Pham 283544

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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 283544 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283544 has 165 members, 32 are drafts.

Phages represented in each track:
• Track 1 : GoCrazy_88, Hankly_93, Xenomorph_88, Kardesai_91, Dynamite_92, Bowling_94, Mooshroom_93, KeaneyLin_90, NapoleonB_93, Benllo_91
• Track 2 : Elsa_90, Arcadia_90, Nason_90, Correa_88, YoshiYama_91
• Track 3 : Heisenberger_91, BenitoAntonio_90, Tribby_94, Mudcat_87, Cheesy_93, JEGGS_91
• Track 4 : Circum_93
• Track 5 : Wilde_14
• Track 6 : Tank_14
• Track 7 : Rizwana_13
• Track 8 : Renaldo_80
• Track 9 : PoeMe_73
• Track 10 : Mardi_73
• Track 11 : Muglass_74, Biscute_72, Kinny_75, BarbieDoll_76
• Track 12 : GantcherGoblin_70
• Track 13 : Leathea_72
• Track 14 : Navi1117_75
• Track 15 : Uzumaki_69
• Track 16 : Tenney120_73
• Track 17 : Lewando_76
• Track 18 : TrixiePhattel_73
• Track 19 : Altjira_74, Argan_69, KevinMinion_70
• Track 20 : Barbonzobean_79
• Track 21 : Zeina_75
• Track 22 : Stardrop_76
• Track 23 : Phaila_74
• Track 24 : GalaxyEater_10
• Track 25 : Jasmine_8
• Track 26 : Westy_68, Comrade_67, Karp_65, Stigma_66, Belfort_69
• Track 27 : DeluluLabubu_66, Forrest_69, Jada_67, Maupel_67, Emma1919_69, Gilson_68
• Track 28 : Phredrick_67, Kenrey_69
• Track 29 : Moab_67, Patelgo_67
• Track 30 : MeganTheeKilla_66, Francob_66
• Track 31 : SparkleGoddess_67
• Track 32 : Sarkar_12, Quantum_11, Kradal_11, EhyElimayoE_11
• Track 33 : Satis_11
• Track 34 : JustBecause_9, Kela_9

- Track 35 : Frankenweenie_15
- Track 36 : Nirvana_15
- Track 37 : GiJojo_106
- Track 38 : Tainan_244, InterFolia_246, Mikro_238, ScottMcG_236, LinStu_241, Breeniome_244, LordLeafolot_245, Spec_238, Grungle_226, PharkleMinkus_246, LolaVinca_240, Bigswole_249, Lethe_242, Nappy_243, YoungMoneyMata_244, FrayBell_247, Patter_246, Dandelion_250, NuevoMundo_246, Halldule_236, Koguma_243, Tyke_241
- Track 39 : Colt_234, Blubba_231, Cane17_233
- Track 40 : Sebata_244, DeejaClivia_231, JayJay_244, Maturis_238, DirtMonster_233, Lunareta_241, Montpel_241
- Track 41 : Mangeria_244
- Track 42 : I3_254
- Track 43 : PinkCoffee_74, Danyall_73
- Track 44 : KimmyK_72, Bakery_77, Valary_73, CherryCola_73, Gezellig_69, Wizard_69
- Track 45 : Phlop_70, PullumCavea_71
- Track 46 : Barb_74, ClamChowder_74, Fugax_75
- Track 47 : CoveyB_73, Arri_73, VanDeWege_74, Portcullis_73, Nubi_72
- Track 48 : Salvador_72, Evamon_72, Mutzi_71, YungMoney_72
- Track 49 : Togo_72, SmokingBunny_73
- Track 50 : Twister6_73
- Track 51 : Halo3_70
- Track 52 : RogerDodger_76
- Track 53 : Talon44_72, Avazak_71, Captrips_69, NoPickles_69, Petito_72, Football_72, Tairn4Wing_72
- Track 54 : Bugg_73, Artorias_70, FortCran_70, Dancer_70
- Track 55 : Pherobrine_70
- Track 56 : Fazel_71
- Track 57 : Hortihabitatio_71
- Track 58 : ChickyNuggy_73, JulesRay_70
- Track 59 : Secretariat_68
- Track 60 : Conley_69
- Track 61 : Mysticmoon_71
- Track 62 : Schwartz33_69
- Track 63 : Skog_75
- Track 64 : Aleemily_54, ModicumRichard_55, Cafasso_55
- Track 65 : Morgana_55
- Track 66 : ObLaDi_55
- Track 67 : E3_gp177
- Track 68 : Cantare_122

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

The start number called the most often in the published annotations is 26, it was called in 50 of the 133 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Arri_73, Bakery_77, Barb_74, Bigswole_249, Blubba_231, Breeniome_244, Cane17_233, CherryCola_73, ClamChowder_74, Colt_234, CoveyB_73,

Dandelion_250, Danyall_73, E3_gp177, Evamon_72, FrayBell_247, Fugax_75, Gezellig_69, Grungle_226, Halldule_236, Halo3_70, I3_254, InterFolia_246, KimmyK_72, Koguma_243, Lethe_242, LinStu_241, LolaVinca_240, LordLeafolot_245, Mangeria_244, Mikro_238, Mutzi_71, Nappy_243, Nubi_72, NuevoMundo_246, Patter_246, PharkleMinkus_246, Phlop_70, PinkCoffee_74, Portcullis_73, PullumCavea_71, RogerDodger_76, Salvador_72, ScottMcG_236, Skog_75, SmokingBunny_73, Spec_238, Tainan_244, Togo_72, Twister6_73, Tyke_241, Valary_73, VanDeWege_74, Wizard_69, YoungMoneyMata_244, YungMoney_72,

Genes that have the "Most Annotated" start but do not call it:
• TrixiePhattel_73,

Genes that do not have the "Most Annotated" start:
• Aleemily_54, Altjira_74, Arcadia_90, Argan_69, Artorias_70, Avazak_71, BarbieDoll_76, Barbonzobean_79, Belfort_69, BenitoAntonio_90, Benllo_91, Biscute_72, Bowling_94, Bugg_73, Cafasso_55, Cantare_122, Captrips_69, Cheesy_93, ChickyNuggy_73, Circum_93, Comrade_67, Conley_69, Correa_88, Dancer_70, DeejaClivia_231, DeluluLabubu_66, DirtMonster_233, Dynamite_92, EhyElimayoE_11, Elsa_90, Emma1919_69, Fazel_71, Football_72, Forrest_69, FortCran_70, Francob_66, Frankenweenie_15, GalaxyEater_10, GantcherGoblin_70, GiJojo_106, Gilson_68, GoCrazy_88, Hankly_93, Heisenberger_91, Hortihabitatio_71, JEGGS_91, Jada_67, Jasmine_8, JayJay_244, JulesRay_70, JustBecause_9, Kardesai_91, Karp_65, KeaneyLin_90, Kela_9, Kenrey_69, KevinMinion_70, Kinny_75, Kradal_11, Leathea_72, Lewando_76, Lunareta_241, Mardi_73, Maturis_238, Maupel_67, MeganTheeKilla_66, Moab_67, ModicumRichard_55, Montpel_241, Mooshroom_93, Morgana_55, Mudcat_87, Muglass_74, Mysticmoon_71, NapoleonB_93, Nason_90, Navi1117_75, Nirvana_15, NoPickles_69, ObLaDi_55, Patelgo_67, Petito_72, Phaila_74, Pherobrine_70, Phredrick_67, PoeMe_73, Quantum_11, Renaldo_80, Rizwana_13, Sarkar_12, Satis_11, Schwartz33_69, Sebata_244, Secretariat_68, SparkleGoddess_67, Stardrop_76, Stigma_66, Tairn4Wing_72, Talon44_72, Tank_14, Tenney120_73, Tribby_94, Uzumaki_69, Westy_68, Wilde_14, Xenomorph_88, YoshiYama_91, Zeina_75,

Summary by start number:

Start 21:
• Found in 3 of 165 (1.8%) of genes in pham
• Manual Annotations of this start: 3 of 133
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rizwana_13 (AP1), Tank_14 (AP1), Wilde_14 (AP1),

Start 22:
• Found in 5 of 165 (3.0%) of genes in pham
• Manual Annotations of this start: 4 of 133
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aleemily_54 (DZ), Cafasso_55 (DZ), ModicumRichard_55 (DZ), Morgana_55 (DZ), ObLaDi_55 (DZ),

Start 23:
• Found in 7 of 165 (4.2%) of genes in pham

• Manual Annotations of this start: 3 of 133
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DeejaClivia_231 (C1), DirtMonster_233 (C1), JayJay_244 (C1), Lunareta_241 (C1), Maturis_238 (C1), Montpel_241 (C1), Sebata_244 (C1),

Start 24:
• Found in 22 of 165 (13.3%) of genes in pham
• Manual Annotations of this start: 20 of 133
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arcadia_90 (AM), BenitoAntonio_90 (AM), Benllo_91 (AM), Bowling_94 (AM), Cheesy_93 (AM), Circum_93 (AM), Correa_88 (AM), Dynamite_92 (AM), Elsa_90 (AM), GoCrazy_88 (AM), Hankly_93 (AM), Heisenberger_91 (AM), JEGGS_91 (AM), Kardesai_91 (AM), KeaneyLin_90 (AM), Mooshroom_93 (AM), Mudcat_87 (AM), NapoleonB_93 (AM), Nason_90 (AM), Tribby_94 (AM), Xenomorph_88 (AM), YoshiYama_91 (AM),

Start 25:
• Found in 1 of 165 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 133
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schwartz33_69 (DJ),

Start 26:
• Found in 57 of 165 (34.5%) of genes in pham
• Manual Annotations of this start: 50 of 133
• Called 98.2% of time when present
• Phage (with cluster) where this start called: Arri_73 (DC1), Bakery_77 (DC1), Barb_74 (DC1), Bigswole_249 (C1), Blubba_231 (C1), Breeniome_244 (C1), Cane17_233 (C1), CherryCola_73 (DC1), ClamChowder_74 (DC1), Colt_234 (C1), CoveyB_73 (DC1), Dandelion_250 (C1), Danyall_73 (DC1), E3_gp177 (singleton), Evamon_72 (DC1), FrayBell_247 (C1), Fugax_75 (DC1), Gezellig_69 (DC1), Grungle_226 (C1), Halldule_236 (C1), Halo3_70 (DC1), I3_254 (C1), InterFolia_246 (C1), KimmyK_72 (DC1), Koguma_243 (C1), Lethe_242 (C1), LinStu_241 (C1), LolaVinca_240 (C1), LordLeafolot_245 (C1), Mangeria_244 (C1), Mikro_238 (C1), Mutzi_71 (DC1), Nappy_243 (C1), Nubi_72 (DC1), NuevoMundo_246 (C1), Patter_246 (C1), PharkleMinkus_246 (C1), Phlop_70 (DC1), PinkCoffee_74 (DC1), Portcullis_73 (DC1), PullumCavea_71 (DC1), RogerDodger_76 (DC1), Salvador_72 (DC1), ScottMcG_236 (C1), Skog_75 (DO), SmokingBunny_73 (DC1), Spec_238 (C1), Tainan_244 (C1), Togo_72 (DC1), Twister6_73 (DC1), Tyke_241 (C1), Valary_73 (DC1), VanDeWege_74 (DC1), Wizard_69 (DC1), YoungMoneyMata_244 (C1), YungMoney_72 (DC1),

Start 27:
• Found in 22 of 165 (13.3%) of genes in pham
• Manual Annotations of this start: 11 of 133
• Called 95.5% of time when present
• Phage (with cluster) where this start called: Altjira_74 (AU6), Argan_69 (AU6), BarbieDoll_76 (AU6), Barbonzobean_79 (AU6), Biscute_72 (AU6), GantcherGoblin_70 (AU6), KevinMinion_70 (AU6), Kinny_75 (AU6), Leathea_72 (AU6), Lewando_76 (AU6), Mardi_73 (AU6), Muglass_74 (AU6), Navi1117_75 (AU6), Phaila_74 (AU6), PoeMe_73 (AU6), Renaldo_80 (AU6), Stardrop_76 (AU6), Tenney120_73 (AU6), TrixiePhattel_73 (AU6), Uzumaki_69 (AU6), Zeina_75 (AU6),

Start 29:
• Found in 27 of 165 (16.4%) of genes in pham
• Manual Annotations of this start: 19 of 133
• Called 92.6% of time when present
• Phage (with cluster) where this start called: Artorias_70 (DJ), Avazak_71 (DJ), Bugg_73 (DJ), Captrips_69 (DJ), ChickyNuggy_73 (DJ), Conley_69 (DJ), Dancer_70 (DJ), EhyElimayoE_11 (BM), Fazel_71 (DJ), Football_72 (DJ), FortCran_70 (DJ), Hortihabitatio_71 (DJ), JulesRay_70 (DJ), JustBecause_9 (BM), Kela_9 (BM), Kradal_11 (BM), Mysticmoon_71 (DJ), NoPickles_69 (DJ), Petito_72 (DJ), Pherobrine_70 (DJ), Quantum_11 (BM), Sarkar_12 (BM), Satis_11 (BM), Tairn4Wing_72 (DJ), Talon44_72 (DJ),

Start 30:
• Found in 2 of 165 (1.2%) of genes in pham
• Manual Annotations of this start: 2 of 133
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cantare_122 (singleton), GiJojo_106 (BS),

Start 31:
• Found in 21 of 165 (12.7%) of genes in pham
• Manual Annotations of this start: 17 of 133
• Called 95.2% of time when present
• Phage (with cluster) where this start called: Belfort_69 (BK1), Comrade_67 (BK1), DeluluLabubu_66 (BK1), Emma1919_69 (BK1), Forrest_69 (BK1), Francob_66 (BK1), GalaxyEater_10 (AV), Gilson_68 (BK1), Jada_67 (BK1), Jasmine_8 (AV), Karp_65 (BK1), Kenrey_69 (BK1), Maupel_67 (BK1), MeganTheeKilla_66 (BK1), Moab_67 (BK1), Patelgo_67 (BK1), Phredrick_67 (BK1), Secretariat_68 (DJ), Stigma_66 (BK1), Westy_68 (BK1),

Start 35:
• Found in 5 of 165 (3.0%) of genes in pham
• Manual Annotations of this start: 2 of 133
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Frankenweenie_15 (BM), Nirvana_15 (BM),

Start 36:
• Found in 20 of 165 (12.1%) of genes in pham
• Manual Annotations of this start: 1 of 133
• Called 5.0% of time when present
• Phage (with cluster) where this start called: SparkleGoddess_67 (BK1),

Summary by clusters:

There are 13 clusters represented in this pham: DO, singleton, AP1, DJ, BM, AU6, AM, DZ, BK1, AV, BS, C1, DC1,

Info for manual annotations of cluster AM:
•Start number 24 was manually annotated 20 times for cluster AM.

Info for manual annotations of cluster AP1:

•Start number 21 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AU6:
•Start number 27 was manually annotated 11 times for cluster AU6.

Info for manual annotations of cluster AV:
•Start number 31 was manually annotated 1 time for cluster AV.

Info for manual annotations of cluster BK1:
•Start number 31 was manually annotated 15 times for cluster BK1.
•Start number 36 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster BM:
•Start number 29 was manually annotated 6 times for cluster BM.
•Start number 35 was manually annotated 2 times for cluster BM.

Info for manual annotations of cluster BS:
•Start number 30 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster C1:
•Start number 23 was manually annotated 3 times for cluster C1.
•Start number 26 was manually annotated 23 times for cluster C1.

Info for manual annotations of cluster DC1:
•Start number 26 was manually annotated 26 times for cluster DC1.

Info for manual annotations of cluster DJ:
•Start number 25 was manually annotated 1 time for cluster DJ.
•Start number 29 was manually annotated 13 times for cluster DJ.
•Start number 31 was manually annotated 1 time for cluster DJ.

Info for manual annotations of cluster DO:
•Start number 26 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster DZ:
•Start number 22 was manually annotated 4 times for cluster DZ.

Gene Information:
Gene: Aleemily_54 Start: 39648, Stop: 39905, Start Num: 22
Candidate Starts for Aleemily_54:
(5, 39462), (9, 39543), (Start: 22 @39648 has 4 MA's), (46, 39753), (63, 39852),

Gene: Altjira_74 Start: 45409, Stop: 45696, Start Num: 27
Candidate Starts for Altjira_74:
(Start: 27 @45409 has 11 MA's), (50, 45517), (53, 45538), (69, 45640),

Gene: Arcadia_90 Start: 52556, Stop: 52813, Start Num: 24
Candidate Starts for Arcadia_90:
(Start: 24 @52556 has 20 MA's), (39, 52601),

Gene: Argan_69 Start: 44132, Stop: 44419, Start Num: 27
Candidate Starts for Argan_69:
(Start: 27 @44132 has 11 MA's), (50, 44240), (53, 44261), (69, 44363),

Gene: Arri_73 Start: 50476, Stop: 50718, Start Num: 26
Candidate Starts for Arri_73:
(13, 50419), (Start: 26 @50476 has 50 MA's), (42, 50536), (47, 50581), (50, 50593), (52, 50611), (58, 50650),

Gene: Artorias_70 Start: 48379, Stop: 48633, Start Num: 29
Candidate Starts for Artorias_70:
(Start: 29 @48379 has 19 MA's), (39, 48415), (43, 48445), (64, 48571), (69, 48604),

Gene: Avazak_71 Start: 48706, Stop: 48960, Start Num: 29
Candidate Starts for Avazak_71:
(Start: 29 @48706 has 19 MA's), (39, 48742), (43, 48772), (64, 48898), (69, 48931),

Gene: Bakery_77 Start: 52745, Stop: 52987, Start Num: 26
Candidate Starts for Bakery_77:
(8, 52613), (20, 52733), (Start: 26 @52745 has 50 MA's), (42, 52805), (47, 52850), (50, 52862), (58, 52919),

Gene: Barb_74 Start: 50409, Stop: 50657, Start Num: 26
Candidate Starts for Barb_74:
(1, 49578), (7, 50259), (18, 50394), (Start: 26 @50409 has 50 MA's), (42, 50469), (47, 50514), (50, 50526), (58, 50583),

Gene: BarbieDoll_76 Start: 45845, Stop: 46132, Start Num: 27
Candidate Starts for BarbieDoll_76:
(Start: 27 @45845 has 11 MA's), (50, 45953), (69, 46076),

Gene: Barbonzobean_79 Start: 46241, Stop: 46528, Start Num: 27
Candidate Starts for Barbonzobean_79:
(Start: 27 @46241 has 11 MA's), (45, 46328), (49, 46346), (50, 46349), (69, 46472),

Gene: Belfort_69 Start: 55718, Stop: 55945, Start Num: 31
Candidate Starts for Belfort_69:
(Start: 31 @55718 has 17 MA's), (Start: 36 @55736 has 1 MA's), (50, 55820), (60, 55889), (61, 55895),

Gene: BenitoAntonio_90 Start: 52281, Stop: 52538, Start Num: 24
Candidate Starts for BenitoAntonio_90:
(Start: 24 @52281 has 20 MA's),

Gene: Benllo_91 Start: 53121, Stop: 53378, Start Num: 24
Candidate Starts for Benllo_91:
(Start: 24 @53121 has 20 MA's),

Gene: Bigswole_249 Start: 137037, Stop: 137270, Start Num: 26
Candidate Starts for Bigswole_249:
(14, 136995), (Start: 26 @137037 has 50 MA's), (38, 137073), (39, 137079), (56, 137199), (60, 137217), (63, 137232),

Gene: Biscute_72 Start: 45497, Stop: 45784, Start Num: 27

Candidate Starts for Biscute_72:
(Start: 27 @45497 has 11 MA's), (50, 45605), (69, 45728),

Gene: Blubba_231 Start: 137996, Stop: 138229, Start Num: 26
Candidate Starts for Blubba_231:
(14, 137954), (Start: 26 @137996 has 50 MA's), (38, 138032), (39, 138038), (56, 138158), (60, 138176),

Gene: Bowling_94 Start: 53654, Stop: 53911, Start Num: 24
Candidate Starts for Bowling_94:
(Start: 24 @53654 has 20 MA's),

Gene: Breeniome_244 Start: 134026, Stop: 134259, Start Num: 26
Candidate Starts for Breeniome_244:
(14, 133984), (Start: 26 @134026 has 50 MA's), (38, 134062), (39, 134068), (56, 134188), (60, 134206), (63, 134221),

Gene: Bugg_73 Start: 48424, Stop: 48678, Start Num: 29
Candidate Starts for Bugg_73:
(Start: 29 @48424 has 19 MA's), (39, 48460), (43, 48490), (64, 48616), (69, 48649),

Gene: Cafasso_55 Start: 40222, Stop: 40476, Start Num: 22
Candidate Starts for Cafasso_55:
(5, 40036), (9, 40117), (Start: 22 @40222 has 4 MA's), (46, 40327), (63, 40426),

Gene: Cane17_233 Start: 138405, Stop: 138638, Start Num: 26
Candidate Starts for Cane17_233:
(14, 138363), (Start: 26 @138405 has 50 MA's), (38, 138441), (39, 138447), (56, 138567), (60, 138585),

Gene: Cantare_122 Start: 85748, Stop: 86017, Start Num: 30
Candidate Starts for Cantare_122:
(Start: 30 @85748 has 2 MA's), (Start: 36 @85766 has 1 MA's), (48, 85841),

Gene: Captrips_69 Start: 47854, Stop: 48108, Start Num: 29
Candidate Starts for Captrips_69:
(Start: 29 @47854 has 19 MA's), (39, 47890), (43, 47920), (64, 48046), (69, 48079),

Gene: Cheesy_93 Start: 53026, Stop: 53283, Start Num: 24
Candidate Starts for Cheesy_93:
(Start: 24 @53026 has 20 MA's),

Gene: CherryCola_73 Start: 50799, Stop: 51047, Start Num: 26
Candidate Starts for CherryCola_73:
(8, 50667), (20, 50787), (Start: 26 @50799 has 50 MA's), (42, 50859), (47, 50904), (50, 50916), (58, 50973),

Gene: ChickyNuggy_73 Start: 48447, Stop: 48701, Start Num: 29
Candidate Starts for ChickyNuggy_73:
(Start: 29 @48447 has 19 MA's), (32, 48453), (39, 48483), (43, 48513), (64, 48639), (69, 48672),

Gene: Circum_93 Start: 53360, Stop: 53617, Start Num: 24
Candidate Starts for Circum_93:

(Start: 24 @53360 has 20 MA's), (53, 53495),

Gene: ClamChowder_74 Start: 50409, Stop: 50657, Start Num: 26
Candidate Starts for ClamChowder_74:
(1, 49578), (7, 50259), (18, 50394), (Start: 26 @50409 has 50 MA's), (42, 50469), (47, 50514), (50, 50526), (58, 50583),

Gene: Colt_234 Start: 137636, Stop: 137869, Start Num: 26
Candidate Starts for Colt_234:
(14, 137594), (Start: 26 @137636 has 50 MA's), (38, 137672), (39, 137678), (56, 137798), (60, 137816),

Gene: Comrade_67 Start: 55334, Stop: 55561, Start Num: 31
Candidate Starts for Comrade_67:
(Start: 31 @55334 has 17 MA's), (Start: 36 @55352 has 1 MA's), (50, 55436), (60, 55505), (61, 55511),

Gene: Conley_69 Start: 48997, Stop: 49233, Start Num: 29
Candidate Starts for Conley_69:
(Start: 29 @48997 has 19 MA's), (39, 49033), (43, 49063),

Gene: Correa_88 Start: 51905, Stop: 52162, Start Num: 24
Candidate Starts for Correa_88:
(Start: 24 @51905 has 20 MA's), (39, 51950),

Gene: CoveyB_73 Start: 50292, Stop: 50540, Start Num: 26
Candidate Starts for CoveyB_73:
(13, 50235), (Start: 26 @50292 has 50 MA's), (42, 50352), (47, 50397), (50, 50409), (52, 50427), (58, 50466),

Gene: Dancer_70 Start: 48116, Stop: 48370, Start Num: 29
Candidate Starts for Dancer_70:
(Start: 29 @48116 has 19 MA's), (39, 48152), (43, 48182), (64, 48308), (69, 48341),

Gene: Dandelion_250 Start: 138088, Stop: 138321, Start Num: 26
Candidate Starts for Dandelion_250:
(14, 138046), (Start: 26 @138088 has 50 MA's), (38, 138124), (39, 138130), (56, 138250), (60, 138268), (63, 138283),

Gene: Danyall_73 Start: 50390, Stop: 50638, Start Num: 26
Candidate Starts for Danyall_73:
(7, 50240), (18, 50375), (Start: 26 @50390 has 50 MA's), (42, 50450), (47, 50495), (50, 50507), (58, 50564),

Gene: DeejaClivia_231 Start: 132995, Stop: 133228, Start Num: 23
Candidate Starts for DeejaClivia_231:
(14, 132956), (Start: 23 @132995 has 3 MA's), (38, 133031), (39, 133037), (56, 133157), (60, 133175),

Gene: DeluluLabubu_66 Start: 53372, Stop: 53599, Start Num: 31
Candidate Starts for DeluluLabubu_66:
(Start: 31 @53372 has 17 MA's), (Start: 36 @53390 has 1 MA's), (39, 53405), (50, 53474),

Gene: DirtMonster_233 Start: 134501, Stop: 134734, Start Num: 23
Candidate Starts for DirtMonster_233:

(14, 134462), (Start: 23 @134501 has 3 MA's), (38, 134537), (39, 134543), (56, 134663), (60, 134681),

Gene: Dynamite_92 Start: 52622, Stop: 52879, Start Num: 24
Candidate Starts for Dynamite_92:
(Start: 24 @52622 has 20 MA's),

Gene: E3_gp177 Start: 119674, Stop: 119916, Start Num: 26
Candidate Starts for E3_gp177:
(10, 119563), (13, 119596), (Start: 26 @119674 has 50 MA's), (42, 119734), (48, 119782), (65, 119881),

Gene: EhyElimayoE_11 Start: 6341, Stop: 6610, Start Num: 29
Candidate Starts for EhyElimayoE_11:
(3, 5894), (4, 6011), (6, 6146), (12, 6257), (16, 6299), (Start: 29 @6341 has 19 MA's), (60, 6515), (62, 6524), (69, 6566),

Gene: Elsa_90 Start: 52556, Stop: 52813, Start Num: 24
Candidate Starts for Elsa_90:
(Start: 24 @52556 has 20 MA's), (39, 52601),

Gene: Emma1919_69 Start: 54046, Stop: 54273, Start Num: 31
Candidate Starts for Emma1919_69:
(Start: 31 @54046 has 17 MA's), (Start: 36 @54064 has 1 MA's), (39, 54079), (50, 54148),

Gene: Evamon_72 Start: 50173, Stop: 50421, Start Num: 26
Candidate Starts for Evamon_72:
(7, 50023), (18, 50158), (Start: 26 @50173 has 50 MA's), (42, 50233), (47, 50278), (50, 50290), (52, 50308), (58, 50347),

Gene: Fazel_71 Start: 48619, Stop: 48870, Start Num: 29
Candidate Starts for Fazel_71:
(Start: 29 @48619 has 19 MA's), (39, 48655), (41, 48670), (53, 48745), (61, 48799), (67, 48838),

Gene: Football_72 Start: 48005, Stop: 48259, Start Num: 29
Candidate Starts for Football_72:
(Start: 29 @48005 has 19 MA's), (39, 48041), (43, 48071), (64, 48197), (69, 48230),

Gene: Forrest_69 Start: 54752, Stop: 54979, Start Num: 31
Candidate Starts for Forrest_69:
(Start: 31 @54752 has 17 MA's), (Start: 36 @54770 has 1 MA's), (39, 54785), (50, 54854),

Gene: FortCran_70 Start: 48379, Stop: 48633, Start Num: 29
Candidate Starts for FortCran_70:
(Start: 29 @48379 has 19 MA's), (39, 48415), (43, 48445), (64, 48571), (69, 48604),

Gene: Francob_66 Start: 54109, Stop: 54336, Start Num: 31
Candidate Starts for Francob_66:
(Start: 31 @54109 has 17 MA's), (Start: 36 @54127 has 1 MA's), (39, 54142), (50, 54211), (61, 54286),

Gene: Frankenweenie_15 Start: 7328, Stop: 7591, Start Num: 35
Candidate Starts for Frankenweenie_15:
(Start: 29 @7310 has 19 MA's), (Start: 35 @7328 has 2 MA's), (38, 7340), (45, 7394),

Gene: FrayBell_247 Start: 134131, Stop: 134364, Start Num: 26
Candidate Starts for FrayBell_247:
(14, 134089), (Start: 26 @134131 has 50 MA's), (38, 134167), (39, 134173), (56, 134293), (60, 134311), (63, 134326),

Gene: Fugax_75 Start: 50401, Stop: 50649, Start Num: 26
Candidate Starts for Fugax_75:
(1, 49570), (7, 50251), (18, 50386), (Start: 26 @50401 has 50 MA's), (42, 50461), (47, 50506), (50, 50518), (58, 50575),

Gene: GalaxyEater_10 Start: 4962, Stop: 5189, Start Num: 31
Candidate Starts for GalaxyEater_10:
(Start: 31 @4962 has 17 MA's),

Gene: GantcherGoblin_70 Start: 44191, Stop: 44478, Start Num: 27
Candidate Starts for GantcherGoblin_70:
(Start: 27 @44191 has 11 MA's), (50, 44299), (53, 44320), (66, 44413), (69, 44422),

Gene: Gezellig_69 Start: 50045, Stop: 50293, Start Num: 26
Candidate Starts for Gezellig_69:
(8, 49913), (20, 50033), (Start: 26 @50045 has 50 MA's), (42, 50105), (47, 50150), (50, 50162), (58, 50219),

Gene: GiJojo_106 Start: 62792, Stop: 63085, Start Num: 30
Candidate Starts for GiJojo_106:
(Start: 30 @62792 has 2 MA's), (51, 62909), (58, 62957), (60, 62969), (71, 63035),

Gene: Gilson_68 Start: 54008, Stop: 54235, Start Num: 31
Candidate Starts for Gilson_68:
(Start: 31 @54008 has 17 MA's), (Start: 36 @54026 has 1 MA's), (39, 54041), (50, 54110),

Gene: GoCrazy_88 Start: 51547, Stop: 51804, Start Num: 24
Candidate Starts for GoCrazy_88:
(Start: 24 @51547 has 20 MA's),

Gene: Grungle_226 Start: 132405, Stop: 132638, Start Num: 26
Candidate Starts for Grungle_226:
(14, 132363), (Start: 26 @132405 has 50 MA's), (38, 132441), (39, 132447), (56, 132567), (60, 132585), (63, 132600),

Gene: Halldule_236 Start: 133587, Stop: 133820, Start Num: 26
Candidate Starts for Halldule_236:
(14, 133545), (Start: 26 @133587 has 50 MA's), (38, 133623), (39, 133629), (56, 133749), (60, 133767), (63, 133782),

Gene: Halo3_70 Start: 50630, Stop: 50878, Start Num: 26
Candidate Starts for Halo3_70:
(8, 50498), (20, 50618), (Start: 26 @50630 has 50 MA's), (42, 50690), (47, 50735), (50, 50747), (52, 50765), (58, 50804),

Gene: Hankly_93 Start: 52732, Stop: 52989, Start Num: 24
Candidate Starts for Hankly_93:
(Start: 24 @52732 has 20 MA's),

Gene: Heisenberger_91 Start: 52491, Stop: 52748, Start Num: 24
Candidate Starts for Heisenberger_91:
(Start: 24 @52491 has 20 MA's),

Gene: Hortihabitatio_71 Start: 48995, Stop: 49246, Start Num: 29
Candidate Starts for Hortihabitatio_71:
(Start: 27 @48992 has 11 MA's), (Start: 29 @48995 has 19 MA's), (39, 49031), (41, 49046), (53, 49121), (61, 49175), (67, 49214),

Gene: I3_254 Start: 136279, Stop: 136512, Start Num: 26
Candidate Starts for I3_254:
(14, 136237), (Start: 26 @136279 has 50 MA's), (Start: 36 @136306 has 1 MA's), (37, 136312), (46, 136375), (60, 136459), (63, 136474),

Gene: InterFolia_246 Start: 135936, Stop: 136169, Start Num: 26
Candidate Starts for InterFolia_246:
(14, 135894), (Start: 26 @135936 has 50 MA's), (38, 135972), (39, 135978), (56, 136098), (60, 136116), (63, 136131),

Gene: JEGGS_91 Start: 52570, Stop: 52827, Start Num: 24
Candidate Starts for JEGGS_91:
(Start: 24 @52570 has 20 MA's),

Gene: Jada_67 Start: 53934, Stop: 54161, Start Num: 31
Candidate Starts for Jada_67:
(Start: 31 @53934 has 17 MA's), (Start: 36 @53952 has 1 MA's), (39, 53967), (50, 54036),

Gene: Jasmine_8 Start: 3920, Stop: 4156, Start Num: 31
Candidate Starts for Jasmine_8:
(Start: 31 @3920 has 17 MA's), (61, 4097),

Gene: JayJay_244 Start: 134700, Stop: 134933, Start Num: 23
Candidate Starts for JayJay_244:
(14, 134661), (Start: 23 @134700 has 3 MA's), (38, 134736), (39, 134742), (56, 134862), (60, 134880),

Gene: JulesRay_70 Start: 48372, Stop: 48626, Start Num: 29
Candidate Starts for JulesRay_70:
(Start: 29 @48372 has 19 MA's), (32, 48378), (39, 48408), (43, 48438), (64, 48564), (69, 48597),

Gene: JustBecause_9 Start: 5308, Stop: 5589, Start Num: 29
Candidate Starts for JustBecause_9:
(Start: 29 @5308 has 19 MA's), (Start: 35 @5326 has 2 MA's), (45, 5392), (49, 5410), (60, 5482),

Gene: Kardesai_91 Start: 52160, Stop: 52417, Start Num: 24
Candidate Starts for Kardesai_91:
(Start: 24 @52160 has 20 MA's),

Gene: Karp_65 Start: 54933, Stop: 55160, Start Num: 31
Candidate Starts for Karp_65:
(Start: 31 @54933 has 17 MA's), (Start: 36 @54951 has 1 MA's), (50, 55035), (60, 55104), (61, 55110),

Gene: KeaneyLin_90 Start: 52585, Stop: 52842, Start Num: 24

Candidate Starts for KeaneyLin_90:
(Start: 24 @52585 has 20 MA's),

Gene: Kela_9 Start: 5299, Stop: 5580, Start Num: 29
Candidate Starts for Kela_9:
(Start: 29 @5299 has 19 MA's), (Start: 35 @5317 has 2 MA's), (45, 5383), (49, 5401), (60, 5473),

Gene: Kenrey_69 Start: 54190, Stop: 54417, Start Num: 31
Candidate Starts for Kenrey_69:
(Start: 31 @54190 has 17 MA's), (Start: 36 @54208 has 1 MA's), (39, 54223), (50, 54292), (61, 54367), (64, 54379),

Gene: KevinMinion_70 Start: 45083, Stop: 45370, Start Num: 27
Candidate Starts for KevinMinion_70:
(Start: 27 @45083 has 11 MA's), (50, 45191), (53, 45212), (69, 45314),

Gene: KimmyK_72 Start: 50492, Stop: 50740, Start Num: 26
Candidate Starts for KimmyK_72:
(8, 50360), (20, 50480), (Start: 26 @50492 has 50 MA's), (42, 50552), (47, 50597), (50, 50609), (58, 50666),

Gene: Kinny_75 Start: 46325, Stop: 46612, Start Num: 27
Candidate Starts for Kinny_75:
(Start: 27 @46325 has 11 MA's), (50, 46433), (69, 46556),

Gene: Koguma_243 Start: 134564, Stop: 134797, Start Num: 26
Candidate Starts for Koguma_243:
(14, 134522), (Start: 26 @134564 has 50 MA's), (38, 134600), (39, 134606), (56, 134726), (60, 134744), (63, 134759),

Gene: Kradal_11 Start: 6341, Stop: 6610, Start Num: 29
Candidate Starts for Kradal_11:
(3, 5894), (4, 6011), (6, 6146), (12, 6257), (16, 6299), (Start: 29 @6341 has 19 MA's), (60, 6515), (62, 6524), (69, 6566),

Gene: Leathea_72 Start: 44099, Stop: 44386, Start Num: 27
Candidate Starts for Leathea_72:
(Start: 27 @44099 has 11 MA's), (55, 44252), (60, 44276), (70, 44333),

Gene: Lethe_242 Start: 136348, Stop: 136581, Start Num: 26
Candidate Starts for Lethe_242:
(14, 136306), (Start: 26 @136348 has 50 MA's), (38, 136384), (39, 136390), (56, 136510), (60, 136528), (63, 136543),

Gene: Lewando_76 Start: 46062, Stop: 46349, Start Num: 27
Candidate Starts for Lewando_76:
(Start: 27 @46062 has 11 MA's), (49, 46167), (50, 46170), (69, 46293),

Gene: LinStu_241 Start: 133863, Stop: 134096, Start Num: 26
Candidate Starts for LinStu_241:
(14, 133821), (Start: 26 @133863 has 50 MA's), (38, 133899), (39, 133905), (56, 134025), (60, 134043), (63, 134058),

Gene: LolaVinca_240 Start: 135366, Stop: 135599, Start Num: 26
Candidate Starts for LolaVinca_240:
(14, 135324), (Start: 26 @135366 has 50 MA's), (38, 135402), (39, 135408), (56, 135528), (60, 135546), (63, 135561),

Gene: LordLeafolot_245 Start: 134979, Stop: 135212, Start Num: 26
Candidate Starts for LordLeafolot_245:
(14, 134937), (Start: 26 @134979 has 50 MA's), (38, 135015), (39, 135021), (56, 135141), (60, 135159), (63, 135174),

Gene: Lunareta_241 Start: 135720, Stop: 135953, Start Num: 23
Candidate Starts for Lunareta_241:
(14, 135681), (Start: 23 @135720 has 3 MA's), (38, 135756), (39, 135762), (56, 135882), (60, 135900),

Gene: Mangeria_244 Start: 135923, Stop: 136156, Start Num: 26
Candidate Starts for Mangeria_244:
(14, 135881), (15, 135884), (Start: 26 @135923 has 50 MA's), (38, 135959), (39, 135965), (56, 136085), (60, 136103), (63, 136118),

Gene: Mardi_73 Start: 44835, Stop: 45122, Start Num: 27
Candidate Starts for Mardi_73:
(Start: 27 @44835 has 11 MA's), (50, 44943), (53, 44964), (59, 45009), (69, 45066),

Gene: Maturis_238 Start: 134686, Stop: 134919, Start Num: 23
Candidate Starts for Maturis_238:
(14, 134647), (Start: 23 @134686 has 3 MA's), (38, 134722), (39, 134728), (56, 134848), (60, 134866),

Gene: Maupel_67 Start: 54008, Stop: 54235, Start Num: 31
Candidate Starts for Maupel_67:
(Start: 31 @54008 has 17 MA's), (Start: 36 @54026 has 1 MA's), (39, 54041), (50, 54110),

Gene: MeganTheeKilla_66 Start: 53369, Stop: 53596, Start Num: 31
Candidate Starts for MeganTheeKilla_66:
(Start: 31 @53369 has 17 MA's), (Start: 36 @53387 has 1 MA's), (39, 53402), (50, 53471), (61, 53546),

Gene: Mikro_238 Start: 136879, Stop: 137112, Start Num: 26
Candidate Starts for Mikro_238:
(14, 136837), (Start: 26 @136879 has 50 MA's), (38, 136915), (39, 136921), (56, 137041), (60, 137059), (63, 137074),

Gene: Moab_67 Start: 55209, Stop: 55436, Start Num: 31
Candidate Starts for Moab_67:
(Start: 31 @55209 has 17 MA's), (Start: 36 @55227 has 1 MA's),

Gene: ModicumRichard_55 Start: 40221, Stop: 40475, Start Num: 22
Candidate Starts for ModicumRichard_55:
(5, 40035), (9, 40116), (Start: 22 @40221 has 4 MA's), (46, 40326), (63, 40425),

Gene: Montpel_241 Start: 135718, Stop: 135951, Start Num: 23
Candidate Starts for Montpel_241:
(14, 135679), (Start: 23 @135718 has 3 MA's), (38, 135754), (39, 135760), (56, 135880), (60, 135898),

Gene: Mooshroom_93 Start: 52160, Stop: 52417, Start Num: 24

Candidate Starts for Mooshroom_93:
(Start: 24 @52160 has 20 MA's),

Gene: Morgana_55 Start: 40172, Stop: 40429, Start Num: 22
Candidate Starts for Morgana_55:
(9, 40070), (Start: 22 @40172 has 4 MA's), (46, 40277), (63, 40376),

Gene: Mudcat_87 Start: 53725, Stop: 53982, Start Num: 24
Candidate Starts for Mudcat_87:
(Start: 24 @53725 has 20 MA's),

Gene: Muglass_74 Start: 45401, Stop: 45688, Start Num: 27
Candidate Starts for Muglass_74:
(Start: 27 @45401 has 11 MA's), (50, 45509), (69, 45632),

Gene: Mutzi_71 Start: 51265, Stop: 51513, Start Num: 26
Candidate Starts for Mutzi_71:
(7, 51115), (18, 51250), (Start: 26 @51265 has 50 MA's), (42, 51325), (47, 51370), (50, 51382), (52, 51400), (58, 51439),

Gene: Mysticmoon_71 Start: 49282, Stop: 49524, Start Num: 29
Candidate Starts for Mysticmoon_71:
(Start: 29 @49282 has 19 MA's), (32, 49288), (39, 49318), (41, 49333), (53, 49408), (61, 49462),

Gene: NapoleonB_93 Start: 52622, Stop: 52879, Start Num: 24
Candidate Starts for NapoleonB_93:
(Start: 24 @52622 has 20 MA's),

Gene: Nappy_243 Start: 136335, Stop: 136568, Start Num: 26
Candidate Starts for Nappy_243:
(14, 136293), (Start: 26 @136335 has 50 MA's), (38, 136371), (39, 136377), (56, 136497), (60, 136515), (63, 136530),

Gene: Nason_90 Start: 52556, Stop: 52813, Start Num: 24
Candidate Starts for Nason_90:
(Start: 24 @52556 has 20 MA's), (39, 52601),

Gene: Navi1117_75 Start: 45271, Stop: 45558, Start Num: 27
Candidate Starts for Navi1117_75:
(Start: 27 @45271 has 11 MA's), (50, 45379), (53, 45400), (69, 45502),

Gene: Nirvana_15 Start: 7592, Stop: 7855, Start Num: 35
Candidate Starts for Nirvana_15:
(Start: 29 @7574 has 19 MA's), (Start: 35 @7592 has 2 MA's), (38, 7604), (60, 7748), (61, 7754),

Gene: NoPickles_69 Start: 47540, Stop: 47794, Start Num: 29
Candidate Starts for NoPickles_69:
(Start: 29 @47540 has 19 MA's), (39, 47576), (43, 47606), (64, 47732), (69, 47765),

Gene: Nubi_72 Start: 50104, Stop: 50346, Start Num: 26
Candidate Starts for Nubi_72:
(13, 50047), (Start: 26 @50104 has 50 MA's), (42, 50164), (47, 50209), (50, 50221), (52, 50239), (58, 50278),

Gene: NuevoMundo_246 Start: 136442, Stop: 136675, Start Num: 26
Candidate Starts for NuevoMundo_246:
(14, 136400), (Start: 26 @136442 has 50 MA's), (38, 136478), (39, 136484), (56, 136604), (60, 136622), (63, 136637),

Gene: ObLaDi_55 Start: 40212, Stop: 40466, Start Num: 22
Candidate Starts for ObLaDi_55:
(9, 40107), (Start: 22 @40212 has 4 MA's), (46, 40317), (63, 40416),

Gene: Patelgo_67 Start: 55396, Stop: 55623, Start Num: 31
Candidate Starts for Patelgo_67:
(Start: 31 @55396 has 17 MA's), (Start: 36 @55414 has 1 MA's),

Gene: Patter_246 Start: 135186, Stop: 135419, Start Num: 26
Candidate Starts for Patter_246:
(14, 135144), (Start: 26 @135186 has 50 MA's), (38, 135222), (39, 135228), (56, 135348), (60, 135366), (63, 135381),

Gene: Petito_72 Start: 49631, Stop: 49885, Start Num: 29
Candidate Starts for Petito_72:
(Start: 29 @49631 has 19 MA's), (39, 49667), (43, 49697), (64, 49823), (69, 49856),

Gene: Phaila_74 Start: 44315, Stop: 44602, Start Num: 27
Candidate Starts for Phaila_74:
(Start: 27 @44315 has 11 MA's), (50, 44423), (53, 44444), (59, 44489), (69, 44546),

Gene: PharkleMinkus_246 Start: 134130, Stop: 134363, Start Num: 26
Candidate Starts for PharkleMinkus_246:
(14, 134088), (Start: 26 @134130 has 50 MA's), (38, 134166), (39, 134172), (56, 134292), (60, 134310), (63, 134325),

Gene: Pherobrine_70 Start: 49341, Stop: 49583, Start Num: 29
Candidate Starts for Pherobrine_70:
(Start: 29 @49341 has 19 MA's), (39, 49377), (41, 49392), (53, 49467), (61, 49521),

Gene: Phlop_70 Start: 50135, Stop: 50383, Start Num: 26
Candidate Starts for Phlop_70:
(8, 50003), (20, 50123), (Start: 26 @50135 has 50 MA's), (42, 50195), (47, 50240), (48, 50243), (50, 50252), (58, 50309),

Gene: Phredrick_67 Start: 53261, Stop: 53488, Start Num: 31
Candidate Starts for Phredrick_67:
(Start: 31 @53261 has 17 MA's), (Start: 36 @53279 has 1 MA's), (39, 53294), (50, 53363), (61, 53438), (64, 53450),

Gene: PinkCoffee_74 Start: 50431, Stop: 50679, Start Num: 26
Candidate Starts for PinkCoffee_74:
(7, 50281), (18, 50416), (Start: 26 @50431 has 50 MA's), (42, 50491), (47, 50536), (50, 50548), (58, 50605),

Gene: PoeMe_73 Start: 44803, Stop: 45090, Start Num: 27
Candidate Starts for PoeMe_73:

(Start: 27 @44803 has 11 MA's), (50, 44911), (53, 44932), (55, 44956), (66, 45025), (69, 45034),

Gene: Portcullis_73 Start: 50182, Stop: 50424, Start Num: 26
Candidate Starts for Portcullis_73:
(13, 50125), (Start: 26 @50182 has 50 MA's), (42, 50242), (47, 50287), (50, 50299), (52, 50317), (58, 50356),

Gene: PullumCavea_71 Start: 50312, Stop: 50560, Start Num: 26
Candidate Starts for PullumCavea_71:
(8, 50180), (20, 50300), (Start: 26 @50312 has 50 MA's), (42, 50372), (47, 50417), (48, 50420), (50, 50429), (58, 50486),

Gene: Quantum_11 Start: 6341, Stop: 6610, Start Num: 29
Candidate Starts for Quantum_11:
(3, 5894), (4, 6011), (6, 6146), (12, 6257), (16, 6299), (Start: 29 @6341 has 19 MA's), (60, 6515), (62, 6524), (69, 6566),

Gene: Renaldo_80 Start: 46283, Stop: 46570, Start Num: 27
Candidate Starts for Renaldo_80:
(Start: 27 @46283 has 11 MA's), (49, 46388), (50, 46391),

Gene: Rizwana_13 Start: 5984, Stop: 6241, Start Num: 21
Candidate Starts for Rizwana_13:
(17, 5963), (Start: 21 @5984 has 3 MA's), (28, 5999), (50, 6110), (60, 6179),

Gene: RogerDodger_76 Start: 51380, Stop: 51628, Start Num: 26
Candidate Starts for RogerDodger_76:
(Start: 26 @51380 has 50 MA's), (42, 51440), (47, 51485), (50, 51497), (52, 51515), (58, 51554), (63, 51581),

Gene: Salvador_72 Start: 50171, Stop: 50419, Start Num: 26
Candidate Starts for Salvador_72:
(7, 50021), (18, 50156), (Start: 26 @50171 has 50 MA's), (42, 50231), (47, 50276), (50, 50288), (52, 50306), (58, 50345),

Gene: Sarkar_12 Start: 6341, Stop: 6610, Start Num: 29
Candidate Starts for Sarkar_12:
(3, 5894), (4, 6011), (6, 6146), (12, 6257), (16, 6299), (Start: 29 @6341 has 19 MA's), (60, 6515), (62, 6524), (69, 6566),

Gene: Satis_11 Start: 6337, Stop: 6606, Start Num: 29
Candidate Starts for Satis_11:
(2, 5710), (4, 6007), (6, 6142), (12, 6253), (16, 6295), (Start: 29 @6337 has 19 MA's), (38, 6367), (60, 6511), (62, 6520), (69, 6562),

Gene: Schwartz33_69 Start: 48060, Stop: 48317, Start Num: 25
Candidate Starts for Schwartz33_69:
(Start: 25 @48060 has 1 MA's), (39, 48102), (41, 48117), (57, 48225), (59, 48237), (67, 48285),

Gene: ScottMcG_236 Start: 134192, Stop: 134425, Start Num: 26
Candidate Starts for ScottMcG_236:
(14, 134150), (Start: 26 @134192 has 50 MA's), (38, 134228), (39, 134234), (56, 134354), (60, 134372), (63, 134387),

Gene: Sebata_244 Start: 135891, Stop: 136124, Start Num: 23
Candidate Starts for Sebata_244:
(14, 135852), (Start: 23 @135891 has 3 MA's), (38, 135927), (39, 135933), (56, 136053), (60, 136071),

Gene: Secretariat_68 Start: 47409, Stop: 47657, Start Num: 31
Candidate Starts for Secretariat_68:
(19, 47385), (Start: 31 @47409 has 17 MA's), (39, 47442), (41, 47457), (59, 47577), (62, 47589), (67, 47625),

Gene: Skog_75 Start: 30969, Stop: 31244, Start Num: 26
Candidate Starts for Skog_75:
(11, 30897), (Start: 26 @30969 has 50 MA's), (37, 31002), (40, 31023), (42, 31029), (47, 31074), (48, 31077), (50, 31086), (54, 31113), (58, 31143), (68, 31206),

Gene: SmokingBunny_73 Start: 51218, Stop: 51466, Start Num: 26
Candidate Starts for SmokingBunny_73:
(Start: 26 @51218 has 50 MA's), (37, 51251), (42, 51278), (47, 51323), (50, 51335), (52, 51353), (58, 51392), (63, 51419),

Gene: SparkleGoddess_67 Start: 55353, Stop: 55562, Start Num: 36
Candidate Starts for SparkleGoddess_67:
(Start: 31 @55335 has 17 MA's), (Start: 36 @55353 has 1 MA's), (50, 55437), (60, 55506), (61, 55512),

Gene: Spec_238 Start: 135155, Stop: 135388, Start Num: 26
Candidate Starts for Spec_238:
(14, 135113), (Start: 26 @135155 has 50 MA's), (38, 135191), (39, 135197), (56, 135317), (60, 135335), (63, 135350),

Gene: Stardrop_76 Start: 44905, Stop: 45192, Start Num: 27
Candidate Starts for Stardrop_76:
(Start: 27 @44905 has 11 MA's), (50, 45013), (53, 45034), (55, 45058), (69, 45136),

Gene: Stigma_66 Start: 55349, Stop: 55576, Start Num: 31
Candidate Starts for Stigma_66:
(Start: 31 @55349 has 17 MA's), (Start: 36 @55367 has 1 MA's), (50, 55451), (60, 55520), (61, 55526),

Gene: Tainan_244 Start: 134706, Stop: 134939, Start Num: 26
Candidate Starts for Tainan_244:
(14, 134664), (Start: 26 @134706 has 50 MA's), (38, 134742), (39, 134748), (56, 134868), (60, 134886), (63, 134901),

Gene: Tairn4Wing_72 Start: 48216, Stop: 48470, Start Num: 29
Candidate Starts for Tairn4Wing_72:
(Start: 29 @48216 has 19 MA's), (39, 48252), (43, 48282), (64, 48408), (69, 48441),

Gene: Talon44_72 Start: 48492, Stop: 48746, Start Num: 29
Candidate Starts for Talon44_72:
(Start: 29 @48492 has 19 MA's), (39, 48528), (43, 48558), (64, 48684), (69, 48717),

Gene: Tank_14 Start: 5999, Stop: 6256, Start Num: 21
Candidate Starts for Tank_14:
(Start: 21 @5999 has 3 MA's), (33, 6023), (44, 6092), (60, 6194),

Gene: Tenney120_73 Start: 44851, Stop: 45138, Start Num: 27
Candidate Starts for Tenney120_73:
(Start: 27 @44851 has 11 MA's), (50, 44959), (53, 44980), (69, 45082),

Gene: Togo_72 Start: 51218, Stop: 51466, Start Num: 26
Candidate Starts for Togo_72:
(Start: 26 @51218 has 50 MA's), (37, 51251), (42, 51278), (47, 51323), (50, 51335), (52, 51353), (58, 51392), (63, 51419),

Gene: Tribby_94 Start: 53361, Stop: 53618, Start Num: 24
Candidate Starts for Tribby_94:
(Start: 24 @53361 has 20 MA's),

Gene: TrixiePhattel_73 Start: 44473, Stop: 44778, Start Num: 27
Candidate Starts for TrixiePhattel_73:
(Start: 26 @44470 has 50 MA's), (Start: 27 @44473 has 11 MA's), (Start: 35 @44494 has 2 MA's), (50, 44581), (53, 44602), (59, 44647), (69, 44704),

Gene: Twister6_73 Start: 49567, Stop: 49815, Start Num: 26
Candidate Starts for Twister6_73:
(20, 49555), (Start: 26 @49567 has 50 MA's), (42, 49627), (47, 49672), (50, 49684), (58, 49741),

Gene: Tyke_241 Start: 137198, Stop: 137431, Start Num: 26
Candidate Starts for Tyke_241:
(14, 137156), (Start: 26 @137198 has 50 MA's), (38, 137234), (39, 137240), (56, 137360), (60, 137378), (63, 137393),

Gene: Uzumaki_69 Start: 44292, Stop: 44579, Start Num: 27
Candidate Starts for Uzumaki_69:
(Start: 27 @44292 has 11 MA's), (50, 44400), (53, 44421), (59, 44466), (69, 44523),

Gene: Valary_73 Start: 50867, Stop: 51115, Start Num: 26
Candidate Starts for Valary_73:
(8, 50735), (20, 50855), (Start: 26 @50867 has 50 MA's), (42, 50927), (47, 50972), (50, 50984), (58, 51041),

Gene: VanDeWege_74 Start: 50539, Stop: 50781, Start Num: 26
Candidate Starts for VanDeWege_74:
(13, 50482), (Start: 26 @50539 has 50 MA's), (42, 50599), (47, 50644), (50, 50656), (52, 50674), (58, 50713),

Gene: Westy_68 Start: 55335, Stop: 55562, Start Num: 31
Candidate Starts for Westy_68:
(Start: 31 @55335 has 17 MA's), (Start: 36 @55353 has 1 MA's), (50, 55437), (60, 55506), (61, 55512),

Gene: Wilde_14 Start: 5927, Stop: 6184, Start Num: 21
Candidate Starts for Wilde_14:
(Start: 21 @5927 has 3 MA's), (33, 5951), (34, 5954), (44, 6020), (60, 6122),

Gene: Wizard_69 Start: 50045, Stop: 50293, Start Num: 26
Candidate Starts for Wizard_69:

(8, 49913), (20, 50033), (Start: 26 @50045 has 50 MA's), (42, 50105), (47, 50150), (50, 50162), (58, 50219),

Gene: Xenomorph_88 Start: 53193, Stop: 53450, Start Num: 24
Candidate Starts for Xenomorph_88:
(Start: 24 @53193 has 20 MA's),

Gene: YoshiYama_91 Start: 53268, Stop: 53525, Start Num: 24
Candidate Starts for YoshiYama_91:
(Start: 24 @53268 has 20 MA's), (39, 53313),

Gene: YoungMoneyMata_244 Start: 135641, Stop: 135874, Start Num: 26
Candidate Starts for YoungMoneyMata_244:
(14, 135599), (Start: 26 @135641 has 50 MA's), (38, 135677), (39, 135683), (56, 135803), (60, 135821), (63, 135836),

Gene: YungMoney_72 Start: 52105, Stop: 52353, Start Num: 26
Candidate Starts for YungMoney_72:
(7, 51955), (18, 52090), (Start: 26 @52105 has 50 MA's), (42, 52165), (47, 52210), (50, 52222), (52, 52240), (58, 52279),

Gene: Zeina_75 Start: 45147, Stop: 45434, Start Num: 27
Candidate Starts for Zeina_75:
(Start: 27 @45147 has 11 MA's), (50, 45255), (53, 45276), (59, 45321), (69, 45378),