 45227), (194, 45194), (207, 45176), (229, 45101), (234, 45086), (238, 45077), (268, 45002), (293, 44927),

Gene: Amymech_67 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Amymech_67:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Anamika_46 Start: 46699, Stop: 45980, Start Num: 167
Candidate Starts for Anamika_46:
(Start: 167 @46699 has 76 MA's), (188, 46633), (207, 46582), (212, 46576), (234, 46492), (249, 46447), (268, 46408), (293, 46333), (299, 46324), (366, 46129),

Gene: Asapag_64 Start: 39261, Stop: 39899, Start Num: 156
Candidate Starts for Asapag_64:
(144, 39240), (Start: 156 @39261 has 7 MA's), (169, 39291), (189, 39345), (195, 39372), (246, 39474), (283, 39552), (351, 39705), (387, 39870),

Gene: Ashballer_72 Start: 44821, Stop: 43955, Start Num: 42
Candidate Starts for Ashballer_72:
(34, 44848), (39, 44827), (Start: 42 @44821 has 7 MA's), (Start: 52 @44794 has 4 MA's), (Start: 58 @44764 has 2 MA's), (59, 44761), (70, 44731), (73, 44722), (120, 44602), (206, 44494), (222, 44425), (245, 44350), (346, 44164), (355, 44134), (389, 43975),

Gene: Atcoo_62 Start: 41875, Stop: 42537, Start Num: 151
Candidate Starts for Atcoo_62:
(Start: 111 @41794 has 1 MA's), (115, 41803), (131, 41830), (Start: 151 @41875 has 6 MA's), (169, 41908), (189, 41962), (195, 41989), (225, 42049), (262, 42139), (271, 42151), (284, 42184), (351, 42349), (363, 42382), (368, 42418), (387, 42508),

Gene: Austin_49 Start: 45293, Stop: 44574, Start Num: 167
Candidate Starts for Austin_49:
(Start: 167 @45293 has 76 MA's), (188, 45227), (194, 45194), (207, 45176), (229, 45101), (234, 45086), (238, 45077), (268, 45002), (293, 44927),

Gene: Ayotoya_67 Start: 43566, Stop: 44279, Start Num: 160
Candidate Starts for Ayotoya_67:
(65, 43332), (110, 43461), (Start: 160 @43566 has 64 MA's), (169, 43593), (190, 43659), (270, 43884), (283, 43917), (304, 43971), (323, 44028), (349, 44079), (351, 44082), (364, 44121), (368, 44157),

Gene: Barb_61 Start: 44265, Stop: 45221, Start Num: 54
Candidate Starts for Barb_61:
(Start: 54 @44265 has 13 MA's), (79, 44361), (118, 44451), (218, 44721), (222, 44745), (237, 44790), (239, 44796), (280, 44895), (347, 45006), (364, 45060),

Gene: Barbochs_45 Start: 44538, Stop: 43816, Start Num: 167
Candidate Starts for Barbochs_45:

(Start: 167 @44538 has 76 MA's), (179, 44499), (188, 44472), (207, 44421), (229, 44346), (234, 44331), (268, 44247), (293, 44172), (349, 44016), (366, 43968), (368, 43938), (390, 43836),

Gene: Bartholomew_57 Start: 37622, Stop: 38488, Start Num: 113
Candidate Starts for Bartholomew_57:
(93, 37571), (97, 37586), (Start: 113 @37622 has 3 MA's), (Start: 158 @37721 has 9 MA's), (169, 37751), (180, 37784), (Start: 182 @37793 has 2 MA's), (194, 37841), (209, 37874), (225, 37943), (250, 38015), (260, 38039), (269, 38054), (334, 38225), (345, 38261), (362, 38327), (365, 38333), (383, 38438), (387, 38456),

Gene: Beaver_50 Start: 46308, Stop: 45586, Start Num: 167
Candidate Starts for Beaver_50:
(Start: 167 @46308 has 76 MA's), (179, 46269), (188, 46242), (207, 46191), (229, 46116), (234, 46101), (268, 46017), (293, 45942), (349, 45786), (366, 45738), (368, 45708), (390, 45606),

Gene: Benczkowski14_42 Start: 45651, Stop: 44935, Start Num: 167
Candidate Starts for Benczkowski14_42:
(Start: 167 @45651 has 76 MA's), (174, 45636), (207, 45534), (234, 45444), (237, 45438), (293, 45285), (319, 45222), (335, 45192), (384, 44970),

Gene: BenoitCattle_47 Start: 44738, Stop: 44016, Start Num: 167
Candidate Starts for BenoitCattle_47:
(Start: 167 @44738 has 76 MA's), (179, 44699), (188, 44672), (207, 44621), (229, 44546), (234, 44531), (268, 44447), (293, 44372), (349, 44216), (366, 44168), (368, 44138), (390, 44036),

Gene: Bernal13_60 Start: 41221, Stop: 41958, Start Num: 164
Candidate Starts for Bernal13_60:
(24, 40804), (96, 41062), (100, 41068), (Start: 164 @41221 has 7 MA's), (179, 41263), (200, 41335), (205, 41353), (243, 41479), (251, 41497), (295, 41611), (307, 41647), (326, 41692), (351, 41776), (354, 41785), (356, 41788), (361, 41797), (365, 41815), (392, 41947),

Gene: Berries_46 Start: 46670, Stop: 45951, Start Num: 167
Candidate Starts for Berries_46:
(Start: 167 @46670 has 76 MA's), (188, 46604), (207, 46553), (212, 46547), (234, 46463), (249, 46418), (268, 46379), (293, 46304), (366, 46100),

Gene: BetterKatz_66 Start: 42765, Stop: 43475, Start Num: 160
Candidate Starts for BetterKatz_66:
(65, 42531), (110, 42660), (Start: 160 @42765 has 64 MA's), (169, 42792), (190, 42858), (270, 43083), (283, 43116), (304, 43170), (323, 43227), (349, 43278), (351, 43281), (368, 43356),

Gene: Bianmat_46 Start: 46710, Stop: 45991, Start Num: 167
Candidate Starts for Bianmat_46:
(Start: 167 @46710 has 76 MA's), (188, 46644), (198, 46602), (207, 46593), (212, 46587), (234, 46503), (249, 46458), (263, 46425), (268, 46419), (293, 46344), (366, 46140),

Gene: Bibwit_83 Start: 56952, Stop: 57692, Start Num: 160
Candidate Starts for Bibwit_83:
(7, 56205), (29, 56574), (50, 56640), (127, 56877), (140, 56901), (Start: 160 @56952 has 64 MA's), (177, 57000), (179, 57009), (Start: 182 @57021 has 2 MA's), (237, 57213), (241, 57228), (262, 57288), (267, 57294), (270, 57297), (276, 57309), (278, 57315), (283, 57330), (323, 57441), (365, 57555), (368, 57588), (371, 57600), (378, 57633), (383, 57660), (390, 57681),

Gene: Big3_68 Start: 44998, Stop: 44108, Start Num: 35
Candidate Starts for Big3_68:
(10, 45160), (11, 45127), (26, 45037), (Start: 35 @44998 has 1 MA's), (48, 44968), (49, 44965), (62, 44911), (72, 44878), (76, 44857), (125, 44752), (134, 44731), (142, 44710), (145, 44704), (184, 44629), (192, 44599), (225, 44482), (237, 44449), (336, 44368), (349, 44302), (367, 44242), (377, 44185), (378, 44179), (382, 44158),

Gene: BigShaq_46 Start: 44743, Stop: 44021, Start Num: 167
Candidate Starts for BigShaq_46:
(Start: 167 @44743 has 76 MA's), (179, 44704), (188, 44677), (207, 44626), (229, 44551), (234, 44536), (268, 44452), (293, 44377), (349, 44221), (366, 44173), (368, 44143), (390, 44041),

Gene: BillyBobJr_52 Start: 46616, Stop: 45894, Start Num: 167
Candidate Starts for BillyBobJr_52:
(Start: 167 @46616 has 76 MA's), (179, 46577), (188, 46550), (194, 46517), (207, 46499), (229, 46424), (234, 46409), (268, 46325), (293, 46250), (365, 46049), (366, 46046), (390, 45914),

Gene: BirksAndSocks_51 Start: 46658, Stop: 45936, Start Num: 167
Candidate Starts for BirksAndSocks_51:
(Start: 167 @46658 has 76 MA's), (179, 46619), (188, 46592), (207, 46541), (229, 46466), (234, 46451), (268, 46367), (293, 46292), (349, 46136), (366, 46088), (368, 46058), (390, 45956),

Gene: BloominB_67 Start: 44904, Stop: 45578, Start Num: 149
Candidate Starts for BloominB_67:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: BobBob_87 Start: 57791, Stop: 58489, Start Num: 160
Candidate Starts for BobBob_87:
(7, 57044), (29, 57413), (50, 57479), (127, 57716), (140, 57740), (Start: 160 @57791 has 64 MA's), (177, 57839), (179, 57848), (Start: 182 @57860 has 2 MA's), (218, 57968), (237, 58028), (267, 58109), (276, 58124), (283, 58145), (335, 58277), (351, 58310), (365, 58352), (371, 58397), (378, 58430), (383, 58457), (390, 58478),

Gene: Bobquesha_72 Start: 42529, Stop: 43374, Start Num: 83
Candidate Starts for Bobquesha_72:
(66, 42478), (Start: 83 @42529 has 22 MA's), (94, 42556), (108, 42586), (199, 42814), (219, 42874), (237, 42940), (336, 43114), (357, 43192), (365, 43219), (370, 43258), (378, 43297), (393, 43357),

Gene: Bock_68 Start: 43009, Stop: 43719, Start Num: 160
Candidate Starts for Bock_68:
(65, 42775), (110, 42904), (Start: 160 @43009 has 64 MA's), (169, 43036), (190, 43102), (270, 43327), (283, 43360), (304, 43414), (323, 43471), (349, 43522), (351, 43525), (368, 43600),

Gene: Boilgate_61 Start: 43556, Stop: 44494, Start Num: 53
Candidate Starts for Boilgate_61:
(44, 43532), (Start: 53 @43556 has 16 MA's), (Start: 58 @43583 has 2 MA's), (60, 43589), (63, 43595), (68, 43613), (79, 43652), (118, 43742), (129, 43763), (134, 43772), (136, 43775), (163, 43835), (171, 43853), (199, 43940), (206, 43952), (213, 43964), (222, 44021), (237, 44066), (279, 44141), (346, 44291), (355, 44321), (365, 44351), (369, 44387),

Gene: Boneham_50 Start: 46562, Stop: 45840, Start Num: 167
Candidate Starts for Boneham_50:
(Start: 167 @46562 has 76 MA's), (179, 46523), (188, 46496), (207, 46445), (229, 46370), (234, 46355), (268, 46271), (293, 46196), (365, 45995), (366, 45992), (390, 45860),

Gene: BotCity_67 Start: 40937, Stop: 41575, Start Num: 156
Candidate Starts for BotCity_67:
(144, 40916), (Start: 156 @40937 has 7 MA's), (169, 40967), (189, 41021), (195, 41048), (246, 41150), (283, 41228), (351, 41381), (387, 41546),

Gene: Bran_64 Start: 40159, Stop: 40923, Start Num: 155
Candidate Starts for Bran_64:
(Start: 155 @40159 has 2 MA's), (169, 40192), (Start: 182 @40234 has 2 MA's), (188, 40249), (191, 40261), (194, 40282), (209, 40315), (225, 40384), (244, 40441), (248, 40450), (250, 40456), (266, 40492), (297, 40573), (334, 40663), (338, 40672), (345, 40699), (348, 40726), (374, 40828), (378, 40849), (382, 40870), (396, 40915), (399, 40918),

Gene: Brandonk123_11 Start: 5315, Stop: 5971, Start Num: 156
Candidate Starts for Brandonk123_11:
(Start: 156 @5315 has 7 MA's), (185, 5387), (189, 5399), (195, 5426), (246, 5552), (283, 5627), (302, 5675), (329, 5732), (331, 5735), (348, 5780), (351, 5789),

Gene: Brandonk123_89 Start: 57956, Stop: 58654, Start Num: 160
Candidate Starts for Brandonk123_89:
(3, 57155), (7, 57209), (29, 57578), (50, 57644), (127, 57881), (140, 57905), (Start: 160 @57956 has 64 MA's), (172, 57989), (177, 58004), (Start: 182 @58025 has 2 MA's), (218, 58133), (237, 58193), (267, 58274), (276, 58289), (283, 58310), (335, 58442), (351, 58475), (365, 58517), (371, 58562), (378, 58595), (383, 58622), (390, 58643),

Gene: Brawn1_82 Start: 57096, Stop: 57794, Start Num: 160
Candidate Starts for Brawn1_82:
(7, 56349), (29, 56718), (50, 56784), (127, 57021), (140, 57045), (Start: 160 @57096 has 64 MA's), (177, 57144), (179, 57153), (Start: 182 @57165 has 2 MA's), (218, 57273), (237, 57333), (267, 57414), (276, 57429), (283, 57450), (335, 57582), (351, 57615), (365, 57657), (371, 57702), (378, 57735), (383, 57762), (390, 57783),

Gene: Breezic_46 Start: 44551, Stop: 43829, Start Num: 167
Candidate Starts for Breezic_46:
(Start: 167 @44551 has 76 MA's), (179, 44512), (188, 44485), (207, 44434), (229, 44359), (234, 44344), (268, 44260), (293, 44185), (349, 44029), (366, 43981), (368, 43951), (390, 43849),

Gene: BritBrat_76 Start: 47469, Stop: 48248, Start Num: 158
Candidate Starts for BritBrat_76:
(Start: 158 @47469 has 9 MA's), (172, 47505), (186, 47550), (191, 47562), (197, 47589), (225, 47703), (272, 47826), (294, 47892), (311, 47937), (313, 47940), (365, 48093), (390, 48222), (396, 48240),

Gene: BronnyJr_51 Start: 36387, Stop: 37439, Start Num: 53
Candidate Starts for BronnyJr_51:
(30, 36318), (Start: 53 @36387 has 16 MA's), (Start: 58 @36414 has 2 MA's), (73, 36456), (79, 36483), (90, 36507), (95, 36522), (122, 36579), (125, 36582), (134, 36603), (187, 36756), (193, 36780), (195, 36798), (347, 37221), (365, 37278), (398, 37431),

Gene: Brujita_55 Start: 37346, Stop: 37996, Start Num: 160

Candidate Starts for Brujita_55:
(Start: 160 @37346 has 64 MA's), (231, 37532), (246, 37568), (253, 37583), (256, 37586), (302, 37694), (339, 37760), (353, 37814), (365, 37844), (387, 37967),

Gene: Brusacoram_62 Start: 40418, Stop: 41080, Start Num: 151
Candidate Starts for Brusacoram_62:
(Start: 111 @40337 has 1 MA's), (115, 40346), (131, 40373), (Start: 151 @40418 has 6 MA's), (169, 40451), (189, 40505), (195, 40532), (225, 40592), (262, 40682), (271, 40694), (284, 40727), (351, 40892), (363, 40925), (368, 40961), (387, 41051),

Gene: Brylie_66 Start: 42588, Stop: 43298, Start Num: 160
Candidate Starts for Brylie_66:
(65, 42354), (110, 42483), (Start: 160 @42588 has 64 MA's), (169, 42615), (190, 42681), (270, 42906), (283, 42939), (304, 42993), (323, 43050), (349, 43101), (351, 43104), (368, 43179),

Gene: Butterball_50 Start: 46562, Stop: 45840, Start Num: 167
Candidate Starts for Butterball_50:
(Start: 167 @46562 has 76 MA's), (179, 46523), (188, 46496), (194, 46463), (207, 46445), (229, 46370), (234, 46355), (268, 46271), (293, 46196), (365, 45995), (366, 45992), (390, 45860),

Gene: CathyBurgh_46 Start: 45128, Stop: 44406, Start Num: 167
Candidate Starts for CathyBurgh_46:
(Start: 167 @45128 has 76 MA's), (179, 45089), (188, 45062), (207, 45011), (229, 44936), (234, 44921), (268, 44837), (293, 44762), (349, 44606), (366, 44558), (368, 44528), (390, 44426),

Gene: Chancellor_71 Start: 43637, Stop: 44482, Start Num: 83
Candidate Starts for Chancellor_71:
(66, 43586), (Start: 83 @43637 has 22 MA's), (94, 43664), (108, 43694), (199, 43922), (206, 43934), (219, 43982), (237, 44048), (336, 44222), (357, 44300), (365, 44327), (370, 44366),

Gene: Charianelly_46 Start: 46420, Stop: 45701, Start Num: 167
Candidate Starts for Charianelly_46:
(Start: 167 @46420 has 76 MA's), (188, 46354), (198, 46312), (207, 46303), (212, 46297), (234, 46213), (249, 46168), (263, 46135), (268, 46129), (293, 46054), (366, 45850),

Gene: Che9d_76 Start: 43217, Stop: 43891, Start Num: 160
Candidate Starts for Che9d_76:
(81, 43040), (84, 43046), (86, 43055), (Start: 160 @43217 has 64 MA's), (169, 43244), (189, 43298), (210, 43346), (246, 43448), (254, 43463), (257, 43466), (319, 43619), (329, 43640), (331, 43643), (356, 43718), (368, 43772), (387, 43862),

Gene: Che9d_77 Start: 43923, Stop: 44576, Start Num: 160
Candidate Starts for Che9d_77:
(67, 43686), (69, 43698), (71, 43701), (78, 43734), (80, 43737), (82, 43740), (140, 43875), (Start: 160 @43923 has 64 MA's), (169, 43950), (189, 44004), (195, 44031), (240, 44124), (271, 44190), (284, 44223), (351, 44388), (363, 44421), (368, 44457), (373, 44475), (384, 44538), (387, 44547),

Gene: Cheetobro_71 Start: 43634, Stop: 44479, Start Num: 83
Candidate Starts for Cheetobro_71:
(66, 43583), (Start: 83 @43634 has 22 MA's), (94, 43661), (108, 43691), (199, 43919), (206, 43931), (219, 43979), (237, 44045), (336, 44219), (357, 44297), (365, 44324), (370, 44363),

Gene: Chelms_46 Start: 44743, Stop: 44021, Start Num: 167

Candidate Starts for Chelms_46:
(Start: 167 @44743 has 76 MA's), (188, 44677), (207, 44626), (229, 44551), (234, 44536), (268, 44452), (293, 44377), (349, 44221), (366, 44173), (368, 44143), (390, 44041),

Gene: Chop_68 Start: 43754, Stop: 44467, Start Num: 160
Candidate Starts for Chop_68:
(65, 43520), (110, 43649), (Start: 160 @43754 has 64 MA's), (169, 43781), (190, 43847), (270, 44072), (283, 44105), (304, 44159), (323, 44216), (349, 44267), (351, 44270), (364, 44309), (368, 44345),

Gene: Chubbello_59 Start: 38549, Stop: 39286, Start Num: 157
Candidate Starts for Chubbello_59:
(116, 38459), (123, 38468), (Start: 157 @38549 has 22 MA's), (169, 38579), (180, 38612), (Start: 182 @38621 has 2 MA's), (214, 38711), (223, 38756), (231, 38783), (233, 38789), (255, 38837), (261, 38858), (288, 38918), (294, 38942), (307, 38978), (310, 38984), (321, 39011), (341, 39050), (365, 39134), (386, 39257),

Gene: CinnamonToast_52 Start: 46616, Stop: 45894, Start Num: 167
Candidate Starts for CinnamonToast_52:
(Start: 167 @46616 has 76 MA's), (179, 46577), (188, 46550), (194, 46517), (207, 46499), (229, 46424), (234, 46409), (268, 46325), (293, 46250), (365, 46049), (366, 46046), (390, 45914),

Gene: ClamChowder_61 Start: 44265, Stop: 45221, Start Num: 54
Candidate Starts for ClamChowder_61:
(Start: 54 @44265 has 13 MA's), (79, 44361), (118, 44451), (218, 44721), (222, 44745), (237, 44790), (239, 44796), (280, 44895), (347, 45006), (364, 45060),

Gene: Clown_9 Start: 5559, Stop: 6242, Start Num: 182
Candidate Starts for Clown_9:
(162, 5499), (Start: 182 @5559 has 2 MA's), (203, 5628), (227, 5730), (234, 5751), (246, 5787), (275, 5847), (279, 5859), (288, 5883), (290, 5892), (317, 5964), (330, 6000), (333, 6003), (360, 6081), (375, 6162), (394, 6234),

Gene: Crete_47 Start: 45009, Stop: 44287, Start Num: 167
Candidate Starts for Crete_47:
(Start: 167 @45009 has 76 MA's), (179, 44970), (188, 44943), (207, 44892), (229, 44817), (234, 44802), (268, 44718), (293, 44643), (349, 44487), (366, 44439), (368, 44409), (390, 44307),

Gene: DLane_61 Start: 40914, Stop: 41870, Start Num: 53
Candidate Starts for DLane_61:
(Start: 53 @40914 has 16 MA's), (Start: 58 @40941 has 2 MA's), (73, 40983), (79, 41010), (90, 41034), (95, 41049), (118, 41100), (136, 41133), (176, 41211), (Start: 182 @41235 has 2 MA's), (193, 41271), (195, 41286), (206, 41307), (213, 41319), (222, 41376), (237, 41421), (263, 41484), (279, 41505), (336, 41607), (365, 41712),

Gene: DaddyRickover_77 Start: 47706, Stop: 48362, Start Num: 160
Candidate Starts for DaddyRickover_77:
(128, 47643), (Start: 151 @47697 has 6 MA's), (Start: 160 @47706 has 64 MA's), (161, 47712), (189, 47787), (195, 47814), (225, 47874), (262, 47964), (271, 47976), (284, 48009), (289, 48024), (351, 48174), (363, 48207), (368, 48243), (387, 48333),

Gene: Daegal_70 Start: 45947, Stop: 46621, Start Num: 149
Candidate Starts for Daegal_70:

(28, 45581), (43, 45638), (45, 45641), (59, 45698), (73, 45743), (77, 45767), (97, 45818), (121, 45872), (Start: 149 @45947 has 18 MA's), (150, 45950), (Start: 157 @45959 has 22 MA's), (169, 45986), (217, 46106), (236, 46160), (270, 46238), (273, 46244), (281, 46268), (287, 46277), (303, 46319), (342, 46403), (343, 46406), (351, 46439), (353, 46445), (355, 46451), (369, 46514), (377, 46550), (382, 46577), (384, 46592), (387, 46601),

Gene: Daenerys_73 Start: 47291, Stop: 47959, Start Num: 149
Candidate Starts for Daenerys_73:
(Start: 149 @47291 has 18 MA's), (169, 47330), (189, 47384), (195, 47411), (225, 47471), (262, 47561), (271, 47573), (284, 47606), (351, 47771), (363, 47804), (368, 47840), (387, 47930),

Gene: Dakiti_47 Start: 45611, Stop: 44889, Start Num: 167
Candidate Starts for Dakiti_47:
(Start: 167 @45611 has 76 MA's), (188, 45545), (207, 45494), (229, 45419), (234, 45404), (268, 45320), (293, 45245), (349, 45089), (366, 45041), (368, 45011), (390, 44909),

Gene: Damp_46 Start: 45584, Stop: 44865, Start Num: 167
Candidate Starts for Damp_46:
(Start: 167 @45584 has 76 MA's), (188, 45518), (207, 45467), (212, 45461), (234, 45377), (249, 45332), (268, 45293), (293, 45218), (366, 45014),

Gene: DanSyl44_74 Start: 44828, Stop: 45673, Start Num: 83
Candidate Starts for DanSyl44_74:
(66, 44777), (Start: 83 @44828 has 22 MA's), (94, 44855), (108, 44885), (199, 45113), (206, 45125), (219, 45173), (237, 45239), (336, 45413), (357, 45491), (365, 45518), (370, 45557),

Gene: Danyall_60 Start: 44369, Stop: 45325, Start Num: 54
Candidate Starts for Danyall_60:
(21, 44243), (32, 44309), (Start: 54 @44369 has 13 MA's), (79, 44465), (118, 44555), (218, 44825), (222, 44849), (237, 44894), (239, 44900), (280, 44999), (347, 45110), (364, 45164),

Gene: DeepSoil15_67 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for DeepSoil15_67:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: DelRio_67 Start: 43775, Stop: 44485, Start Num: 160
Candidate Starts for DelRio_67:
(65, 43541), (110, 43670), (Start: 160 @43775 has 64 MA's), (169, 43802), (190, 43868), (270, 44093), (283, 44126), (304, 44180), (323, 44237), (349, 44288), (351, 44291), (364, 44330), (368, 44366),

Gene: Delrey21_89 Start: 60618, Stop: 61307, Start Num: 160
Candidate Starts for Delrey21_89:
(135, 60561), (Start: 160 @60618 has 64 MA's), (189, 60699), (296, 60993), (303, 61005), (358, 61143), (363, 61161), (377, 61236), (378, 61242),

Gene: Demosthenes_42 Start: 45591, Stop: 44875, Start Num: 167
Candidate Starts for Demosthenes_42:
(Start: 167 @45591 has 76 MA's), (174, 45576), (207, 45474), (234, 45384), (237, 45378), (293, 45225), (319, 45162), (335, 45132), (384, 44910),

Gene: Dewey_62 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Dewey_62:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Diabla_50 Start: 46492, Stop: 45770, Start Num: 167
Candidate Starts for Diabla_50:
(Start: 167 @46492 has 76 MA's), (179, 46453), (207, 46375), (229, 46300), (234, 46285), (268, 46201), (293, 46126), (366, 45922), (368, 45892), (390, 45790),

Gene: DillTech15_74 Start: 44613, Stop: 45275, Start Num: 151
Candidate Starts for DillTech15_74:
(Start: 111 @44532 has 1 MA's), (115, 44541), (131, 44568), (Start: 151 @44613 has 6 MA's), (169, 44646), (189, 44700), (195, 44727), (225, 44787), (262, 44877), (271, 44889), (284, 44922), (335, 45039), (351, 45087), (363, 45120), (368, 45156), (387, 45246),

Gene: Divya_14 Start: 9831, Stop: 10529, Start Num: 156
Candidate Starts for Divya_14:
(Start: 156 @9831 has 7 MA's), (189, 9915), (262, 10119),

Gene: DobbysSock_52 Start: 38487, Stop: 39110, Start Num: 157
Candidate Starts for DobbysSock_52:
(147, 38466), (Start: 157 @38487 has 22 MA's), (169, 38517), (189, 38571), (221, 38640), (242, 38688), (265, 38721), (299, 38790), (303, 38799), (348, 38904), (351, 38913), (387, 39078),

Gene: DocB7_036 Start: 37520, Stop: 36810, Start Num: 165
Candidate Starts for DocB7_036:
(165, 37520), (169, 37511), (179, 37478), (188, 37451), (190, 37442), (225, 37337), (234, 37310), (285, 37184), (293, 37154), (340, 37052), (377, 36881), (384, 36839), (385, 36827), (388, 36821),

Gene: DoctorFroggo_89 Start: 60618, Stop: 61307, Start Num: 160
Candidate Starts for DoctorFroggo_89:
(135, 60561), (Start: 160 @60618 has 64 MA's), (189, 60699), (296, 60993), (303, 61005), (358, 61143), (363, 61161), (377, 61236), (378, 61242),

Gene: Donkeykong_75 Start: 46725, Stop: 47396, Start Num: 160
Candidate Starts for Donkeykong_75:
(119, 46662), (150, 46716), (Start: 160 @46725 has 64 MA's), (161, 46731), (189, 46806), (247, 46956), (249, 46959), (274, 47007), (315, 47109), (329, 47145), (335, 47154), (351, 47208), (373, 47295), (387, 47367),

Gene: Doomphist_77 Start: 47104, Stop: 47772, Start Num: 149
Candidate Starts for Doomphist_77:
(Start: 149 @47104 has 18 MA's), (169, 47143), (189, 47197), (195, 47224), (225, 47284), (262, 47374), (271, 47386), (284, 47419), (351, 47584), (363, 47617), (368, 47653), (387, 47743),

Gene: Eggsie_45 Start: 44453, Stop: 43731, Start Num: 167
Candidate Starts for Eggsie_45:
(Start: 167 @44453 has 76 MA's), (179, 44414), (188, 44387), (194, 44354), (207, 44336), (229, 44261), (234, 44246), (268, 44162), (293, 44087), (349, 43931), (366, 43883), (368, 43853), (390, 43751),

Gene: Ein37_67 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Ein37_67:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Ekhein_47 Start: 44256, Stop: 43534, Start Num: 167
Candidate Starts for Ekhein_47:
(Start: 167 @44256 has 76 MA's), (179, 44217), (188, 44190), (207, 44139), (229, 44064), (234, 44049), (268, 43965), (293, 43890), (349, 43734), (366, 43686), (368, 43656), (390, 43554),

Gene: Emmaloid_68 Start: 43421, Stop: 44344, Start Num: 53
Candidate Starts for Emmaloid_68:
(Start: 53 @43421 has 16 MA's), (Start: 58 @43448 has 2 MA's), (73, 43490), (118, 43607), (125, 43616), (134, 43637), (175, 43703), (206, 43739), (213, 43751), (222, 43808), (237, 43853), (239, 43859), (336, 44084), (337, 44087),

Gene: Empress_72 Start: 45915, Stop: 46583, Start Num: 149
Candidate Starts for Empress_72:
(Start: 149 @45915 has 18 MA's), (169, 45954), (189, 46008), (195, 46035), (225, 46095), (262, 46185), (271, 46197), (284, 46230), (351, 46395), (363, 46428), (368, 46464), (387, 46554),

Gene: Eponine_73 Start: 44480, Stop: 45325, Start Num: 83
Candidate Starts for Eponine_73:
(66, 44429), (Start: 83 @44480 has 22 MA's), (94, 44507), (108, 44537), (199, 44765), (206, 44777), (219, 44825), (237, 44891), (336, 45065), (357, 45143), (365, 45170), (370, 45209),

Gene: Evanesce_66 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Evanesce_66:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Exiguo_46 Start: 44268, Stop: 43546, Start Num: 167
Candidate Starts for Exiguo_46:
(Start: 167 @44268 has 76 MA's), (179, 44229), (188, 44202), (207, 44151), (229, 44076), (234, 44061), (268, 43977), (293, 43902), (349, 43746), (366, 43698), (368, 43668), (390, 43566),

Gene: Fajezeel_69 Start: 43491, Stop: 42613, Start Num: 38
Candidate Starts for Fajezeel_69:
(Start: 38 @43491 has 1 MA's), (Start: 46 @43476 has 6 MA's), (Start: 52 @43455 has 4 MA's), (Start: 58 @43425 has 2 MA's), (59, 43422), (70, 43392), (73, 43383), (120, 43263), (206, 43155), (222, 43086), (245, 43011), (346, 42825), (355, 42795), (389, 42636),

Gene: Fastidio_67 Start: 41425, Stop: 42081, Start Num: 159
Candidate Starts for Fastidio_67:
(106, 41311), (Start: 159 @41425 has 1 MA's), (169, 41452), (189, 41506), (195, 41533), (225, 41593), (262, 41683), (271, 41695), (284, 41728), (335, 41845), (351, 41893), (363, 41926), (368, 41962), (387, 42052),

Gene: FelixAlejandro_51 Start: 46760, Stop: 46038, Start Num: 167
Candidate Starts for FelixAlejandro_51:
(Start: 167 @46760 has 76 MA's), (179, 46721), (188, 46694), (194, 46661), (207, 46643), (229, 46568), (234, 46553), (268, 46469), (293, 46394), (365, 46193), (366, 46190), (390, 46058),

Gene: Filuzino_64 Start: 41219, Stop: 42205, Start Num: 53
Candidate Starts for Filuzino_64:
(Start: 53 @41219 has 16 MA's), (Start: 58 @41246 has 2 MA's), (60, 41252), (73, 41288), (79, 41315), (90, 41339), (95, 41354), (118, 41405), (136, 41438), (142, 41456), (187, 41585), (193, 41609), (213, 41657), (222, 41714), (336, 41942), (346, 41987), (348, 41996), (365, 42047),

Gene: Fionnbharth_71 Start: 43878, Stop: 44723, Start Num: 83
Candidate Starts for Fionnbharth_71:
(66, 43827), (Start: 83 @43878 has 22 MA's), (94, 43905), (108, 43935), (199, 44163), (206, 44175), (219, 44223), (237, 44289), (336, 44463), (357, 44541), (365, 44568), (370, 44607),

Gene: Fitzgerald_83 Start: 58102, Stop: 58800, Start Num: 160
Candidate Starts for Fitzgerald_83:
(7, 57355), (29, 57724), (50, 57790), (127, 58027), (140, 58051), (Start: 160 @58102 has 64 MA's), (177, 58150), (179, 58159), (Start: 182 @58171 has 2 MA's), (218, 58279), (237, 58339), (267, 58420), (276, 58435), (283, 58456), (335, 58588), (351, 58621), (365, 58663), (371, 58708), (378, 58741), (383, 58768), (390, 58789),

Gene: Flakey_46 Start: 45132, Stop: 44410, Start Num: 167
Candidate Starts for Flakey_46:
(Start: 167 @45132 has 76 MA's), (179, 45093), (188, 45066), (207, 45015), (229, 44940), (234, 44925), (268, 44841), (293, 44766), (349, 44610), (366, 44562), (368, 44532), (390, 44430),

Gene: Flathead_72 Start: 45157, Stop: 46023, Start Num: 113
Candidate Starts for Flathead_72:
(Start: 83 @45073 has 22 MA's), (87, 45085), (Start: 113 @45157 has 3 MA's), (Start: 158 @45256 has 9 MA's), (169, 45286), (180, 45319), (Start: 182 @45328 has 2 MA's), (194, 45376), (209, 45409), (225, 45478), (250, 45550), (260, 45574), (269, 45589), (334, 45760), (345, 45796), (362, 45862), (365, 45868), (383, 45973), (387, 45991),

Gene: Forge_62 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Forge_62:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Fosterous_87 Start: 58250, Stop: 58948, Start Num: 160
Candidate Starts for Fosterous_87:
(127, 58175), (140, 58199), (Start: 160 @58250 has 64 MA's), (177, 58298), (179, 58307), (Start: 182 @58319 has 2 MA's), (218, 58427), (237, 58487), (267, 58568), (276, 58583), (283, 58604), (335, 58736), (351, 58769), (365, 58811), (371, 58856), (378, 58889), (383, 58916), (390, 58937),

Gene: Francois_66 Start: 42774, Stop: 43487, Start Num: 160
Candidate Starts for Francois_66:
(65, 42540), (110, 42669), (Start: 160 @42774 has 64 MA's), (169, 42801), (190, 42867), (225, 42975), (283, 43125), (304, 43179), (323, 43236), (349, 43287), (351, 43290), (355, 43302), (364, 43329), (365, 43332), (368, 43365), (390, 43458),

Gene: Frokostdame_67 Start: 43587, Stop: 44648, Start Num: 52
Candidate Starts for Frokostdame_67:
(Start: 52 @43587 has 4 MA's), (Start: 54 @43590 has 13 MA's), (79, 43686), (105, 43743), (118, 43776), (175, 43920), (196, 44010), (199, 44016), (213, 44040), (218, 44073), (222, 44097), (237, 44142), (239, 44148), (336, 44388), (347, 44436), (365, 44493), (376, 44559),

Gene: Fugax_62 Start: 44257, Stop: 45213, Start Num: 54
Candidate Starts for Fugax_62:
(Start: 54 @44257 has 13 MA's), (79, 44353), (118, 44443), (218, 44713), (222, 44737), (237, 44782), (239, 44788), (280, 44887), (347, 44998), (364, 45052),

Gene: GAL1_56 Start: 38270, Stop: 38929, Start Num: 156
Candidate Starts for GAL1_56:
(40, 37952), (51, 37976), (61, 38027), (71, 38060), (85, 38108), (104, 38156), (109, 38177), (143, 38240), (Start: 156 @38270 has 7 MA's), (189, 38354), (246, 38495), (283, 38573), (289, 38588), (302, 38621), (320, 38660), (322, 38663), (329, 38678), (335, 38687), (363, 38768), (377, 38843), (384, 38885), (387, 38900),

Gene: GMA7_38 Start: 39507, Stop: 38788, Start Num: 167
Candidate Starts for GMA7_38:
(Start: 167 @39507 has 76 MA's), (188, 39441), (194, 39408), (207, 39390), (229, 39315), (234, 39300), (238, 39291), (268, 39216), (293, 39141),

Gene: GTE7_37 Start: 39538, Stop: 38819, Start Num: 167
Candidate Starts for GTE7_37:
(Start: 167 @39538 has 76 MA's), (179, 39499), (188, 39472), (194, 39439), (207, 39421), (229, 39346), (234, 39331), (238, 39322), (268, 39247), (293, 39172),

Gene: GalacticEye_46 Start: 46382, Stop: 45663, Start Num: 167
Candidate Starts for GalacticEye_46:
(Start: 167 @46382 has 76 MA's), (188, 46316), (207, 46265), (212, 46259), (234, 46175), (249, 46130), (268, 46091), (293, 46016), (366, 45812),

Gene: Galadriel_11 Start: 4990, Stop: 5733, Start Num: 158
Candidate Starts for Galadriel_11:
(Start: 158 @4990 has 9 MA's), (178, 5050), (179, 5053), (190, 5089), (214, 5155), (223, 5200), (228, 5218), (230, 5224), (261, 5302), (288, 5362), (294, 5386), (300, 5395), (310, 5428), (325, 5467), (332, 5476), (350, 5536), (359, 5557), (364, 5575), (365, 5578), (373, 5629), (382, 5677),

Gene: Galadriel_86 Start: 58466, Stop: 59212, Start Num: 160
Candidate Starts for Galadriel_86:
(127, 58391), (140, 58415), (Start: 160 @58466 has 64 MA's), (177, 58514), (179, 58523), (Start: 182 @58535 has 2 MA's), (237, 58733), (241, 58748), (262, 58808), (267, 58814), (270, 58817), (276, 58829), (278, 58835), (283, 58850), (323, 58961), (365, 59075), (371, 59120), (378, 59153), (383, 59180), (390, 59201),

Gene: Gancho_66 Start: 44643, Stop: 45305, Start Num: 157
Candidate Starts for Gancho_66:
(36, 44301), (59, 44382), (73, 44427), (77, 44451), (97, 44502), (121, 44556), (Start: 149 @44631 has 18 MA's), (150, 44634), (Start: 157 @44643 has 22 MA's), (169, 44670), (236, 44844), (270, 44922), (271, 44925), (273, 44928), (281, 44952), (287, 44961), (303, 45003), (342, 45087), (343, 45090), (351, 45123), (353, 45129), (355, 45135), (369, 45198), (377, 45234), (382, 45261), (384, 45276),

(387, 45285),

Gene: Geralt_67 Start: 45011, Stop: 45679, Start Num: 149
Candidate Starts for Geralt_67:
(Start: 149 @45011 has 18 MA's), (169, 45050), (189, 45104), (195, 45131), (225, 45191), (262, 45281), (271, 45293), (284, 45326), (351, 45491), (363, 45524), (368, 45560), (387, 45650),

Gene: Getalong_67 Start: 41639, Stop: 42277, Start Num: 156
Candidate Starts for Getalong_67:
(144, 41618), (Start: 156 @41639 has 7 MA's), (169, 41669), (189, 41723), (195, 41750), (246, 41852), (283, 41930), (351, 42083), (387, 42248),

Gene: Giles_62 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Giles_62:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Gorko_46 Start: 44260, Stop: 43538, Start Num: 167
Candidate Starts for Gorko_46:
(Start: 167 @44260 has 76 MA's), (179, 44221), (188, 44194), (207, 44143), (229, 44068), (234, 44053), (268, 43969), (293, 43894), (349, 43738), (366, 43690), (368, 43660), (390, 43558),

Gene: GourdThymes_46 Start: 45134, Stop: 44412, Start Num: 167
Candidate Starts for GourdThymes_46:
(Start: 167 @45134 has 76 MA's), (179, 45095), (188, 45068), (207, 45017), (229, 44942), (234, 44927), (268, 44843), (293, 44768), (349, 44612), (366, 44564), (368, 44534), (390, 44432),

Gene: GrandSlam_68 Start: 43754, Stop: 44467, Start Num: 160
Candidate Starts for GrandSlam_68:
(65, 43520), (110, 43649), (Start: 160 @43754 has 64 MA's), (169, 43781), (190, 43847), (270, 44072), (283, 44105), (304, 44159), (323, 44216), (349, 44267), (351, 44270), (364, 44309), (368, 44345),

Gene: Gravaillia_63 Start: 44924, Stop: 45586, Start Num: 157
Candidate Starts for Gravaillia_63:
(36, 44582), (59, 44663), (73, 44708), (77, 44732), (97, 44783), (121, 44837), (Start: 149 @44912 has 18 MA's), (150, 44915), (Start: 157 @44924 has 22 MA's), (169, 44951), (236, 45125), (270, 45203), (273, 45209), (281, 45233), (287, 45242), (303, 45284), (342, 45368), (343, 45371), (351, 45404), (353, 45410), (355, 45416), (369, 45479), (377, 45515), (382, 45542), (384, 45557), (387, 45566),

Gene: GrecoEtereo_68 Start: 43047, Stop: 42184, Start Num: 46
Candidate Starts for GrecoEtereo_68:
(Start: 38 @43062 has 1 MA's), (Start: 46 @43047 has 6 MA's), (Start: 52 @43026 has 4 MA's), (Start: 58 @42996 has 2 MA's), (59, 42993), (70, 42963), (73, 42954), (120, 42834), (206, 42726), (222, 42657), (245, 42582), (346, 42396), (355, 42366), (389, 42207),

Gene: Greg_69 Start: 43455, Stop: 42613, Start Num: 52
Candidate Starts for Greg_69:
(Start: 38 @43491 has 1 MA's), (Start: 46 @43476 has 6 MA's), (Start: 52 @43455 has 4 MA's), (Start: 58 @43425 has 2 MA's), (59, 43422), (70, 43392), (73, 43383), (120, 43263), (206, 43155), (222, 43086), (245, 43011), (346, 42825), (355, 42795), (389, 42636),

Gene: Gudmit_63 Start: 37864, Stop: 38583, Start Num: 156
Candidate Starts for Gudmit_63:
(Start: 156 @37864 has 7 MA's), (169, 37894), (179, 37924), (Start: 182 @37936 has 2 MA's), (241, 38116), (276, 38197), (283, 38218), (349, 38380), (355, 38395), (365, 38425), (391, 38554),

Gene: Guillaume_46 Start: 46432, Stop: 45713, Start Num: 167
Candidate Starts for Guillaume_46:
(Start: 167 @46432 has 76 MA's), (188, 46366), (207, 46315), (212, 46309), (234, 46225), (249, 46180), (268, 46141), (293, 46066), (299, 46057), (366, 45862),

Gene: HC_55 Start: 36568, Stop: 37686, Start Num: 23
Candidate Starts for HC_55:
(16, 36517), (18, 36532), (Start: 23 @36568 has 1 MA's), (Start: 53 @36679 has 16 MA's), (Start: 58 @36709 has 2 MA's), (79, 36778), (90, 36802), (95, 36817), (118, 36868), (136, 36901), (187, 37048), (193, 37072), (213, 37120), (222, 37177), (237, 37222), (314, 37384), (336, 37423), (365, 37528),

Gene: HH92_66 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for HH92_66:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Hadrien_66 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Hadrien_66:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Hail_62 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Hail_62:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Hail2Pitt_45 Start: 46908, Stop: 46189, Start Num: 167
Candidate Starts for Hail2Pitt_45:
(Start: 167 @46908 has 76 MA's), (188, 46842), (207, 46791), (212, 46785), (234, 46701), (249, 46656), (268, 46617), (293, 46542), (299, 46533), (366, 46338),

Gene: Hamood_68 Start: 43754, Stop: 44467, Start Num: 160
Candidate Starts for Hamood_68:
(65, 43520), (110, 43649), (Start: 160 @43754 has 64 MA's), (169, 43781), (190, 43847), (270, 44072), (283, 44105), (304, 44159), (323, 44216), (349, 44267), (351, 44270), (364, 44309), (368, 44345),

Gene: Hamulus_73 Start: 46052, Stop: 46708, Start Num: 160
Candidate Starts for Hamulus_73:
(98, 45920), (Start: 151 @46043 has 6 MA's), (Start: 160 @46052 has 64 MA's), (161, 46058), (189, 46133), (195, 46160), (225, 46220), (262, 46310), (271, 46322), (284, 46355), (289, 46370), (351, 46520), (363, 46553), (368, 46589), (387, 46679),

Gene: Harambe_46 Start: 46699, Stop: 45980, Start Num: 167
Candidate Starts for Harambe_46:
(Start: 167 @46699 has 76 MA's), (188, 46633), (207, 46582), (212, 46576), (234, 46492), (249, 46447), (263, 46414), (268, 46408), (293, 46333), (366, 46129),

Gene: HarryOW_66 Start: 43503, Stop: 42691, Start Num: 58
Candidate Starts for HarryOW_66:
(Start: 38 @43569 has 1 MA's), (Start: 46 @43554 has 6 MA's), (Start: 52 @43533 has 4 MA's), (Start: 58 @43503 has 2 MA's), (59, 43500), (70, 43470), (73, 43461), (120, 43341), (206, 43233), (222, 43164), (245, 43089), (346, 42903), (355, 42873), (389, 42714),

Gene: HayZem_48 Start: 45290, Stop: 44571, Start Num: 167
Candidate Starts for HayZem_48:
(Start: 167 @45290 has 76 MA's), (179, 45251), (188, 45224), (194, 45191), (207, 45173), (229, 45098), (234, 45083), (238, 45074), (268, 44999), (293, 44924),

Gene: Hegedechwinu_81 Start: 47355, Stop: 48155, Start Num: 152
Candidate Starts for Hegedechwinu_81:
(Start: 152 @47355 has 3 MA's), (Start: 155 @47358 has 2 MA's), (169, 47391), (180, 47424), (Start: 182 @47433 has 2 MA's), (194, 47481), (209, 47514), (225, 47583), (250, 47655), (260, 47679), (269, 47694), (334, 47865), (345, 47901), (362, 47967), (365, 47973), (383, 48078), (387, 48096), (400, 48126),

Gene: Hello_46 Start: 46661, Stop: 45942, Start Num: 167
Candidate Starts for Hello_46:
(Start: 167 @46661 has 76 MA's), (188, 46595), (207, 46544), (212, 46538), (234, 46454), (249, 46409), (268, 46370), (293, 46295), (366, 46091),

Gene: Hollow_43 Start: 45997, Stop: 45281, Start Num: 167
Candidate Starts for Hollow_43:
(Start: 167 @45997 has 76 MA's), (174, 45982), (207, 45880), (234, 45790), (237, 45784), (293, 45631), (319, 45568), (335, 45538), (349, 45475), (384, 45316),

Gene: Hotorobo_46 Start: 45139, Stop: 44417, Start Num: 167
Candidate Starts for Hotorobo_46:
(Start: 167 @45139 has 76 MA's), (179, 45100), (188, 45073), (207, 45022), (229, 44947), (234, 44932), (268, 44848), (293, 44773), (349, 44617), (366, 44569), (368, 44539), (390, 44437),

Gene: Hyzer_73 Start: 48832, Stop: 49506, Start Num: 160
Candidate Starts for Hyzer_73:
(Start: 156 @48829 has 7 MA's), (Start: 160 @48832 has 64 MA's), (169, 48859), (189, 48913), (195, 48940), (231, 49021), (236, 49030), (283, 49132), (316, 49216), (351, 49318), (365, 49354), (378, 49432), (387, 49477),

Gene: IMpilo_63 Start: 41773, Stop: 42438, Start Num: 151
Candidate Starts for IMpilo_63:
(128, 41719), (Start: 151 @41773 has 6 MA's), (Start: 160 @41782 has 64 MA's), (161, 41788), (189, 41863), (195, 41890), (225, 41950), (262, 42040), (271, 42052), (284, 42085), (289, 42100), (351, 42250), (363, 42283), (368, 42319), (387, 42409),

Gene: IMpilo_61 Start: 40322, Stop: 41200, Start Num: 53
Candidate Starts for IMpilo_61:

(Start: 53 @40322 has 16 MA's), (Start: 58 @40349 has 2 MA's), (60, 40355), (73, 40391), (118, 40508), (125, 40517), (129, 40529), (134, 40538), (183, 40604), (222, 40709), (237, 40754), (239, 40760), (263, 40817), (279, 40838), (336, 40940), (349, 41000), (365, 41045),

Gene: Ibhubesi_66 Start: 42310, Stop: 42972, Start Num: 160
Candidate Starts for Ibhubesi_66:
(81, 42133), (84, 42139), (86, 42148), (132, 42253), (Start: 160 @42310 has 64 MA's), (189, 42391), (274, 42583), (294, 42643), (349, 42781), (351, 42784), (377, 42892), (384, 42934), (387, 42943),

Gene: Ibrahim_60 Start: 41425, Stop: 42162, Start Num: 164
Candidate Starts for Ibrahim_60:
(24, 41008), (96, 41266), (100, 41272), (Start: 164 @41425 has 7 MA's), (179, 41467), (200, 41539), (205, 41557), (243, 41683), (251, 41701), (295, 41815), (307, 41851), (326, 41896), (351, 41980), (354, 41989), (356, 41992), (361, 42001), (365, 42019), (392, 42151),

Gene: Inventum_72 Start: 45927, Stop: 46595, Start Num: 149
Candidate Starts for Inventum_72:
(Start: 149 @45927 has 18 MA's), (169, 45966), (189, 46020), (195, 46047), (225, 46107), (262, 46197), (271, 46209), (284, 46242), (351, 46407), (363, 46440), (368, 46476), (387, 46566),

Gene: Island3_55 Start: 37346, Stop: 37996, Start Num: 160
Candidate Starts for Island3_55:
(Start: 160 @37346 has 64 MA's), (231, 37532), (246, 37568), (253, 37583), (256, 37586), (302, 37694), (339, 37760), (353, 37814), (365, 37844), (387, 37967),

Gene: JF1_71 Start: 43844, Stop: 44689, Start Num: 83
Candidate Starts for JF1_71:
(Start: 83 @43844 has 22 MA's), (94, 43871), (108, 43901), (199, 44129), (206, 44141), (219, 44189), (237, 44255), (336, 44429), (357, 44507), (365, 44534), (370, 44573),

Gene: JKSyngboy_82 Start: 57242, Stop: 57988, Start Num: 156
Candidate Starts for JKSyngboy_82:
(7, 56504), (25, 56852), (127, 57170), (140, 57194), (Start: 156 @57242 has 7 MA's), (172, 57275), (177, 57290), (179, 57299), (Start: 182 @57311 has 2 MA's), (226, 57479), (237, 57509), (241, 57524), (267, 57590), (270, 57593), (276, 57605), (278, 57611), (283, 57626), (308, 57704), (365, 57851), (371, 57896), (384, 57965),

Gene: Jabberwocky_84 Start: 58563, Stop: 59261, Start Num: 160
Candidate Starts for Jabberwocky_84:
(7, 57816), (29, 58185), (50, 58251), (127, 58488), (140, 58512), (Start: 160 @58563 has 64 MA's), (177, 58611), (179, 58620), (Start: 182 @58632 has 2 MA's), (218, 58740), (237, 58800), (267, 58881), (276, 58896), (283, 58917), (335, 59049), (351, 59082), (365, 59124), (371, 59169), (378, 59202), (383, 59229), (390, 59250),

Gene: JalFarm20_88 Start: 49372, Stop: 50172, Start Num: 152
Candidate Starts for JalFarm20_88:
(Start: 152 @49372 has 3 MA's), (Start: 155 @49375 has 2 MA's), (169, 49408), (180, 49441), (Start: 182 @49450 has 2 MA's), (194, 49498), (209, 49531), (225, 49600), (250, 49672), (260, 49696), (269, 49711), (334, 49882), (345, 49918), (362, 49984), (365, 49990), (383, 50095), (387, 50113), (400, 50143),

Gene: JalFarm20_79 Start: 46369, Stop: 47022, Start Num: 160
Candidate Starts for JalFarm20_79:

(101, 46255), (Start: 160 @46369 has 64 MA's), (189, 46450), (195, 46477), (220, 46516), (246, 46588), (262, 46624), (284, 46669), (306, 46732), (349, 46831), (351, 46834), (363, 46867), (387, 46993),

Gene: Jams_46 Start: 45870, Stop: 45151, Start Num: 167
Candidate Starts for Jams_46:
(Start: 167 @45870 has 76 MA's), (188, 45804), (198, 45762), (207, 45753), (212, 45747), (234, 45663), (249, 45618), (263, 45585), (268, 45579), (293, 45504), (366, 45300),

Gene: Jellybones_49 Start: 46241, Stop: 45519, Start Num: 167
Candidate Starts for Jellybones_49:
(Start: 167 @46241 has 76 MA's), (179, 46202), (188, 46175), (194, 46142), (207, 46124), (229, 46049), (234, 46034), (268, 45950), (293, 45875), (349, 45719), (366, 45671), (368, 45641), (390, 45539),

Gene: Jinkies_19 Start: 14524, Stop: 15195, Start Num: 160
Candidate Starts for Jinkies_19:
(114, 14434), (154, 14518), (Start: 160 @14524 has 64 MA's), (189, 14608), (195, 14635), (231, 14701), (256, 14752), (302, 14863), (351, 15013), (352, 15016), (363, 15046), (382, 15148), (384, 15163),

Gene: JoeyJr_74 Start: 46916, Stop: 47584, Start Num: 149
Candidate Starts for JoeyJr_74:
(Start: 149 @46916 has 18 MA's), (169, 46955), (189, 47009), (195, 47036), (225, 47096), (262, 47186), (271, 47198), (284, 47231), (351, 47396), (363, 47429), (368, 47465), (387, 47555),

Gene: John316_50 Start: 46297, Stop: 45575, Start Num: 167
Candidate Starts for John316_50:
(Start: 167 @46297 has 76 MA's), (179, 46258), (188, 46231), (207, 46180), (229, 46105), (234, 46090), (268, 46006), (293, 45931), (349, 45775), (366, 45727), (368, 45697), (390, 45595),

Gene: Jormungandr_46 Start: 46414, Stop: 45695, Start Num: 167
Candidate Starts for Jormungandr_46:
(Start: 167 @46414 has 76 MA's), (188, 46348), (207, 46297), (212, 46291), (234, 46207), (249, 46162), (268, 46123), (293, 46048), (299, 46039), (366, 45844),

Gene: Journey_55 Start: 36648, Stop: 37631, Start Num: 53
Candidate Starts for Journey_55:
(Start: 53 @36648 has 16 MA's), (Start: 58 @36675 has 2 MA's), (73, 36717), (118, 36834), (134, 36864), (189, 37020), (222, 37143), (237, 37188), (239, 37194), (257, 37236), (336, 37362), (347, 37410), (355, 37437),

Gene: Journey_54 Start: 35843, Stop: 36610, Start Num: 102
Candidate Starts for Journey_54:
(Start: 102 @35843 has 1 MA's), (107, 35852), (118, 35879), (Start: 156 @35945 has 7 MA's), (169, 35975), (189, 36029), (294, 36281), (351, 36422), (355, 36434), (363, 36455), (387, 36581),

Gene: Juice456_67 Start: 44325, Stop: 44978, Start Num: 160
Candidate Starts for Juice456_67:
(101, 44211), (Start: 160 @44325 has 64 MA's), (189, 44406), (195, 44433), (220, 44472), (246, 44544), (262, 44580), (284, 44625), (306, 44688), (349, 44787), (351, 44790), (363, 44823), (387, 44949),

Gene: JuliaChild_70 Start: 44385, Stop: 43519, Start Num: 42
Candidate Starts for JuliaChild_70:
(34, 44412), (39, 44391), (Start: 42 @44385 has 7 MA's), (Start: 58 @44328 has 2 MA's), (59, 44325), (70, 44295), (73, 44286), (120, 44166), (206, 44058), (222, 43989), (245, 43914), (346, 43728), (355, 43698), (389, 43539),

Gene: Juliette_73 Start: 43942, Stop: 44787, Start Num: 83
Candidate Starts for Juliette_73:
(66, 43891), (Start: 83 @43942 has 22 MA's), (94, 43969), (108, 43999), (199, 44227), (206, 44239), (219, 44287), (237, 44353), (336, 44527), (357, 44605), (365, 44632), (370, 44671),

Gene: Jung_56 Start: 37454, Stop: 38110, Start Num: 160
Candidate Starts for Jung_56:
(Start: 151 @37445 has 6 MA's), (Start: 160 @37454 has 64 MA's), (161, 37460), (189, 37535), (195, 37562), (225, 37622), (262, 37712), (271, 37724), (284, 37757), (351, 37922), (363, 37955), (368, 37991), (387, 38081), (397, 38102),

Gene: Juniormint_55 Start: 36637, Stop: 37290, Start Num: 151
Candidate Starts for Juniormint_55:
(Start: 111 @36556 has 1 MA's), (115, 36565), (131, 36592), (Start: 151 @36637 has 6 MA's), (169, 36670), (195, 36751), (225, 36811), (262, 36901), (271, 36913), (284, 36946), (351, 37111), (363, 37144), (368, 37180), (382, 37246), (387, 37270),

Gene: Juniper1_66 Start: 43088, Stop: 44041, Start Num: 53
Candidate Starts for Juniper1_66:
(14, 42911), (16, 42926), (33, 43031), (Start: 53 @43088 has 16 MA's), (Start: 58 @43115 has 2 MA's), (60, 43121), (68, 43145), (118, 43274), (125, 43283), (134, 43304), (222, 43541), (225, 43553), (229, 43565), (239, 43592), (259, 43646), (291, 43712), (305, 43745), (336, 43781), (365, 43886),

Gene: Juniper1_67 Start: 44073, Stop: 44747, Start Num: 160
Candidate Starts for Juniper1_67:
(137, 44025), (Start: 160 @44073 has 64 MA's), (169, 44100), (189, 44154), (210, 44202), (236, 44280), (246, 44304), (254, 44319), (257, 44322), (319, 44475), (329, 44496), (331, 44499), (356, 44574), (368, 44628), (387, 44718),

Gene: KSSJEB_67 Start: 42872, Stop: 42006, Start Num: 46
Candidate Starts for KSSJEB_67:
(Start: 38 @42887 has 1 MA's), (Start: 46 @42872 has 6 MA's), (Start: 52 @42851 has 4 MA's), (Start: 58 @42818 has 2 MA's), (59, 42815), (70, 42785), (73, 42776), (120, 42656), (206, 42548), (222, 42479), (245, 42404), (346, 42218), (355, 42188), (389, 42029),

Gene: Kamashten_10 Start: 5311, Stop: 6054, Start Num: 158
Candidate Starts for Kamashten_10:
(Start: 158 @5311 has 9 MA's), (178, 5371), (179, 5374), (190, 5410), (214, 5476), (223, 5521), (228, 5539), (230, 5545), (261, 5623), (288, 5683), (294, 5707), (300, 5716), (310, 5749), (325, 5788), (332, 5797), (350, 5857), (359, 5878), (364, 5896), (365, 5899), (373, 5950), (382, 5998),

Gene: Kamashten_86 Start: 58360, Stop: 59106, Start Num: 160
Candidate Starts for Kamashten_86:
(127, 58285), (140, 58309), (Start: 160 @58360 has 64 MA's), (177, 58408), (179, 58417), (Start: 182 @58429 has 2 MA's), (237, 58627), (241, 58642), (262, 58702), (267, 58708), (270, 58711), (276, 58723), (278, 58729), (283, 58744), (323, 58855), (365, 58969), (371, 59014), (378, 59047), (383, 59074), (390, 59095),

Gene: Kaseim_46 Start: 45855, Stop: 45136, Start Num: 167
Candidate Starts for Kaseim_46:
(Start: 167 @45855 has 76 MA's), (188, 45789), (198, 45747), (207, 45738), (212, 45732), (234, 45648), (249, 45603), (263, 45570), (268, 45564), (293, 45489), (366, 45285),

Gene: Katyusha_42 Start: 45651, Stop: 44935, Start Num: 167
Candidate Starts for Katyusha_42:
(Start: 167 @45651 has 76 MA's), (174, 45636), (207, 45534), (234, 45444), (237, 45438), (293, 45285), (319, 45222), (335, 45192), (384, 44970),

Gene: Keitabear_83 Start: 58873, Stop: 59571, Start Num: 160
Candidate Starts for Keitabear_83:
(7, 58126), (29, 58495), (50, 58561), (127, 58798), (140, 58822), (Start: 160 @58873 has 64 MA's), (177, 58921), (179, 58930), (Start: 182 @58942 has 2 MA's), (218, 59050), (237, 59110), (267, 59191), (276, 59206), (283, 59227), (335, 59359), (351, 59392), (365, 59434), (371, 59479), (378, 59512), (383, 59539), (390, 59560),

Gene: Kelzog_48 Start: 45146, Stop: 44424, Start Num: 167
Candidate Starts for Kelzog_48:
(Start: 167 @45146 has 76 MA's), (179, 45107), (188, 45080), (207, 45029), (229, 44954), (234, 44939), (268, 44855), (293, 44780), (349, 44624), (366, 44576), (368, 44546), (390, 44444),

Gene: KimmyK_60 Start: 44699, Stop: 45655, Start Num: 54
Candidate Starts for KimmyK_60:
(Start: 54 @44699 has 13 MA's), (79, 44795), (118, 44885), (218, 45155), (222, 45179), (237, 45224), (239, 45230), (280, 45329), (347, 45440), (364, 45494),

Gene: Kinbote_65 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Kinbote_65:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: KingMidas_73 Start: 46330, Stop: 46998, Start Num: 149
Candidate Starts for KingMidas_73:
(Start: 149 @46330 has 18 MA's), (169, 46369), (189, 46423), (195, 46450), (225, 46510), (262, 46600), (271, 46612), (284, 46645), (351, 46810), (363, 46843), (368, 46879), (387, 46969),

Gene: Kraw_71 Start: 43630, Stop: 44475, Start Num: 83
Candidate Starts for Kraw_71:
(66, 43579), (Start: 83 @43630 has 22 MA's), (94, 43657), (108, 43687), (199, 43915), (206, 43927), (219, 43975), (237, 44041), (336, 44215), (357, 44293), (365, 44320), (370, 44359),

Gene: KristaRAM_69 Start: 44694, Stop: 45347, Start Num: 160
Candidate Starts for KristaRAM_69:
(101, 44580), (Start: 160 @44694 has 64 MA's), (189, 44775), (195, 44802), (220, 44841), (246, 44913), (262, 44949), (284, 44994), (306, 45057), (349, 45156), (351, 45159), (363, 45192), (387, 45318),

Gene: Kvothe_42 Start: 45550, Stop: 44834, Start Num: 167
Candidate Starts for Kvothe_42:

(Start: 167 @45550 has 76 MA's), (174, 45535), (207, 45433), (234, 45343), (237, 45337), (293, 45184), (319, 45121), (335, 45091), (384, 44869),

Gene: Lahirium_46 Start: 46936, Stop: 46217, Start Num: 167
Candidate Starts for Lahirium_46:
(Start: 167 @46936 has 76 MA's), (188, 46870), (207, 46819), (212, 46813), (234, 46729), (249, 46684), (268, 46645), (293, 46570), (299, 46561), (366, 46366),

Gene: Lamina13_71 Start: 44833, Stop: 43967, Start Num: 42
Candidate Starts for Lamina13_71:
(34, 44860), (39, 44839), (Start: 42 @44833 has 7 MA's), (Start: 58 @44776 has 2 MA's), (59, 44773), (70, 44743), (73, 44734), (120, 44614), (206, 44506), (222, 44437), (245, 44362), (346, 44176), (355, 44146), (389, 43987),

Gene: Lebo14_70 Start: 43963, Stop: 44808, Start Num: 83
Candidate Starts for Lebo14_70:
(66, 43912), (Start: 83 @43963 has 22 MA's), (94, 43990), (108, 44020), (199, 44248), (206, 44260), (219, 44308), (237, 44374), (336, 44548), (357, 44626), (365, 44653), (370, 44692),

Gene: Lennon_85 Start: 59303, Stop: 60049, Start Num: 160
Candidate Starts for Lennon_85:
(7, 58556), (29, 58925), (50, 58991), (127, 59228), (140, 59252), (Start: 160 @59303 has 64 MA's), (177, 59351), (179, 59360), (Start: 182 @59372 has 2 MA's), (237, 59570), (241, 59585), (262, 59645), (267, 59651), (270, 59654), (276, 59666), (278, 59672), (283, 59687), (323, 59798), (365, 59912), (371, 59957), (378, 59990), (383, 60017), (390, 60038),

Gene: Leperchaun_72 Start: 46150, Stop: 46818, Start Num: 149
Candidate Starts for Leperchaun_72:
(Start: 149 @46150 has 18 MA's), (169, 46189), (189, 46243), (195, 46270), (225, 46330), (262, 46420), (271, 46432), (284, 46465), (351, 46630), (363, 46663), (368, 46699), (387, 46789),

Gene: Lidong_46 Start: 46670, Stop: 45951, Start Num: 167
Candidate Starts for Lidong_46:
(Start: 167 @46670 has 76 MA's), (188, 46604), (198, 46562), (207, 46553), (212, 46547), (234, 46463), (249, 46418), (263, 46385), (268, 46379), (293, 46304), (366, 46100),

Gene: LilHazelnut_67 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for LilHazelnut_67:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Linetti_47 Start: 45752, Stop: 45030, Start Num: 167
Candidate Starts for Linetti_47:
(Start: 151 @45794 has 6 MA's), (Start: 167 @45752 has 76 MA's), (179, 45713), (188, 45686), (207, 45635), (229, 45560), (234, 45545), (268, 45461), (293, 45386), (349, 45230), (366, 45182), (368, 45152), (390, 45050),

Gene: LittleShirley_66 Start: 43146, Stop: 43808, Start Num: 160
Candidate Starts for LittleShirley_66:
(81, 42969), (Start: 160 @43146 has 64 MA's), (169, 43173), (189, 43227), (294, 43479), (351, 43620), (355, 43632), (363, 43653), (387, 43779),

Gene: LittleShirley_73 Start: 45098, Stop: 45754, Start Num: 160
Candidate Starts for LittleShirley_73:
(98, 44966), (Start: 151 @45089 has 6 MA's), (Start: 160 @45098 has 64 MA's), (161, 45104), (189, 45179), (195, 45206), (225, 45266), (262, 45356), (271, 45368), (284, 45401), (289, 45416), (351, 45566), (363, 45599), (368, 45635), (387, 45725),

Gene: Lizzo_46 Start: 45128, Stop: 44406, Start Num: 167
Candidate Starts for Lizzo_46:
(Start: 167 @45128 has 76 MA's), (179, 45089), (188, 45062), (207, 45011), (229, 44936), (234, 44921), (268, 44837), (293, 44762), (349, 44606), (366, 44558), (368, 44528), (390, 44426),

Gene: Love_11 Start: 5310, Stop: 6053, Start Num: 158
Candidate Starts for Love_11:
(Start: 158 @5310 has 9 MA's), (178, 5370), (179, 5373), (190, 5409), (214, 5475), (223, 5520), (228, 5538), (230, 5544), (261, 5622), (288, 5682), (294, 5706), (300, 5715), (310, 5748), (325, 5787), (332, 5796), (350, 5856), (359, 5877), (364, 5895), (365, 5898), (373, 5949), (382, 5997),

Gene: Love_91 Start: 59114, Stop: 59854, Start Num: 160
Candidate Starts for Love_91:
(127, 59039), (140, 59063), (Start: 160 @59114 has 64 MA's), (172, 59147), (177, 59162), (179, 59171), (Start: 182 @59183 has 2 MA's), (201, 59249), (237, 59375), (241, 59390), (267, 59456), (270, 59459), (276, 59471), (283, 59492), (323, 59603), (365, 59717), (371, 59762), (378, 59795), (383, 59822), (390, 59843),

Gene: Luke_66 Start: 44871, Stop: 45533, Start Num: 157
Candidate Starts for Luke_66:
(36, 44529), (59, 44610), (73, 44655), (77, 44679), (97, 44730), (121, 44784), (Start: 149 @44859 has 18 MA's), (150, 44862), (Start: 157 @44871 has 22 MA's), (169, 44898), (236, 45072), (270, 45150), (273, 45156), (281, 45180), (287, 45189), (303, 45231), (342, 45315), (343, 45318), (351, 45351), (353, 45357), (355, 45363), (369, 45426), (377, 45462), (382, 45489), (384, 45504), (387, 45513),

Gene: Luker_47 Start: 46889, Stop: 46170, Start Num: 167
Candidate Starts for Luker_47:
(Start: 167 @46889 has 76 MA's), (188, 46823), (207, 46772), (212, 46766), (234, 46682), (249, 46637), (268, 46598), (293, 46523), (366, 46319),

Gene: Luna22_62 Start: 44900, Stop: 45562, Start Num: 157
Candidate Starts for Luna22_62:
(36, 44558), (59, 44639), (73, 44684), (77, 44708), (97, 44759), (121, 44813), (Start: 149 @44888 has 18 MA's), (150, 44891), (Start: 157 @44900 has 22 MA's), (169, 44927), (236, 45101), (270, 45179), (273, 45185), (281, 45209), (287, 45218), (303, 45260), (342, 45344), (343, 45347), (351, 45380), (353, 45386), (355, 45392), (369, 45455), (377, 45491), (382, 45518), (384, 45533), (387, 45542),

Gene: Malthus_72 Start: 43630, Stop: 44475, Start Num: 83
Candidate Starts for Malthus_72:
(66, 43579), (Start: 83 @43630 has 22 MA's), (94, 43657), (108, 43687), (199, 43915), (206, 43927), (219, 43975), (237, 44041), (336, 44215), (357, 44293), (365, 44320), (370, 44359),

Gene: Mantra_63 Start: 41560, Stop: 42504, Start Num: 53
Candidate Starts for Mantra_63:
(Start: 53 @41560 has 16 MA's), (112, 41737), (118, 41746), (136, 41779), (173, 41854), (222, 42025), (237, 42070), (239, 42076), (264, 42133), (291, 42184), (336, 42244), (346, 42289), (349, 42304),

(365, 42349),

Gene: Marchy_62 Start: 40457, Stop: 39594, Start Num: 46
Candidate Starts for Marchy_62:
(Start: 38 @40472 has 1 MA's), (Start: 46 @40457 has 6 MA's), (Start: 52 @40436 has 4 MA's), (Start: 58 @40406 has 2 MA's), (59, 40403), (70, 40373), (73, 40364), (120, 40244), (206, 40136), (222, 40067), (245, 39992), (346, 39806), (355, 39776), (389, 39617),

Gene: Marker_68 Start: 42811, Stop: 43545, Start Num: 160
Candidate Starts for Marker_68:
(85, 42634), (88, 42640), (91, 42649), (138, 42754), (Start: 160 @42811 has 64 MA's), (179, 42868), (180, 42871), (Start: 182 @42880 has 2 MA's), (190, 42904), (214, 42970), (223, 43015), (231, 43042), (233, 43048), (255, 43096), (261, 43117), (286, 43174), (288, 43177), (294, 43201), (307, 43237), (310, 43243), (321, 43270), (358, 43369), (365, 43393), (368, 43426), (386, 43516),

Gene: Mbo4_26 Start: 25859, Stop: 26965, Start Num: 53
Candidate Starts for Mbo4_26:
(Start: 53 @25859 has 16 MA's), (73, 25931), (118, 26048), (134, 26078), (145, 26105), (206, 26255), (222, 26324), (237, 26369), (287, 26525), (336, 26705), (347, 26753), (376, 26876), (382, 26909), (383, 26915), (391, 26942),

Gene: McCrothy_10 Start: 5166, Stop: 5909, Start Num: 158
Candidate Starts for McCrothy_10:
(Start: 158 @5166 has 9 MA's), (178, 5226), (179, 5229), (190, 5265), (214, 5331), (223, 5376), (228, 5394), (230, 5400), (261, 5478), (288, 5538), (294, 5562), (300, 5571), (310, 5604), (325, 5643), (332, 5652), (350, 5712), (359, 5733), (364, 5751), (365, 5754), (373, 5805), (382, 5853),

Gene: McCrothy_84 Start: 59090, Stop: 59836, Start Num: 160
Candidate Starts for McCrothy_84:
(127, 59015), (140, 59039), (Start: 160 @59090 has 64 MA's), (177, 59138), (179, 59147), (Start: 182 @59159 has 2 MA's), (237, 59357), (241, 59372), (262, 59432), (267, 59438), (270, 59441), (276, 59453), (278, 59459), (283, 59474), (323, 59585), (365, 59699), (371, 59744), (378, 59777), (383, 59804), (390, 59825),

Gene: McKinley_88 Start: 58094, Stop: 58834, Start Num: 160
Candidate Starts for McKinley_88:
(3, 57293), (7, 57347), (29, 57716), (50, 57782), (127, 58019), (140, 58043), (Start: 160 @58094 has 64 MA's), (172, 58127), (177, 58142), (179, 58151), (Start: 182 @58163 has 2 MA's), (237, 58355), (241, 58370), (267, 58436), (270, 58439), (276, 58451), (283, 58472), (323, 58583), (365, 58697), (371, 58742), (378, 58775), (383, 58802), (390, 58823),

Gene: Medindi_62 Start: 39874, Stop: 40860, Start Num: 53
Candidate Starts for Medindi_62:
(Start: 53 @39874 has 16 MA's), (Start: 58 @39901 has 2 MA's), (60, 39907), (73, 39943), (79, 39970), (90, 39994), (95, 40009), (118, 40060), (136, 40093), (142, 40111), (187, 40240), (193, 40264), (213, 40312), (222, 40369), (336, 40597), (346, 40642), (348, 40651), (365, 40702),

Gene: Megiddo_59 Start: 40265, Stop: 41059, Start Num: 158
Candidate Starts for Megiddo_59:
(Start: 158 @40265 has 9 MA's), (179, 40325), (Start: 182 @40337 has 2 MA's), (190, 40361), (204, 40412), (258, 40568), (277, 40610), (282, 40628), (307, 40709), (349, 40829), (351, 40832), (356, 40844), (367, 40886), (369, 40907), (371, 40916), (372, 40919), (380, 40955), (381, 40964), (395, 41009), (401, 41033),

Gene: Mendokysei_64 Start: 42338, Stop: 43075, Start Num: 164
Candidate Starts for Mendokysei_64:
(Start: 164 @42338 has 7 MA's), (172, 42356), (179, 42380), (200, 42452), (243, 42596), (295, 42728), (307, 42764), (326, 42809), (351, 42893), (356, 42905), (365, 42932),

Gene: Minos_47 Start: 46412, Stop: 45693, Start Num: 167
Candidate Starts for Minos_47:
(Start: 167 @46412 has 76 MA's), (188, 46346), (198, 46304), (207, 46295), (212, 46289), (234, 46205), (249, 46160), (263, 46127), (268, 46121), (293, 46046), (366, 45842),

Gene: MissDaisy_68 Start: 42544, Stop: 43389, Start Num: 83
Candidate Starts for MissDaisy_68:
(66, 42493), (Start: 83 @42544 has 22 MA's), (94, 42571), (108, 42601), (199, 42829), (206, 42841), (219, 42889), (237, 42955), (293, 43078), (336, 43129), (357, 43207), (365, 43234), (370, 43273), (393, 43372),

Gene: Mitti_71 Start: 43785, Stop: 44630, Start Num: 83
Candidate Starts for Mitti_71:
(66, 43734), (Start: 83 @43785 has 22 MA's), (94, 43812), (108, 43842), (199, 44070), (206, 44082), (219, 44130), (237, 44196), (336, 44370), (357, 44448), (365, 44475), (370, 44514),

Gene: Monty_45 Start: 44278, Stop: 43556, Start Num: 167
Candidate Starts for Monty_45:
(Start: 167 @44278 has 76 MA's), (179, 44239), (188, 44212), (207, 44161), (229, 44086), (234, 44071), (268, 43987), (293, 43912), (349, 43756), (366, 43708), (368, 43678), (390, 43576),

Gene: MoontowerMania_8 Start: 4709, Stop: 5452, Start Num: 158
Candidate Starts for MoontowerMania_8:
(Start: 158 @4709 has 9 MA's), (178, 4769), (179, 4772), (190, 4808), (214, 4874), (223, 4919), (228, 4937), (230, 4943), (261, 5021), (288, 5081), (294, 5105), (300, 5114), (310, 5147), (325, 5186), (332, 5195), (350, 5255), (359, 5276), (364, 5294), (365, 5297), (373, 5348), (382, 5396),

Gene: MrWormie_46 Start: 45573, Stop: 44854, Start Num: 167
Candidate Starts for MrWormie_46:
(Start: 167 @45573 has 76 MA's), (188, 45507), (198, 45465), (207, 45456), (212, 45450), (234, 45366), (249, 45321), (263, 45288), (268, 45282), (293, 45207), (366, 45003),

Gene: Msay19_51 Start: 46751, Stop: 46029, Start Num: 167
Candidate Starts for Msay19_51:
(Start: 167 @46751 has 76 MA's), (179, 46712), (188, 46685), (207, 46634), (229, 46559), (234, 46544), (268, 46460), (293, 46385), (349, 46229), (366, 46181), (368, 46151), (390, 46049),

Gene: Mulch_66 Start: 42588, Stop: 43298, Start Num: 160
Candidate Starts for Mulch_66:
(65, 42354), (110, 42483), (Start: 160 @42588 has 64 MA's), (169, 42615), (190, 42681), (270, 42906), (283, 42939), (304, 42993), (323, 43050), (349, 43101), (351, 43104), (368, 43179),

Gene: Nadeem_66 Start: 42576, Stop: 43286, Start Num: 160
Candidate Starts for Nadeem_66:
(65, 42342), (110, 42471), (Start: 160 @42576 has 64 MA's), (169, 42603), (190, 42669), (270, 42894), (283, 42927), (304, 42981), (323, 43038), (349, 43089), (351, 43092), (368, 43167),

Gene: Nairb_58 Start: 41222, Stop: 41959, Start Num: 164
Candidate Starts for Nairb_58:
(96, 41063), (100, 41069), (Start: 164 @41222 has 7 MA's), (179, 41264), (200, 41336), (205, 41354), (243, 41480), (251, 41498), (295, 41612), (307, 41648), (326, 41693), (351, 41777), (354, 41786), (356, 41789), (361, 41798), (365, 41816), (392, 41948),

Gene: NancyRae_65 Start: 42526, Stop: 43239, Start Num: 160
Candidate Starts for NancyRae_65:
(65, 42292), (110, 42421), (Start: 160 @42526 has 64 MA's), (169, 42553), (190, 42619), (270, 42844), (283, 42877), (304, 42931), (323, 42988), (349, 43039), (351, 43042), (368, 43117),

Gene: Natkenzie_89 Start: 59142, Stop: 59831, Start Num: 160
Candidate Starts for Natkenzie_89:
(47, 58827), (103, 59016), (124, 59061), (135, 59085), (Start: 160 @59142 has 64 MA's), (189, 59223), (204, 59274), (246, 59400), (264, 59439), (296, 59517), (303, 59529), (312, 59550), (328, 59586), (358, 59667),

Gene: Neoevie_46 Start: 46675, Stop: 45956, Start Num: 167
Candidate Starts for Neoevie_46:
(Start: 167 @46675 has 76 MA's), (188, 46609), (207, 46558), (212, 46552), (234, 46468), (249, 46423), (268, 46384), (293, 46309), (366, 46105),

Gene: Newt_47 Start: 46903, Stop: 46184, Start Num: 167
Candidate Starts for Newt_47:
(Start: 167 @46903 has 76 MA's), (188, 46837), (198, 46795), (207, 46786), (212, 46780), (234, 46696), (249, 46651), (263, 46618), (268, 46612), (293, 46537), (366, 46333),

Gene: Niagara_42 Start: 45629, Stop: 44913, Start Num: 167
Candidate Starts for Niagara_42:
(Start: 167 @45629 has 76 MA's), (174, 45614), (207, 45512), (234, 45422), (237, 45416), (293, 45263), (319, 45200), (335, 45170), (384, 44948),

Gene: Nimbo_66 Start: 45014, Stop: 45682, Start Num: 149
Candidate Starts for Nimbo_66:
(Start: 149 @45014 has 18 MA's), (169, 45053), (189, 45107), (195, 45134), (225, 45194), (262, 45284), (271, 45296), (284, 45329), (351, 45494), (363, 45527), (368, 45563), (387, 45653),

Gene: Nimi13_46 Start: 46421, Stop: 45702, Start Num: 167
Candidate Starts for Nimi13_46:
(Start: 167 @46421 has 76 MA's), (188, 46355), (198, 46313), (207, 46304), (212, 46298), (234, 46214), (249, 46169), (263, 46136), (268, 46130), (293, 46055), (366, 45851),

Gene: OBUpride_67 Start: 44912, Stop: 45574, Start Num: 157
Candidate Starts for OBUpride_67:
(36, 44570), (59, 44651), (73, 44696), (77, 44720), (97, 44771), (121, 44825), (Start: 149 @44900 has 18 MA's), (150, 44903), (Start: 157 @44912 has 22 MA's), (169, 44939), (236, 45113), (270, 45191), (273, 45197), (281, 45221), (287, 45230), (303, 45272), (342, 45356), (343, 45359), (351, 45392), (353, 45398), (355, 45404), (369, 45467), (377, 45503), (382, 45530), (384, 45545), (387, 45554),

Gene: Ogopogo_78 Start: 45456, Stop: 46199, Start Num: 111
Candidate Starts for Ogopogo_78:
(Start: 111 @45456 has 1 MA's), (115, 45465), (131, 45492), (Start: 151 @45537 has 6 MA's), (169, 45570), (189, 45624), (195, 45651), (225, 45711), (262, 45801), (271, 45813), (284, 45846), (351,

46011), (363, 46044), (368, 46080), (387, 46170),

Gene: Ogopogo_72 Start: 43150, Stop: 43812, Start Num: 160
Candidate Starts for Ogopogo_72:
(106, 43036), (Start: 160 @43150 has 64 MA's), (169, 43177), (189, 43231), (294, 43483), (351, 43624), (363, 43657), (387, 43783),

Gene: Oksu_70 Start: 45599, Stop: 46261, Start Num: 159
Candidate Starts for Oksu_70:
(31, 45245), (133, 45542), (Start: 159 @45599 has 1 MA's), (169, 45626), (189, 45680), (191, 45686), (195, 45707), (199, 45716), (208, 45725), (283, 45911), (289, 45926), (320, 45998), (324, 46007), (327, 46013), (331, 46019), (349, 46070), (351, 46073), (377, 46181), (387, 46232),

Gene: OldBen_71 Start: 46406, Stop: 47074, Start Num: 149
Candidate Starts for OldBen_71:
(Start: 149 @46406 has 18 MA's), (169, 46445), (189, 46499), (195, 46526), (225, 46586), (262, 46676), (271, 46688), (284, 46721), (351, 46886), (363, 46919), (368, 46955), (387, 47045),

Gene: OmniCritical_70 Start: 43718, Stop: 44563, Start Num: 83
Candidate Starts for OmniCritical_70:
(Start: 83 @43718 has 22 MA's), (94, 43745), (108, 43775), (199, 44003), (206, 44015), (219, 44063), (237, 44129), (336, 44303), (357, 44381), (365, 44408), (370, 44447),

Gene: PFR1_39 Start: 29215, Stop: 30003, Start Num: 160
Candidate Starts for PFR1_39:
(17, 28762), (21, 28789), (Start: 58 @28948 has 2 MA's), (Start: 158 @29212 has 9 MA's), (Start: 160 @29215 has 64 MA's), (169, 29242), (179, 29272), (Start: 182 @29284 has 2 MA's), (198, 29341), (200, 29344), (211, 29371), (252, 29515), (277, 29563), (282, 29581), (285, 29593), (307, 29662), (318, 29683), (339, 29722), (351, 29779), (367, 29833), (378, 29896), (379, 29899), (382, 29917),

Gene: PFR2_41 Start: 30784, Stop: 31572, Start Num: 160
Candidate Starts for PFR2_41:
(17, 30331), (21, 30358), (Start: 58 @30517 has 2 MA's), (Start: 158 @30781 has 9 MA's), (Start: 160 @30784 has 64 MA's), (169, 30811), (179, 30841), (Start: 182 @30853 has 2 MA's), (198, 30910), (200, 30913), (211, 30940), (252, 31084), (277, 31132), (282, 31150), (285, 31162), (307, 31231), (318, 31252), (339, 31291), (351, 31348), (367, 31402), (378, 31465), (379, 31468), (382, 31486),

Gene: PHappiness_74 Start: 47235, Stop: 47903, Start Num: 149
Candidate Starts for PHappiness_74:
(Start: 149 @47235 has 18 MA's), (169, 47274), (189, 47328), (195, 47355), (225, 47415), (262, 47505), (271, 47517), (284, 47550), (351, 47715), (363, 47748), (368, 47784), (387, 47874),

Gene: PSullivan_67 Start: 42452, Stop: 41586, Start Num: 42
Candidate Starts for PSullivan_67:
(34, 42479), (39, 42458), (Start: 42 @42452 has 7 MA's), (Start: 58 @42395 has 2 MA's), (59, 42392), (70, 42362), (73, 42353), (120, 42233), (206, 42125), (222, 42056), (245, 41981), (346, 41795), (355, 41765), (389, 41606),

Gene: PaintedDog_64 Start: 41494, Stop: 42366, Start Num: 86
Candidate Starts for PaintedDog_64:
(56, 41401), (62, 41428), (64, 41434), (86, 41494), (99, 41524), (166, 41683), (170, 41692), (180, 41713), (222, 41866), (237, 41911), (304, 42049), (336, 42100), (346, 42145), (347, 42148), (365, 42205),

Gene: Parada_66 Start: 42588, Stop: 43298, Start Num: 160
Candidate Starts for Parada_66:
(65, 42354), (110, 42483), (Start: 160 @42588 has 64 MA's), (169, 42615), (190, 42681), (270, 42906), (283, 42939), (304, 42993), (323, 43050), (349, 43101), (351, 43104), (368, 43179),

Gene: Paries_10 Start: 4991, Stop: 5734, Start Num: 158
Candidate Starts for Paries_10:
(Start: 158 @4991 has 9 MA's), (178, 5051), (179, 5054), (190, 5090), (214, 5156), (223, 5201), (228, 5219), (230, 5225), (261, 5303), (288, 5363), (294, 5387), (300, 5396), (310, 5429), (325, 5468), (332, 5477), (350, 5537), (359, 5558), (364, 5576), (365, 5579), (373, 5630), (382, 5678),

Gene: Patt_67 Start: 42268, Stop: 43113, Start Num: 83
Candidate Starts for Patt_67:
(66, 42217), (Start: 83 @42268 has 22 MA's), (94, 42295), (108, 42325), (199, 42553), (206, 42565), (219, 42613), (237, 42679), (336, 42853), (357, 42931), (365, 42958), (370, 42997), (378, 43036), (393, 43096),

Gene: Payneful_66 Start: 43153, Stop: 42311, Start Num: 52
Candidate Starts for Payneful_66:
(Start: 38 @43189 has 1 MA's), (Start: 46 @43174 has 6 MA's), (Start: 52 @43153 has 4 MA's), (Start: 58 @43123 has 2 MA's), (59, 43120), (70, 43090), (73, 43081), (120, 42961), (206, 42853), (222, 42784), (245, 42709), (346, 42523), (355, 42493), (389, 42334),

Gene: Peridot_67 Start: 42071, Stop: 42994, Start Num: 53
Candidate Starts for Peridot_67:
(Start: 53 @42071 has 16 MA's), (Start: 58 @42098 has 2 MA's), (73, 42140), (118, 42257), (125, 42266), (134, 42287), (175, 42353), (206, 42389), (213, 42401), (222, 42458), (237, 42503), (239, 42509), (336, 42734), (337, 42737),

Gene: Petra_69 Start: 42660, Stop: 43718, Start Num: 54
Candidate Starts for Petra_69:
(1, 41811), (6, 42207), (8, 42426), (9, 42438), (13, 42486), (19, 42534), (Start: 54 @42660 has 13 MA's), (79, 42756), (105, 42813), (118, 42846), (134, 42876), (175, 42990), (196, 43080), (218, 43143), (222, 43167), (229, 43191), (237, 43212), (239, 43218), (280, 43317), (347, 43506), (349, 43518),

Gene: Phalconet_64 Start: 40982, Stop: 41998, Start Num: 53
Candidate Starts for Phalconet_64:
(Start: 53 @40982 has 16 MA's), (Start: 58 @41009 has 2 MA's), (73, 41051), (79, 41078), (118, 41168), (125, 41177), (129, 41189), (134, 41198), (163, 41258), (193, 41354), (206, 41390), (213, 41402), (222, 41459), (237, 41504), (239, 41510), (336, 41735), (346, 41780), (365, 41840),

Gene: PhesterPhotato_76 Start: 45973, Stop: 46719, Start Num: 148
Candidate Starts for PhesterPhotato_76:
(Start: 148 @45973 has 1 MA's), (169, 46012), (180, 46045), (Start: 182 @46054 has 2 MA's), (214, 46144), (223, 46189), (231, 46216), (233, 46222), (255, 46270), (261, 46291), (288, 46351), (294, 46375), (307, 46411), (310, 46417), (321, 46444), (341, 46483), (365, 46567), (386, 46690),

Gene: Philon9_45 Start: 46927, Stop: 46214, Start Num: 167
Candidate Starts for Philon9_45:
(74, 47170), (Start: 167 @46927 has 76 MA's), (174, 46912), (207, 46810), (234, 46720), (293, 46561), (319, 46498), (335, 46468), (366, 46357), (368, 46327), (384, 46246),

Gene: PhorbesPhlower_52 Start: 33687, Stop: 34304, Start Num: 157
Candidate Starts for PhorbesPhlower_52:
(Start: 157 @33687 has 22 MA's), (180, 33747), (189, 33771), (221, 33840), (242, 33888), (265, 33921), (299, 33990), (303, 33999), (348, 34104), (351, 34113), (387, 34278),

Gene: PierreThree_46 Start: 45620, Stop: 44898, Start Num: 167
Candidate Starts for PierreThree_46:
(Start: 167 @45620 has 76 MA's), (179, 45581), (188, 45554), (207, 45503), (229, 45428), (234, 45413), (268, 45329), (293, 45254), (349, 45098), (366, 45050), (368, 45020), (390, 44918),

Gene: Pimento_69 Start: 42707, Stop: 43417, Start Num: 160
Candidate Starts for Pimento_69:
(65, 42473), (110, 42602), (Start: 160 @42707 has 64 MA's), (169, 42734), (190, 42800), (270, 43025), (283, 43058), (304, 43112), (323, 43169), (349, 43220), (351, 43223), (364, 43262), (368, 43298),

Gene: PinkCoffee_61 Start: 44274, Stop: 45227, Start Num: 54
Candidate Starts for PinkCoffee_61:
(Start: 54 @44274 has 13 MA's), (79, 44370), (118, 44460), (218, 44727), (222, 44751), (237, 44796), (239, 44802), (280, 44901), (347, 45012), (364, 45066),

Gene: Pita2_70 Start: 43949, Stop: 43083, Start Num: 42
Candidate Starts for Pita2_70:
(34, 43976), (39, 43955), (Start: 42 @43949 has 7 MA's), (Start: 58 @43892 has 2 MA's), (59, 43889), (70, 43859), (73, 43850), (120, 43730), (206, 43622), (222, 43553), (245, 43478), (346, 43292), (355, 43262), (389, 43103),

Gene: Poenanya_77 Start: 47104, Stop: 47772, Start Num: 149
Candidate Starts for Poenanya_77:
(Start: 149 @47104 has 18 MA's), (169, 47143), (189, 47197), (195, 47224), (225, 47284), (262, 47374), (271, 47386), (284, 47419), (351, 47584), (363, 47617), (368, 47653), (387, 47743),

Gene: PokyPuppy_45 Start: 45563, Stop: 44841, Start Num: 167
Candidate Starts for PokyPuppy_45:
(Start: 167 @45563 has 76 MA's), (179, 45524), (194, 45464), (207, 45446), (229, 45371), (234, 45356), (268, 45272), (293, 45197), (349, 45041), (366, 44993), (368, 44963), (390, 44861),

Gene: Poland_51 Start: 46730, Stop: 46008, Start Num: 167
Candidate Starts for Poland_51:
(Start: 167 @46730 has 76 MA's), (179, 46691), (188, 46664), (207, 46613), (229, 46538), (234, 46523), (268, 46439), (293, 46364), (349, 46208), (366, 46160), (368, 46130), (390, 46028),

Gene: Polka14_78 Start: 47894, Stop: 48562, Start Num: 149
Candidate Starts for Polka14_78:
(Start: 149 @47894 has 18 MA's), (169, 47933), (189, 47987), (195, 48014), (225, 48074), (262, 48164), (271, 48176), (284, 48209), (351, 48374), (363, 48407), (368, 48443), (387, 48533),

Gene: Polkaroo_62 Start: 41192, Stop: 41851, Start Num: 153
Candidate Starts for Polkaroo_62:
(Start: 111 @41102 has 1 MA's), (115, 41111), (153, 41192), (169, 41222), (189, 41276), (195, 41303), (225, 41363), (262, 41453), (271, 41465), (284, 41498), (289, 41513), (351, 41663), (363, 41696), (368, 41732), (387, 41822),

Gene: Polkaroo_59 Start: 38517, Stop: 39569, Start Num: 53
Candidate Starts for Polkaroo_59:
(Start: 53 @38517 has 16 MA's), (Start: 58 @38544 has 2 MA's), (60, 38550), (73, 38586), (122, 38709), (125, 38712), (134, 38733), (187, 38886), (193, 38910), (195, 38928), (347, 39351), (365, 39408), (398, 39561),

Gene: PopTart_60 Start: 40607, Stop: 41515, Start Num: 53
Candidate Starts for PopTart_60:
(Start: 53 @40607 has 16 MA's), (Start: 58 @40634 has 2 MA's), (73, 40676), (79, 40703), (118, 40793), (125, 40802), (134, 40823), (222, 40976), (237, 41021), (239, 41027), (263, 41090), (336, 41252), (346, 41297), (365, 41357),

Gene: PullumCavea_58 Start: 44450, Stop: 45406, Start Num: 54
Candidate Starts for PullumCavea_58:
(21, 44324), (32, 44390), (Start: 54 @44450 has 13 MA's), (79, 44546), (118, 44636), (218, 44906), (222, 44930), (237, 44975), (239, 44981), (280, 45080), (347, 45191), (364, 45245),

Gene: Qhanda_73 Start: 43646, Stop: 44491, Start Num: 83
Candidate Starts for Qhanda_73:
(66, 43595), (Start: 83 @43646 has 22 MA's), (94, 43673), (108, 43703), (114, 43715), (126, 43730), (199, 43931), (206, 43943), (237, 44057), (336, 44231), (357, 44309), (365, 44336), (370, 44375), (378, 44414),

Gene: QueenHazel_55 Start: 38490, Stop: 39401, Start Num: 53
Candidate Starts for QueenHazel_55:
(Start: 53 @38490 has 16 MA's), (Start: 58 @38517 has 2 MA's), (60, 38523), (73, 38559), (118, 38676), (129, 38697), (134, 38706), (136, 38709), (183, 38772), (206, 38808), (213, 38820), (215, 38841), (237, 38922), (320, 39108), (336, 39138), (365, 39243),

Gene: Rem711_72 Start: 44535, Stop: 45203, Start Num: 160
Candidate Starts for Rem711_72:
(20, 44103), (37, 44193), (Start: 53 @44235 has 16 MA's), (55, 44241), (57, 44256), (89, 44367), (141, 44487), (Start: 160 @44535 has 64 MA's), (169, 44562), (189, 44616), (302, 44898), (339, 44967), (377, 45120),

Gene: RemRem_47 Start: 44268, Stop: 43546, Start Num: 167
Candidate Starts for RemRem_47:
(Start: 167 @44268 has 76 MA's), (179, 44229), (188, 44202), (207, 44151), (229, 44076), (234, 44061), (268, 43977), (293, 43902), (349, 43746), (366, 43698), (368, 43668), (390, 43566),

Gene: Reptar3000_68 Start: 42257, Stop: 43102, Start Num: 83
Candidate Starts for Reptar3000_68:
(66, 42206), (Start: 83 @42257 has 22 MA's), (94, 42284), (108, 42314), (199, 42542), (206, 42554), (219, 42602), (237, 42668), (336, 42842), (357, 42920), (365, 42947), (370, 42986),

Gene: Rhynn_57 Start: 39880, Stop: 38906, Start Num: 92
Candidate Starts for Rhynn_57:
(Start: 92 @39880 has 1 MA's), (139, 39772), (153, 39727), (181, 39643), (215, 39520), (224, 39466), (235, 39436), (245, 39400), (298, 39241), (301, 39238), (319, 39184), (351, 39082), (365, 39040), (368, 39007),

Gene: Rialto_71 Start: 44794, Stop: 45717, Start Num: 53
Candidate Starts for Rialto_71:

(Start: 53 @44794 has 16 MA's), (Start: 58 @44821 has 2 MA's), (73, 44863), (118, 44980), (125, 44989), (134, 45010), (175, 45076), (206, 45112), (213, 45124), (222, 45181), (237, 45226), (239, 45232), (336, 45457), (337, 45460),

Gene: RitaG_74 Start: 47037, Stop: 47705, Start Num: 149
Candidate Starts for RitaG_74:
(Start: 149 @47037 has 18 MA's), (169, 47076), (189, 47130), (195, 47157), (225, 47217), (262, 47307), (271, 47319), (284, 47352), (351, 47517), (363, 47550), (368, 47586), (387, 47676),

Gene: Rofo_85 Start: 57833, Stop: 58579, Start Num: 160
Candidate Starts for Rofo_85:
(127, 57758), (140, 57782), (Start: 160 @57833 has 64 MA's), (177, 57881), (179, 57890), (Start: 182 @57902 has 2 MA's), (237, 58100), (241, 58115), (262, 58175), (267, 58181), (270, 58184), (276, 58196), (278, 58202), (283, 58217), (323, 58328), (365, 58442), (371, 58487), (378, 58520), (383, 58547), (390, 58568),

Gene: RogerDodger_62 Start: 44572, Stop: 45528, Start Num: 54
Candidate Starts for RogerDodger_62:
(21, 44446), (Start: 54 @44572 has 13 MA's), (79, 44668), (118, 44758), (218, 45028), (222, 45052), (237, 45097), (239, 45103), (280, 45202), (347, 45313), (364, 45367),

Gene: RonRayGun_60 Start: 41425, Stop: 42162, Start Num: 164
Candidate Starts for RonRayGun_60:
(24, 41008), (96, 41266), (100, 41272), (Start: 164 @41425 has 7 MA's), (179, 41467), (200, 41539), (205, 41557), (243, 41683), (251, 41701), (295, 41815), (307, 41851), (326, 41896), (351, 41980), (354, 41989), (356, 41992), (361, 42001), (365, 42019), (392, 42151),

Gene: RoyalG_47 Start: 45104, Stop: 44382, Start Num: 167
Candidate Starts for RoyalG_47:
(Start: 167 @45104 has 76 MA's), (179, 45065), (207, 44987), (229, 44912), (234, 44897), (268, 44813), (293, 44738), (366, 44534), (368, 44504), (390, 44402),

Gene: Ruthiejr_72 Start: 43729, Stop: 44574, Start Num: 83
Candidate Starts for Ruthiejr_72:
(Start: 83 @43729 has 22 MA's), (94, 43756), (108, 43786), (199, 44014), (206, 44026), (219, 44074), (237, 44140), (336, 44314), (357, 44392), (365, 44419), (370, 44458),

Gene: SG4_77 Start: 47569, Stop: 48366, Start Num: 155
Candidate Starts for SG4_77:
(Start: 152 @47566 has 3 MA's), (Start: 155 @47569 has 2 MA's), (169, 47602), (180, 47635), (Start: 182 @47644 has 2 MA's), (194, 47692), (209, 47725), (225, 47794), (250, 47866), (260, 47890), (269, 47905), (334, 48076), (345, 48112), (362, 48178), (365, 48184), (383, 48289), (387, 48307),

Gene: Sam12_46 Start: 44268, Stop: 43546, Start Num: 167
Candidate Starts for Sam12_46:
(Start: 167 @44268 has 76 MA's), (179, 44229), (188, 44202), (207, 44151), (229, 44076), (234, 44061), (268, 43977), (293, 43902), (349, 43746), (366, 43698), (368, 43668), (390, 43566),

Gene: SamScheppers_69 Start: 44109, Stop: 44954, Start Num: 83
Candidate Starts for SamScheppers_69:
(66, 44058), (Start: 83 @44109 has 22 MA's), (94, 44136), (108, 44166), (199, 44394), (206, 44406), (219, 44454), (237, 44520), (336, 44694), (357, 44772), (365, 44799), (370, 44838),

Gene: Sampson_91 Start: 59293, Stop: 59982, Start Num: 160
Candidate Starts for Sampson_91:
(47, 58978), (103, 59167), (124, 59212), (135, 59236), (Start: 160 @59293 has 64 MA's), (189, 59374), (204, 59425), (246, 59551), (264, 59590), (296, 59668), (303, 59680), (312, 59701), (328, 59737), (358, 59818),

Gene: Sanjuju_83 Start: 58188, Stop: 58886, Start Num: 160
Candidate Starts for Sanjuju_83:
(7, 57441), (29, 57810), (50, 57876), (127, 58113), (140, 58137), (Start: 160 @58188 has 64 MA's), (172, 58221), (177, 58236), (Start: 182 @58257 has 2 MA's), (218, 58365), (237, 58425), (267, 58506), (276, 58521), (283, 58542), (335, 58674), (351, 58707), (365, 58749), (371, 58794), (378, 58827), (383, 58854), (390, 58875),

Gene: Sassafras_75 Start: 45926, Stop: 46594, Start Num: 149
Candidate Starts for Sassafras_75:
(Start: 149 @45926 has 18 MA's), (169, 45965), (189, 46019), (195, 46046), (225, 46106), (262, 46196), (271, 46208), (284, 46241), (351, 46406), (363, 46439), (368, 46475), (387, 46565),

Gene: SassyB_60 Start: 40607, Stop: 41515, Start Num: 53
Candidate Starts for SassyB_60:
(Start: 53 @40607 has 16 MA's), (Start: 58 @40634 has 2 MA's), (73, 40676), (79, 40703), (118, 40793), (125, 40802), (134, 40823), (222, 40976), (237, 41021), (239, 41027), (263, 41090), (336, 41252), (346, 41297), (365, 41357),

Gene: Scioto_90 Start: 59143, Stop: 59832, Start Num: 160
Candidate Starts for Scioto_90:
(47, 58828), (103, 59017), (124, 59062), (135, 59086), (Start: 160 @59143 has 64 MA's), (189, 59224), (204, 59275), (246, 59401), (264, 59440), (296, 59518), (303, 59530), (312, 59551), (328, 59587), (358, 59668),

Gene: Scottish_72 Start: 45585, Stop: 46253, Start Num: 149
Candidate Starts for Scottish_72:
(Start: 149 @45585 has 18 MA's), (169, 45624), (189, 45678), (195, 45705), (225, 45765), (262, 45855), (271, 45867), (284, 45900), (351, 46065), (363, 46098), (368, 46134), (387, 46224),

Gene: Sedona_83 Start: 58685, Stop: 59383, Start Num: 160
Candidate Starts for Sedona_83:
(7, 57938), (29, 58307), (50, 58373), (127, 58610), (140, 58634), (Start: 160 @58685 has 64 MA's), (177, 58733), (179, 58742), (Start: 182 @58754 has 2 MA's), (218, 58862), (237, 58922), (267, 59003), (276, 59018), (283, 59039), (335, 59171), (351, 59204), (365, 59246), (371, 59291), (378, 59324), (383, 59351), (390, 59372),

Gene: Shelley_46 Start: 45897, Stop: 45178, Start Num: 167
Candidate Starts for Shelley_46:
(Start: 167 @45897 has 76 MA's), (188, 45831), (198, 45789), (207, 45780), (212, 45774), (234, 45690), (249, 45645), (263, 45612), (268, 45606), (293, 45531), (366, 45327),

Gene: Sidious_64 Start: 44887, Stop: 45681, Start Num: 158
Candidate Starts for Sidious_64:
(Start: 151 @44884 has 6 MA's), (Start: 158 @44887 has 9 MA's), (198, 45019), (200, 45022), (211, 45049), (241, 45166), (307, 45340), (318, 45361), (351, 45457), (369, 45532), (378, 45574),

Gene: Sidious_65 Start: 45678, Stop: 46337, Start Num: 156

Candidate Starts for Sidious_65:
(Start: 156 @45678 has 7 MA's), (189, 45762), (232, 45873), (246, 45903), (283, 45981), (289, 45996), (329, 46086), (335, 46095), (387, 46308),

Gene: SimranZ1_67 Start: 43613, Stop: 44584, Start Num: 53
Candidate Starts for SimranZ1_67:
(14, 43436), (15, 43442), (16, 43451), (17, 43460), (22, 43499), (Start: 53 @43613 has 16 MA's), (75, 43697), (79, 43709), (118, 43799), (129, 43820), (134, 43829), (136, 43832), (163, 43889), (193, 43985), (206, 44021), (213, 44033), (219, 44069), (222, 44090), (229, 44114), (239, 44141), (292, 44249), (336, 44324),

Gene: Sitar_84 Start: 58707, Stop: 59453, Start Num: 160
Candidate Starts for Sitar_84:
(12, 58224), (50, 58395), (127, 58632), (140, 58656), (Start: 160 @58707 has 64 MA's), (177, 58755), (179, 58764), (Start: 182 @58776 has 2 MA's), (237, 58974), (241, 58989), (262, 59049), (267, 59055), (270, 59058), (276, 59070), (278, 59076), (283, 59091), (323, 59202), (365, 59316), (371, 59361), (378, 59394), (383, 59421), (390, 59442),

Gene: Slarp_71 Start: 43637, Stop: 44482, Start Num: 83
Candidate Starts for Slarp_71:
(66, 43586), (Start: 83 @43637 has 22 MA's), (94, 43664), (108, 43694), (199, 43922), (206, 43934), (219, 43982), (237, 44048), (336, 44222), (357, 44300), (365, 44327), (370, 44366),

Gene: Slim_68 Start: 43412, Stop: 44335, Start Num: 53
Candidate Starts for Slim_68:
(Start: 53 @43412 has 16 MA's), (Start: 58 @43439 has 2 MA's), (73, 43481), (118, 43598), (125, 43607), (134, 43628), (175, 43694), (206, 43730), (213, 43742), (222, 43799), (237, 43844), (239, 43850), (336, 44075), (337, 44078),

Gene: Smooch_24 Start: 10992, Stop: 11792, Start Num: 152
Candidate Starts for Smooch_24:
(Start: 152 @10992 has 3 MA's), (Start: 155 @10995 has 2 MA's), (169, 11028), (180, 11061), (Start: 182 @11070 has 2 MA's), (194, 11118), (209, 11151), (225, 11220), (250, 11292), (260, 11316), (269, 11331), (334, 11502), (345, 11538), (362, 11604), (365, 11610), (383, 11715), (387, 11733), (400, 11763),

Gene: Sombrero_47 Start: 44639, Stop: 43917, Start Num: 167
Candidate Starts for Sombrero_47:
(Start: 167 @44639 has 76 MA's), (179, 44600), (188, 44573), (194, 44540), (207, 44522), (229, 44447), (234, 44432), (268, 44348), (293, 44273), (365, 44072), (366, 44069), (390, 43937),

Gene: Spooky_73 Start: 43405, Stop: 44088, Start Num: 182
Candidate Starts for Spooky_73:
(162, 43345), (Start: 182 @43405 has 2 MA's), (203, 43474), (227, 43576), (234, 43597), (246, 43633), (275, 43693), (279, 43705), (288, 43729), (290, 43738), (317, 43810), (330, 43846), (333, 43849), (360, 43927), (375, 44008), (394, 44080),

Gene: Squibbles_46 Start: 45131, Stop: 44409, Start Num: 167
Candidate Starts for Squibbles_46:
(Start: 167 @45131 has 76 MA's), (179, 45092), (188, 45065), (207, 45014), (229, 44939), (234, 44924), (268, 44840), (293, 44765), (349, 44609), (366, 44561), (368, 44531), (390, 44429),

Gene: StAnnes_64 Start: 42680, Stop: 43636, Start Num: 53

Candidate Starts for StAnnes_64:
(Start: 53 @42680 has 16 MA's), (Start: 58 @42707 has 2 MA's), (60, 42713), (73, 42749), (118, 42866), (136, 42899), (176, 42977), (Start: 182 @43001 has 2 MA's), (193, 43037), (195, 43052), (206, 43073), (213, 43085), (222, 43142), (237, 43187), (263, 43250), (279, 43271), (336, 43373), (365, 43478),

Gene: SteveFrench_46 Start: 45344, Stop: 44622, Start Num: 167
Candidate Starts for SteveFrench_46:
(Start: 167 @45344 has 76 MA's), (179, 45305), (207, 45227), (229, 45152), (234, 45137), (268, 45053), (293, 44978), (366, 44774), (368, 44744), (390, 44642),

Gene: StevieRay_65 Start: 41652, Stop: 42314, Start Num: 151
Candidate Starts for StevieRay_65:
(Start: 151 @41652 has 6 MA's), (169, 41685), (189, 41739), (195, 41766), (225, 41826), (262, 41916), (271, 41928), (284, 41961), (351, 42126), (363, 42159), (368, 42195), (387, 42285),

Gene: Sticker17_46 Start: 46412, Stop: 45693, Start Num: 167
Candidate Starts for Sticker17_46:
(Start: 167 @46412 has 76 MA's), (188, 46346), (207, 46295), (212, 46289), (234, 46205), (249, 46160), (268, 46121), (293, 46046), (299, 46037), (366, 45842),

Gene: Stultus_80 Start: 56979, Stop: 57725, Start Num: 160
Candidate Starts for Stultus_80:
(Start: 160 @56979 has 64 MA's), (177, 57027), (179, 57036), (Start: 182 @57048 has 2 MA's), (237, 57246), (241, 57261), (262, 57321), (267, 57327), (270, 57330), (276, 57342), (278, 57348), (283, 57363), (323, 57474), (365, 57588), (368, 57621), (371, 57633), (378, 57666), (383, 57693), (390, 57714),

Gene: SunnyJune_15 Start: 11330, Stop: 12013, Start Num: 156
Candidate Starts for SunnyJune_15:
(Start: 156 @11330 has 7 MA's), (180, 11390), (189, 11414), (253, 11591), (351, 11825), (363, 11858),

Gene: Swole_70 Start: 43859, Stop: 42993, Start Num: 42
Candidate Starts for Swole_70:
(34, 43886), (39, 43865), (Start: 42 @43859 has 7 MA's), (Start: 58 @43802 has 2 MA's), (59, 43799), (70, 43769), (73, 43760), (120, 43640), (206, 43532), (222, 43463), (245, 43388), (346, 43202), (355, 43172), (389, 43013),

Gene: Taquito_70 Start: 43842, Stop: 44687, Start Num: 83
Candidate Starts for Taquito_70:
(66, 43791), (Start: 83 @43842 has 22 MA's), (94, 43869), (108, 43899), (199, 44127), (206, 44139), (219, 44187), (237, 44253), (336, 44427), (357, 44505), (365, 44532), (370, 44571),

Gene: Teal_46 Start: 46880, Stop: 46161, Start Num: 167
Candidate Starts for Teal_46:
(Start: 167 @46880 has 76 MA's), (188, 46814), (198, 46772), (207, 46763), (212, 46757), (234, 46673), (249, 46628), (263, 46595), (268, 46589), (293, 46514), (366, 46310),

Gene: Teatealatte_43 Start: 45553, Stop: 44837, Start Num: 167
Candidate Starts for Teatealatte_43:
(Start: 167 @45553 has 76 MA's), (174, 45538), (207, 45436), (234, 45346), (237, 45340), (293, 45187), (319, 45124), (335, 45094), (384, 44872),

Gene: Teech_43 Start: 45354, Stop: 44638, Start Num: 167
Candidate Starts for Teech_43:
(Start: 167 @45354 has 76 MA's), (174, 45339), (207, 45237), (234, 45147), (237, 45141), (293, 44988), (319, 44925), (335, 44895), (384, 44673),

Gene: Thespis_62 Start: 40418, Stop: 41080, Start Num: 151
Candidate Starts for Thespis_62:
(Start: 111 @40337 has 1 MA's), (115, 40346), (131, 40373), (Start: 151 @40418 has 6 MA's), (169, 40451), (189, 40505), (195, 40532), (225, 40592), (262, 40682), (271, 40694), (284, 40727), (351, 40892), (363, 40925), (368, 40961), (387, 41051),

Gene: Thing3_10 Start: 5311, Stop: 6054, Start Num: 158
Candidate Starts for Thing3_10:
(Start: 158 @5311 has 9 MA's), (178, 5371), (179, 5374), (190, 5410), (214, 5476), (223, 5521), (228, 5539), (230, 5545), (261, 5623), (288, 5683), (294, 5707), (300, 5716), (310, 5749), (325, 5788), (332, 5797), (350, 5857), (359, 5878), (364, 5896), (365, 5899), (373, 5950), (382, 5998),

Gene: Thing3_86 Start: 58360, Stop: 59106, Start Num: 160
Candidate Starts for Thing3_86:
(127, 58285), (140, 58309), (Start: 160 @58360 has 64 MA's), (177, 58408), (179, 58417), (Start: 182 @58429 has 2 MA's), (237, 58627), (241, 58642), (262, 58702), (267, 58708), (270, 58711), (276, 58723), (278, 58729), (283, 58744), (323, 58855), (365, 58969), (371, 59014), (378, 59047), (383, 59074), (390, 59095),

Gene: Tiamoceli_4 Start: 2479, Stop: 3267, Start Num: 58
Candidate Starts for Tiamoceli_4:
(Start: 58 @2479 has 2 MA's), (118, 2644), (185, 2791), (195, 2833), (225, 2935), (230, 2950), (336, 3043), (344, 3067), (384, 3259),

Gene: Tote_65 Start: 41126, Stop: 40260, Start Num: 42
Candidate Starts for Tote_65:
(34, 41153), (39, 41132), (Start: 42 @41126 has 7 MA's), (Start: 58 @41069 has 2 MA's), (59, 41066), (70, 41036), (73, 41027), (120, 40907), (206, 40799), (222, 40730), (245, 40655), (346, 40469), (355, 40439), (389, 40280),

Gene: Tredge_43 Start: 45553, Stop: 44837, Start Num: 167
Candidate Starts for Tredge_43:
(Start: 167 @45553 has 76 MA's), (174, 45538), (207, 45436), (234, 45346), (237, 45340), (293, 45187), (319, 45124), (335, 45094), (384, 44872),

Gene: TripleJ_61 Start: 37250, Stop: 37999, Start Num: 160
Candidate Starts for TripleJ_61:
(Start: 160 @37250 has 64 MA's), (168, 37274), (169, 37277), (180, 37310), (Start: 182 @37319 has 2 MA's), (188, 37334), (202, 37382), (216, 37415), (230, 37466), (241, 37499), (267, 37565), (276, 37580), (283, 37601), (304, 37655), (349, 37763), (351, 37766), (371, 37853),

Gene: Trouble_68 Start: 43948, Stop: 43082, Start Num: 46
Candidate Starts for Trouble_68:
(Start: 38 @43963 has 1 MA's), (Start: 46 @43948 has 6 MA's), (Start: 52 @43927 has 4 MA's), (Start: 58 @43894 has 2 MA's), (59, 43891), (70, 43861), (73, 43852), (120, 43732), (206, 43624), (222, 43555), (245, 43480), (346, 43294), (355, 43264), (389, 43105),

Gene: Tweety_66 Start: 43468, Stop: 44124, Start Num: 160

Candidate Starts for Tweety_66:
(81, 43291), (86, 43306), (90, 43315), (132, 43411), (Start: 160 @43468 has 64 MA's), (189, 43549), (195, 43576), (225, 43636), (262, 43726), (271, 43738), (284, 43771), (351, 43936), (363, 43969), (368, 44005), (384, 44086), (387, 44095),

Gene: Ubuntu_67 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Ubuntu_67:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: UmaThurman_67 Start: 42612, Stop: 43637, Start Num: 54
Candidate Starts for UmaThurman_67:
(4, 42123), (5, 42144), (6, 42156), (8, 42375), (9, 42387), (13, 42435), (Start: 54 @42612 has 13 MA's), (79, 42708), (105, 42765), (118, 42798), (134, 42828), (146, 42861), (175, 42942), (196, 43032), (199, 43038), (222, 43119), (239, 43170), (309, 43326), (347, 43425),

Gene: Utz_60 Start: 42126, Stop: 43184, Start Num: 54
Candidate Starts for Utz_60:
(8, 41889), (9, 41901), (13, 41949), (Start: 54 @42126 has 13 MA's), (79, 42222), (105, 42279), (118, 42312), (134, 42342), (175, 42456), (196, 42546), (215, 42597), (218, 42609), (222, 42633), (229, 42657), (237, 42678), (239, 42684), (347, 42972),

Gene: Vasanti_62 Start: 41618, Stop: 42619, Start Num: 54
Candidate Starts for Vasanti_62:
(2, 41102), (27, 41525), (41, 41585), (Start: 54 @41618 has 13 MA's), (75, 41702), (79, 41714), (105, 41771), (118, 41804), (134, 41834), (185, 41948), (218, 42044), (222, 42068), (237, 42113), (239, 42119), (280, 42218), (336, 42359), (347, 42407),

Gene: Venti_58 Start: 37622, Stop: 38488, Start Num: 113
Candidate Starts for Venti_58:
(93, 37571), (97, 37586), (Start: 113 @37622 has 3 MA's), (Start: 158 @37721 has 9 MA's), (169, 37751), (180, 37784), (Start: 182 @37793 has 2 MA's), (194, 37841), (209, 37874), (225, 37943), (250, 38015), (260, 38039), (269, 38054), (334, 38225), (345, 38261), (362, 38327), (365, 38333), (383, 38438), (387, 38456),

Gene: Verity_88 Start: 60390, Stop: 61079, Start Num: 160
Candidate Starts for Verity_88:
(135, 60333), (Start: 160 @60390 has 64 MA's), (189, 60471), (296, 60765), (303, 60777), (358, 60915), (363, 60933), (377, 61008), (378, 61014),

Gene: ViaConlectus_88 Start: 58070, Stop: 58717, Start Num: 160
Candidate Starts for ViaConlectus_88:
(97, 57944), (117, 57989), (130, 58013), (Start: 160 @58070 has 64 MA's), (189, 58151), (227, 58247), (246, 58292), (283, 58370), (289, 58385), (322, 58460), (335, 58484), (387, 58697),

Gene: Vitaenoii_45 Start: 46926, Stop: 46213, Start Num: 167
Candidate Starts for Vitaenoii_45:
(74, 47169), (Start: 167 @46926 has 76 MA's), (174, 46911), (207, 46809), (234, 46719), (293, 46560), (319, 46497), (335, 46467), (366, 46356), (368, 46326), (384, 46245),

Gene: Walrus_66 Start: 42197, Stop: 43261, Start Num: 54

Candidate Starts for Walrus_66:
(6, 41744), (8, 41963), (9, 41975), (13, 42023), (Start: 54 @42197 has 13 MA's), (79, 42293), (105, 42350), (118, 42383), (134, 42413), (175, 42527), (196, 42617), (218, 42680), (222, 42704), (237, 42749), (239, 42755), (280, 42854), (347, 43043),

Gene: Watermelon_68 Start: 43252, Stop: 42389, Start Num: 46
Candidate Starts for Watermelon_68:
(Start: 38 @43267 has 1 MA's), (Start: 46 @43252 has 6 MA's), (Start: 52 @43231 has 4 MA's), (Start: 58 @43201 has 2 MA's), (59, 43198), (70, 43168), (73, 43159), (120, 43039), (206, 42931), (222, 42862), (245, 42787), (346, 42601), (355, 42571), (389, 42412),

Gene: Webster2_67 Start: 44904, Stop: 45578, Start Num: 149
Candidate Starts for Webster2_67:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: WheatThin_65 Start: 42576, Stop: 43286, Start Num: 160
Candidate Starts for WheatThin_65:
(65, 42342), (110, 42471), (Start: 160 @42576 has 64 MA's), (169, 42603), (190, 42669), (270, 42894), (283, 42927), (304, 42981), (323, 43038), (349, 43089), (351, 43092), (368, 43167),

Gene: Wheeler_71 Start: 44519, Stop: 43659, Start Num: 46
Candidate Starts for Wheeler_71:
(Start: 38 @44534 has 1 MA's), (Start: 46 @44519 has 6 MA's), (Start: 52 @44498 has 4 MA's), (Start: 58 @44468 has 2 MA's), (59, 44465), (70, 44435), (73, 44426), (120, 44306), (206, 44198), (222, 44129), (245, 44054), (346, 43868), (355, 43838), (389, 43679),

Gene: Whitspit_63 Start: 41262, Stop: 40420, Start Num: 52
Candidate Starts for Whitspit_63:
(Start: 38 @41298 has 1 MA's), (Start: 46 @41283 has 6 MA's), (Start: 52 @41262 has 4 MA's), (Start: 58 @41232 has 2 MA's), (59, 41229), (70, 41199), (73, 41190), (120, 41070), (206, 40962), (222, 40893), (245, 40818), (346, 40632), (355, 40602), (389, 40443),

Gene: Whitty_59 Start: 41222, Stop: 41959, Start Num: 164
Candidate Starts for Whitty_59:
(24, 40805), (96, 41063), (100, 41069), (Start: 164 @41222 has 7 MA's), (179, 41264), (200, 41336), (205, 41354), (243, 41480), (251, 41498), (295, 41612), (307, 41648), (326, 41693), (351, 41777), (354, 41786), (356, 41789), (361, 41798), (365, 41816), (392, 41948),

Gene: Wintermute_71 Start: 43867, Stop: 44712, Start Num: 83
Candidate Starts for Wintermute_71:
(66, 43816), (Start: 83 @43867 has 22 MA's), (94, 43894), (108, 43924), (199, 44152), (206, 44164), (219, 44212), (237, 44278), (336, 44452), (357, 44530), (365, 44557), (370, 44596),

Gene: Wishmaker_62 Start: 44916, Stop: 45578, Start Num: 157
Candidate Starts for Wishmaker_62:
(36, 44574), (59, 44655), (73, 44700), (77, 44724), (97, 44775), (121, 44829), (Start: 149 @44904 has 18 MA's), (150, 44907), (Start: 157 @44916 has 22 MA's), (169, 44943), (236, 45117), (270, 45195), (273, 45201), (281, 45225), (287, 45234), (303, 45276), (342, 45360), (343, 45363), (351, 45396), (353, 45402), (355, 45408), (369, 45471), (377, 45507), (382, 45534), (384, 45549), (387, 45558),

Gene: Woes_46 Start: 46931, Stop: 46212, Start Num: 167
Candidate Starts for Woes_46:
(Start: 167 @46931 has 76 MA's), (188, 46865), (207, 46814), (212, 46808), (234, 46724), (249, 46679), (268, 46640), (293, 46565), (366, 46361),

Gene: Worcestershire_47 Start: 44270, Stop: 43548, Start Num: 167
Candidate Starts for Worcestershire_47:
(Start: 167 @44270 has 76 MA's), (179, 44231), (188, 44204), (207, 44153), (229, 44078), (234, 44063), (268, 43979), (293, 43904), (349, 43748), (366, 43700), (368, 43670), (390, 43568),

Gene: Xula_54 Start: 38111, Stop: 39022, Start Num: 53
Candidate Starts for Xula_54:
(Start: 53 @38111 has 16 MA's), (Start: 58 @38138 has 2 MA's), (60, 38144), (73, 38180), (118, 38297), (129, 38318), (134, 38327), (136, 38330), (183, 38393), (206, 38429), (213, 38441), (215, 38462), (237, 38543), (320, 38729), (336, 38759), (365, 38864),

Gene: Y10_68 Start: 43844, Stop: 44689, Start Num: 83
Candidate Starts for Y10_68:
(Start: 83 @43844 has 22 MA's), (94, 43871), (108, 43901), (199, 44129), (206, 44141), (219, 44189), (237, 44255), (336, 44429), (357, 44507), (365, 44534), (370, 44573),

Gene: Y2_68 Start: 43844, Stop: 44689, Start Num: 83
Candidate Starts for Y2_68:
(Start: 83 @43844 has 22 MA's), (94, 43871), (108, 43901), (199, 44129), (206, 44141), (219, 44189), (237, 44255), (336, 44429), (357, 44507), (365, 44534), (370, 44573),

Gene: YasnayaPolyana_70 Start: 43693, Stop: 44538, Start Num: 83
Candidate Starts for YasnayaPolyana_70:
(66, 43642), (Start: 83 @43693 has 22 MA's), (94, 43720), (108, 43750), (199, 43978), (206, 43990), (219, 44038), (237, 44104), (336, 44278), (357, 44356), (365, 44383), (370, 44422),

Gene: ZenTime222_66 Start: 42173, Stop: 42910, Start Num: 164
Candidate Starts for ZenTime222_66:
(24, 41756), (96, 42014), (100, 42020), (Start: 164 @42173 has 7 MA's), (179, 42215), (200, 42287), (205, 42305), (243, 42431), (251, 42449), (295, 42563), (307, 42599), (326, 42644), (351, 42728), (354, 42737), (356, 42740), (361, 42749), (365, 42767), (392, 42899),

Gene: Zipp_89 Start: 60361, Stop: 61050, Start Num: 160
Candidate Starts for Zipp_89:
(135, 60304), (Start: 160 @60361 has 64 MA's), (189, 60442), (296, 60736), (303, 60748), (358, 60886), (363, 60904), (377, 60979), (378, 60985),