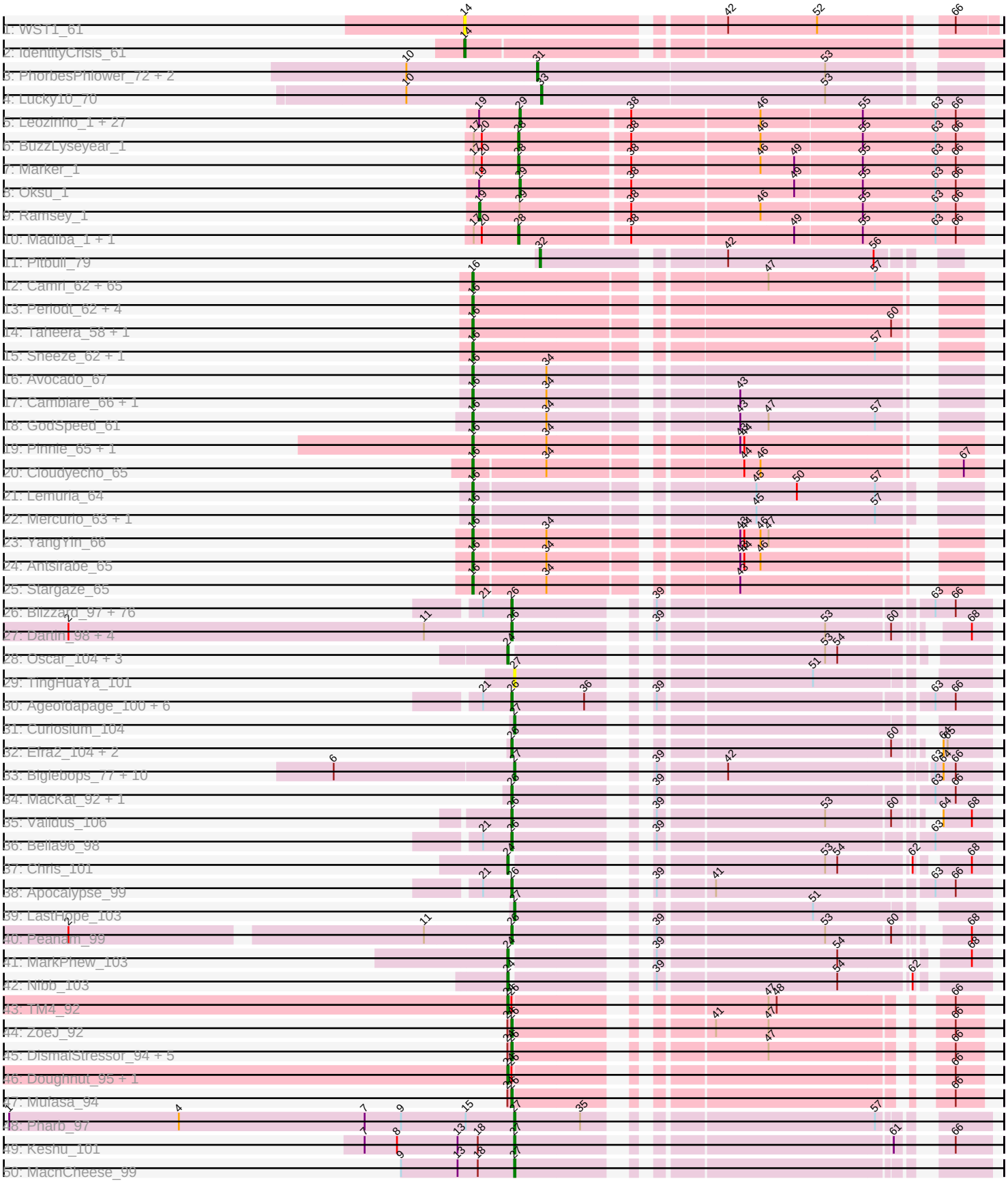
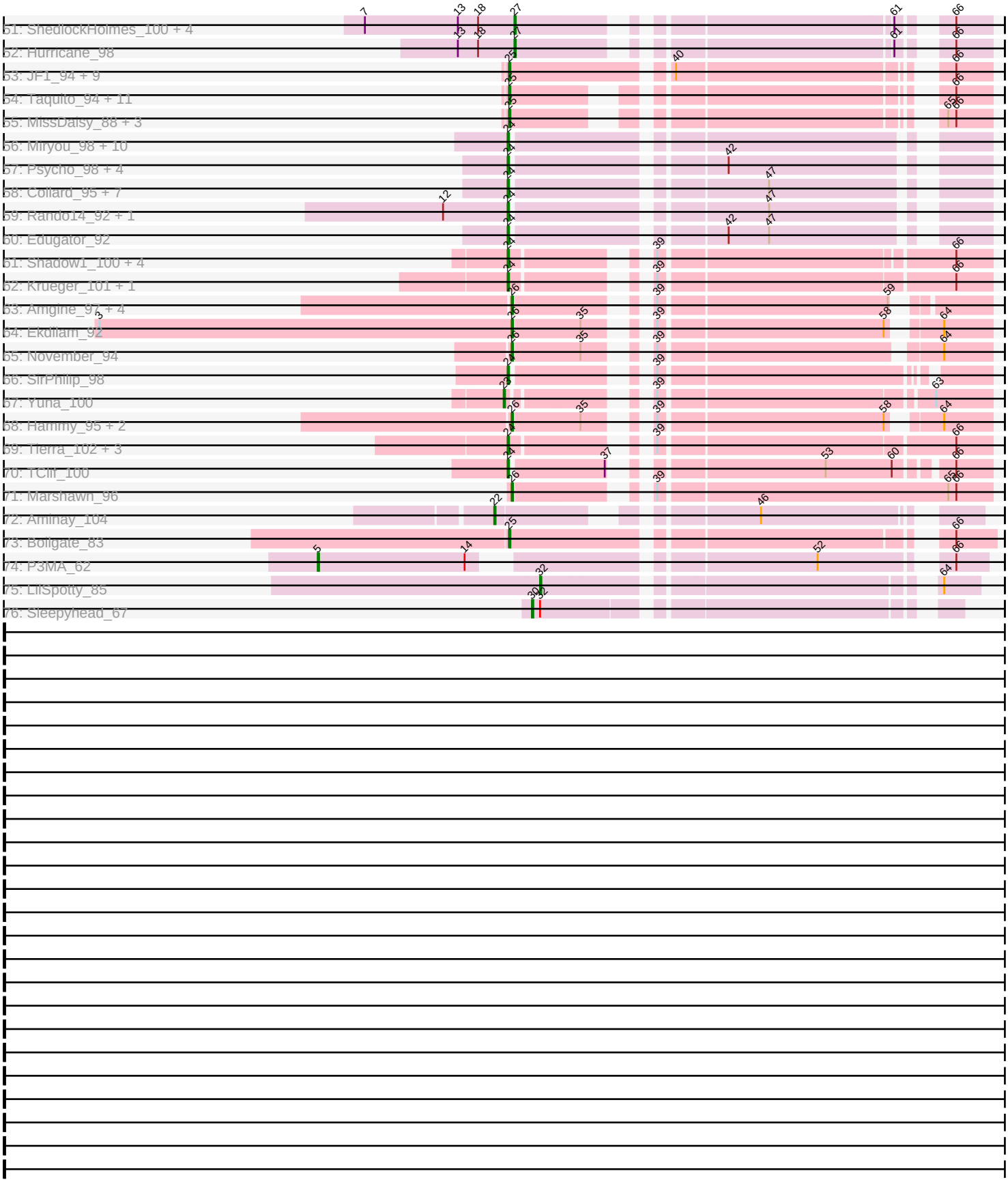
Pham 347136


1: WST1_61
2: IdentityCrisis_61
3: PhorbesPflower_72 + 2
4: Lucky10_70
5: Leozinho_1 + 27
6: BuzzLyseyear_1
7: Marker_1
8: Oksu_1
9: Ramsey_1
10: Madiba_1 + 1
11: Pitbull_79
12: Camri_62 + 65
13: Peridot_62 + 4
14: Taneera_58 + 1
15: Sneeze_62 + 1
16: Avocado_67
17: Cambiare_66 + 1
18: GodSpeed_61
19: Pinnie_65 + 1
20: Cloudyecho_65
21: Lemuria_64
22: Mercurio_63 + 1
23: YangYin_66
24: Antsirabe_65
25: Stargaze_65
26: Blizzard_97 + 76
27: Darum_98 + 4
28: Oscar_104 + 3
29: TingHuaYa_101
30: Ageoldapage_100 + 6
31: Curiosium_104
32: Ella2_104 + 2
33: Biglebops_77 + 10
34: MacKat_92 + 1
35: Validus_106
36: Bella96_98
37: Chris_101
38: Apocalypse_99
39: LastHope_103
40: Peaham_99
41: MarkPhew_103
42: Nibb_103
43: TM4_92
44: ZoeJ_92
45: DismalStressor_94 + 5
46: Doughnut_95 + 1
47: Mufasa_94
48: Pharo_97
49: Keshu_101
50: MacnCheese_99

Pham 347136


51: SherlockHolmes_100 + 4
52: Hurricane_98
53: JF1_94 + 9
54: Taquito_94 + 11
55: MissDaisy_88 + 3
56: Miryou_98 + 10
57: Psycho_98 + 4
58: Collard_95 + 7
59: Rando14_92 + 1
60: Edugator_92
61: Shadow1_100 + 4
62: Krueger_101 + 1
63: Amgine_97 + 4
64: Ekdilam_92
65: November_94
66: SirPhilip_98
67: Yuna_100
68: Hammy_95 + 2
69: Tierra_102 + 3
70: TCliff_100
71: Marshawn_96
72: Aminay_104
73: Boilgate_83
74: P3MA_62
75: LilSpotty_85
76: Sleepyhead_67

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 347136 Report

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

Pham number 347136 has 351 members, 18 are drafts.

Phages represented in each track:
• Track 1 : WST1_61
• Track 2 : IdentityCrisis_61
• Track 3 : PhorbesPhlower_72, InLimbo_72, Morkie_74
• Track 4 : Lucky10_70
• Track 5 : Leozinho_1, Brookers_1, Spikelee_1, Bobi_1, Kingsley_1, Stap_1, Cerasum_1, UncleRicky_1, Peridot_1, Drago_1, Boomer_1, Enby_1, Beanstalk_1, Sarma624_1, DosHalletts_1, Alexphander_1, Beakin_1, Lucia_1, DaWorst_1, Velveteen_1, Coco12_1, BigPhil_1, OwlsT2W_1, RockyHorror_1, Lorde_1, JalFarm20_1, DirtMcgirt_1, Tootsieroll_1
• Track 6 : BuzzLyseyear_1
• Track 7 : Marker_1
• Track 8 : Oksu_1
• Track 9 : Ramsey_1
• Track 10 : Madiba_1, Pollywog_1
• Track 11 : Pitbull_79
• Track 12 : Camri_62, LouisV14_64, Marmie_62, PinkYoshi_62, CassieYates_62, Remy19_62, Wendigo_62, DingDing_63, CLED96_61, Kareem_63, Jane_63, Maliketh_62, Hope_62, OctaviousRex_61, Richarlison_63, Renaissance_61, Aroostook_62, Jonghyun_60, Phreak_62, Hotshotbaby7_62, Mowgli_62, TinaBug_63, Cedasite_62, BruceB_62, Cherrybomb426_61, Frosty24_62, DNAIII_0059, TomBrady_62, Chance64_62, DMoney_61, Phish_61, Gideon_62, AizenPogi_63, Kasen3_63, Sizemore_63, Gomashi_61, JorRay_63, Sweets_62, Primanti_61, Terralys_60, Coleslaw_61, Crespo_61, Darionha_62, Jeilious_62, Neoh_62, Angel_60, Olga_63, Plagueis_62, Peeb_61, Annihilator_61, ShaboiShabazz_61, ECartman_60, Grizzly_61, Ruriko_62, Halo_63, BQuat_61, Avrafan_61, ZoMa_61, Schiebel_60, Jolene_62, Zombie_62, MZKinsey_63, AzulaCat_63, BPs_62, Phloodle_63, GoldenAsh_60
• Track 13 : Periodt_62, Rattrick_62, Barkley26_59, Liefie_59, Paito_63
• Track 14 : Taheera_58, Terror_58
• Track 15 : Sneeze_62, Rabbs_63
• Track 16 : Avocado_67
• Track 17 : Cambiare_66, FlagStaff_64
• Track 18 : GodSpeed_61
• Track 19 : Pinnie_65, MOOREtheMARYer_66
• Track 20 : Cloudyecho_65
• Track 21 : Lemuria_64
• Track 22 : Mercurio_63, Jolie2_61

• Track 23 : YangYin_66
• Track 24 : Antsirabe_65
• Track 25 : Stargaze_65
• Track 26 : Blizzard_97, Adonis_96, TreyKay_98, Capricorn_97, Homura_95, Beezoo_100, Adephagia_95, JAWS_95, MeaningOfLife_98, Megsy_102, Deby_96, Geraldini_97, BGlluviae_96, Pisa4_91, CaseJules_100, Boiiii_97, LindNT_94, Jeckyll_97, Belladonna_97, Veliki_97, YoureAdopted_95, Bern_97, Spock_96, Angelica_95, Tachez_97, Jayhawk_100, Anma_96, ActinUp_97, TruffulaTree_98, Atiba_97, Durfee_97, BEEST_96, BaghaKamala_96, Lunahalos_96, CallaLilly_96, Emerson_101, HedwigODU_96, ShiaSurprise_99, TaiwanKao_98, Anaya_99, DrHayes_98, Ramen_97, Sulley_95, Rapunzel97_99, AlishaPH_89, Piatt_95, TiniBug_95, Prithvi_98, Hyperbowlee_95, Jarvi_96, Zabiza_92, Pokerus_96, Slimphazie_99, SamuelLPlaqson_98, Mynx_97, DartGoblin_97, CheetoDust_96, Ganymede_96, Topper_96, Padpat_101, Twitch_97, QuincyRose_94, Rosmarinus_97, CrimD_96, Pisa1_97, BarrelRoll_96, Padfoot_96, Peel_96, Llorens_96, CREW_95, Tiri_97, Asayake_97, Urkel_98, Inky_96, Dalmuri_97, Joy99_98, Zavala_98
• Track 27 : Dartin_98, Niklas_98, Richo_98, Shaobing_96, McMater_98
• Track 28 : Oscar_104, KiSi_104, Scarlett_103, LeMond_103
• Track 29 : TingHuaYa_101
• Track 30 : Ageofdapage_100, Illumine_100, Murucutumbu_96, Stinson_97, Devera_103, LaterM_96, Dole_99
• Track 31 : Curiosium_104
• Track 32 : Efra2_104, Guanica15_103, Yunkel11_101
• Track 33 : Biglebops_77, Torres_80, SgtBeansprout_78, LilPharaoh_78, Trice_77, Enkosi_79, Amelie_77, Nutello_77, Teejan_79, Mdavu_78, Nikao_80
• Track 34 : MacKat_92, Clipper_100
• Track 35 : Validus_106
• Track 36 : Bella96_98
• Track 37 : Chris_101
• Track 38 : Apocalypse_99
• Track 39 : LastHope_103
• Track 40 : Peanam_99
• Track 41 : MarkPhew_103
• Track 42 : Nibb_103
• Track 43 : TM4_92
• Track 44 : ZoeJ_92
• Track 45 : DismalStressor_94, Findley_94, Strobilo_95, Marcoliusprime_92, DismalFunk_94, Milly_94
• Track 46 : Doughnut_95, BoostSeason_94
• Track 47 : Mufasa_94
• Track 48 : Pharb_97
• Track 49 : Keshu_101
• Track 50 : MacnCheese_99
• Track 51 : ShedlockHolmes_100, TBond007_97, Lea83_98, TribleTrouble_97, Pixie_100
• Track 52 : Hurricane_98
• Track 53 : JF1_94, Malthus_95, Kraw_94, Y2_90, Fionnbharth_94, Juliette_96, Ruthiejr_96, Y10_90, Wintermute_94, Eponine_96
• Track 54 : Taquito_94, SamScheppers_93, Chancellor_94, Nolwazi_96, DanSyl44_97, Cheetobro_92, Qhanda_94, YasnayaPolyana_93, OmniCritical_94, Mitti_94, Slarp_92, Lebo14_93
• Track 55 : MissDaisy_88, Reptar3000_88, Patt_87, Bobquesha_91

• Track 56 : Miryou_98, OkiRoe_97, Guillsminger_96, Waterfoul_95, Thyatira_97, SoSeph_96, Heftyboy_96, Leston_95, Gengar_96, Paola_93, Feyre_98
• Track 57 : Psycho_98, Dadosky_100, Larva_98, Neighly_100, AlleyCat_100
• Track 58 : Collard_95, LilDirt_99, InvictusManeo_97, BananenDer11_99, ViviJ_105, Kratio_100, Agent47_97, DoubleChamp_96
• Track 59 : Rando14_92, Omnicron_96
• Track 60 : Edugator_92
• Track 61 : Shadow1_100, Cain_102, Bryler_94, Phrank_103, Sunflower1121_100
• Track 62 : Krueger_101, Tigress9_100
• Track 63 : Amgine_97, Applecrisp_95, Lavahound_96, Ellie_96, Fefferhead_98
• Track 64 : Ekdilam_92
• Track 65 : November_94
• Track 66 : SirPhilip_98
• Track 67 : Yuna_100
• Track 68 : Hammy_95, DarthP_95, Amohnition_95
• Track 69 : Tierra_102, PhelpsODU_92, Ximenita_103, Syra333_99
• Track 70 : TClif_100
• Track 71 : Marshawn_96
• Track 72 : Aminay_104
• Track 73 : Boilgate_83
• Track 74 : P3MA_62
• Track 75 : LilSpotty_85
• Track 76 : Sleepyhead_67

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 114 of the 333 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ActinUp_97, Adephagia_95, Adonis_96, Ageofdapage_100, AlishaPH_89, Amgine_97, Amohnition_95, Anaya_99, Angelica_95, Anma_96, Apocalypse_99, Applecrisp_95, Asayake_97, Atiba_97, BEEST_96, BGlluviae_96, BaghaKamala_96, BarrelRoll_96, Beezoo_100, Bella96_98, Belladonna_97, Bern_97, Blizzard_97, Boiiii_97, CREW_95, CallaLilly_96, Capricorn_97, CaseJules_100, CheetoDust_96, Clipper_100, CrimD_96, Dalmuri_97, DartGoblin_97, DarthP_95, Dartin_98, Deby_96, Devera_103, DismalFunk_94, DismalStressor_94, Dole_99, DrHayes_98, Durfee_97, Efra2_104, Ekdilam_92, Ellie_96, Emerson_101, Fefferhead_98, Findley_94, Ganymede_96, Geraldini_97, Guanica15_103, Hammy_95, HedwigODU_96, Homura_95, Hyperbowlee_95, Illumine_100, Inky_96, JAWS_95, Jarvi_96, Jayhawk_100, Jeckyll_97, Joy99_98, LaterM_96, Lavahound_96, LindNT_94, Llorens_96, Lunahalos_96, MacKat_92, Marcoliusprime_92, Marshawn_96, McMater_98, MeaningOfLife_98, Megsy_102, Milly_94, Mufasa_94, Murucutumbu_96, Mynx_97, Niklas_98, November_94, Padfoot_96, Padpat_101, Peanam_99, Peel_96, Piatt_95, Pisa1_97, Pisa4_91, Pokerus_96, Prithvi_98, QuincyRose_94, Ramen_97, Rapunzel97_99, Richo_98, Rosmarinus_97, SamuelLPlaqson_98, Shaobing_96, ShiaSurprise_99, Slimphazie_99, Spock_96, Stinson_97, Strobilo_95, Sulley_95, Tachez_97, TaiwanKao_98, TiniBug_95, Tiri_97, Topper_96, TreyKay_98, TruffulaTree_98, Twitch_97, Urkel_98, Validus_106, Veliki_97, YoureAdopted_95, Yunkel11_101, Zabiza_92, Zavala_98, ZoeJ_92,

Genes that have the "Most Annotated" start but do not call it:
• BoostSeason_94, Doughnut_95, TM4_92,

Genes that do not have the "Most Annotated" start:
• Agent47_97, AizenPogi_63, Alexphander_1, AlleyCat_100, Amelie_77, Aminay_104, Angel_60, Annihilator_61, Antsirabe_65, Aroostook_62, Avocado_67, Avrafan_61, AzulaCat_63, BPs_62, BQuat_61, BananenDer11_99, Barkley26_59, Beakin_1, Beanstalk_1, BigPhil_1, Biglebops_77, Bobi_1, Bobquesha_91, Boilgate_83, Boomer_1, Brookers_1, BruceB_62, Bryler_94, BuzzLyseyear_1, CLED96_61, Cain_102, Cambiare_66, Camri_62, CassieYates_62, Cedasite_62, Cerasum_1, Chance64_62, Chancellor_94, Cheetobro_92, Cherrybomb426_61, Chris_101, Cloudyecho_65, Coco12_1, Coleslaw_61, Collard_95, Crespo_61, Curiosium_104, DMoney_61, DNAIII_0059, DaWorst_1, Dadosky_100, DanSyl44_97, Darionha_62, DingDing_63, DirtMcgirt_1, DosHalletts_1, DoubleChamp_96, Drago_1, ECartman_60, Edugator_92, Enby_1, Enkosi_79, Eponine_96, Feyre_98, Fionnbharth_94, FlagStaff_64, Frosty24_62, Gengar_96, Gideon_62, GodSpeed_61, GoldenAsh_60, Gomashi_61, Grizzly_61, Guillsminger_96, Halo_63, Heftyboy_96, Hope_62, Hotshotbaby7_62, Hurricane_98, IdentityCrisis_61, InLimbo_72, InvictusManeo_97, JF1_94, JalFarm20_1, Jane_63, Jeilious_62, Jolene_62, Jolie2_61, Jonghyun_60, JorRay_63, Juliette_96, Kareem_63, Kasen3_63, Keshu_101, KiSi_104, Kingsley_1, Kratio_100, Kraw_94, Krueger_101, Larva_98, LastHope_103, LeMond_103, Lea83_98, Lebo14_93, Lemuria_64, Leozinho_1, Leston_95, Liefie_59, LilDirt_99, LilPharaoh_78, LilSpotty_85, Lorde_1, LouisV14_64, Lucia_1, Lucky10_70, MOOREtheMARYer_66, MZKinsey_63, MacnCheese_99, Madiba_1, Maliketh_62, Malthus_95, MarkPhew_103, Marker_1, Marmie_62, Mdavu_78, Mercurio_63, Miryou_98, MissDaisy_88, Mitti_94, Morkie_74, Mowgli_62, Neighly_100, Neoh_62, Nibb_103, Nikao_80, Nolwazi_96, Nutello_77, OctaviousRex_61, OkiRoe_97, Oksu_1, Olga_63, OmniCritical_94, Omnicron_96, Oscar_104, OwlsT2W_1, P3MA_62, Paito_63, Paola_93, Patt_87, Peeb_61, Peridot_1, Periodt_62, Pharb_97, PhelpsODU_92, Phish_61, Phloodle_63, PhorbesPhlower_72, Phrank_103, Phreak_62, PinkYoshi_62, Pinnie_65, Pitbull_79, Pixie_100, Plagueis_62, Pollywog_1, Primanti_61, Psycho_98, Qhanda_94, Rabbs_63, Ramsey_1, Rando14_92, Rattrick_62, Remy19_62, Renaissance_61, Reptar3000_88, Richarlison_63, RockyHorror_1, Ruriko_62, Ruthiejr_96, SamScheppers_93, Sarma624_1, Scarlett_103, Schiebel_60, SgtBeansprout_78, ShaboiShabazz_61, Shadow1_100, ShedlockHolmes_100, SirPhilip_98, Sizemore_63, Slarp_92, Sleepyhead_67, Sneeze_62, SoSeph_96, Spikelee_1, Stap_1, Stargaze_65, Sunflower1121_100, Sweets_62, Syra333_99, TBond007_97, TClif_100, Taheera_58, Taquito_94, Teejan_79, Terralys_60, Terror_58, Thyatira_97, Tierra_102, Tigress9_100, TinaBug_63, TingHuaYa_101, TomBrady_62, Tootsieroll_1, Torres_80, TribleTrouble_97, Trice_77, UncleRicky_1, Velveteen_1, ViviJ_105, WST1_61, Waterfoul_95, Wendigo_62, Wintermute_94, Ximenita_103, Y10_90, Y2_90, YangYin_66, YasnayaPolyana_93, Yuna_100, ZoMa_61, Zombie_62,

Summary by start number:

Start 5:
• Found in 1 of 351 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: P3MA_62 (singleton),

Start 14:
• Found in 3 of 351 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 333
• Called 66.7% of time when present
• Phage (with cluster) where this start called: IdentityCrisis_61 (AJ), WST1_61 (AJ),

Start 16:
• Found in 88 of 351 (25.1%) of genes in pham
• Manual Annotations of this start: 84 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AizenPogi_63 (G1), Angel_60 (G1), Annihilator_61 (G1), Antsirabe_65 (G5), Aroostook_62 (G1), Avocado_67 (G2), Avrafan_61 (G1), AzulaCat_63 (G1), BPs_62 (G1), BQuat_61 (G1), Barkley26_59 (G1), BruceB_62 (G1), CLED96_61 (G1), Cambiare_66 (G2), Camri_62 (G1), CassieYates_62 (G1), Cedasite_62 (G1), Chance64_62 (G1), Cherrybomb426_61 (G1), Cloudyecho_65 (G3), Coleslaw_61 (G1), Crespo_61 (G1), DMoney_61 (G1), DNAIII_0059 (G1), Darionha_62 (G1), DingDing_63 (G1), ECartman_60 (G1), FlagStaff_64 (G2), Frosty24_62 (G1), Gideon_62 (G1), GodSpeed_61 (G2), GoldenAsh_60 (G1), Gomashi_61 (G1), Grizzly_61 (G1), Halo_63 (G1), Hope_62 (G1), Hotshotbaby7_62 (G1), Jane_63 (G1), Jeilious_62 (G), Jolene_62 (G1), Jolie2_61 (G4), Jonghyun_60 (G1), JorRay_63 (G1), Kareem_63 (G1), Kasen3_63 (G1), Lemuria_64 (G4), Liefie_59 (G1), LouisV14_64 (G1), MOOREtheMARYer_66 (G3), MZKinsey_63 (G1), Maliketh_62 (G1), Marmie_62 (G1), Mercurio_63 (G4), Mowgli_62 (G1), Neoh_62 (G), OctaviousRex_61 (G1), Olga_63 (G1), Paito_63 (G1), Peeb_61 (G1), Periodt_62 (G1), Phish_61 (G1), Phloodle_63 (G1), Phreak_62 (G1), PinkYoshi_62 (G1), Pinnie_65 (G3), Plagueis_62 (G1), Primanti_61 (G1), Rabbs_63 (G1), Rattrick_62 (G1), Remy19_62 (G1), Renaissance_61 (G1), Richarlison_63 (G1), Ruriko_62 (G1), Schiebel_60 (G1), ShaboiShabazz_61 (G1), Sizemore_63 (G1), Sneeze_62 (G1), Stargaze_65 (G5), Sweets_62 (G1), Taheera_58 (G1), Terralys_60 (G1), Terror_58 (G1), TinaBug_63 (G1), TomBrady_62 (G1), Wendigo_62 (G1), YangYin_66 (G5), ZoMa_61 (G1), Zombie_62 (G1),

Start 19:
• Found in 30 of 351 (8.5%) of genes in pham
• Manual Annotations of this start: 1 of 333
• Called 3.3% of time when present
• Phage (with cluster) where this start called: Ramsey_1 (F1),

Start 22:
• Found in 1 of 351 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aminay_104 (K7),

Start 23:
• Found in 1 of 351 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yuna_100 (K6),

Start 24:
• Found in 58 of 351 (16.5%) of genes in pham

• Manual Annotations of this start: 48 of 333
• Called 86.2% of time when present
• Phage (with cluster) where this start called: Agent47_97 (K5), AlleyCat_100 (K5), BananenDer11_99 (K5), BoostSeason_94 (K2), Bryler_94 (K6), Cain_102 (K6), Chris_101 (K1), Collard_95 (K5), Dadosky_100 (K5), DoubleChamp_96 (K5), Doughnut_95 (K2), Edugator_92 (K5), Feyre_98 (K5), Gengar_96 (K5), Guillsminger_96 (K5), Heftyboy_96 (K5), InvictusManeo_97 (K5), KiSi_104 (K1), Kratio_100 (K5), Krueger_101 (K6), Larva_98 (K5), LeMond_103 (K1), Leston_95 (K5), LilDirt_99 (K5), MarkPhew_103 (K1), Miryou_98 (K5), Neighly_100 (K3), Nibb_103 (K1), OkiRoe_97 (K5), Omnicron_96 (K5), Oscar_104 (K1), Paola_93 (K5), PhelpsODU_92 (K6), Phrank_103 (K6), Psycho_98 (K5), Rando14_92 (K5), Scarlett_103 (K1), Shadow1_100 (K6), SirPhilip_98 (K6), SoSeph_96 (K5), Sunflower1121_100 (K6), Syra333_99 (K6), TClif_100 (K6), TM4_92 (K2), Thyatira_97 (K5), Tierra_102 (K6), Tigress9_100 (K6), ViviJ_105 (K5), Waterfoul_95 (K5), Ximenita_103 (K6),

Start 25:
• Found in 27 of 351 (7.7%) of genes in pham
• Manual Annotations of this start: 23 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bobquesha_91 (K4), Boilgate_83 (K8), Chancellor_94 (K4), Cheetobro_92 (K4), DanSyl44_97 (K4), Eponine_96 (K4), Fionnbharth_94 (K4), JF1_94 (K4), Juliette_96 (K4), Kraw_94 (K4), Lebo14_93 (K4), Malthus_95 (K4), MissDaisy_88 (K4), Mitti_94 (K4), Nolwazi_96 (K4), OmniCritical_94 (K4), Patt_87 (K4), Qhanda_94 (K4), Reptar3000_88 (K4), Ruthiejr_96 (K4), SamScheppers_93 (K4), Slarp_92 (K4), Taquito_94 (K4), Wintermute_94 (K4), Y10_90 (K4), Y2_90 (K4), YasnayaPolyana_93 (K4),

Start 26:
• Found in 120 of 351 (34.2%) of genes in pham
• Manual Annotations of this start: 114 of 333
• Called 97.5% of time when present
• Phage (with cluster) where this start called: ActinUp_97 (K1), Adephagia_95 (K1), Adonis_96 (K1), Ageofdapage_100 (K1), AlishaPH_89 (K1), Amgine_97 (K6), Amohnition_95 (K6), Anaya_99 (K1), Angelica_95 (K1), Anma_96 (K1), Apocalypse_99 (K1), Applecrisp_95 (K6), Asayake_97 (K1), Atiba_97 (K1), BEEST_96 (K1), BGlluviae_96 (K1), BaghaKamala_96 (K1), BarrelRoll_96 (K1), Beezoo_100 (K1), Bella96_98 (K1), Belladonna_97 (K1), Bern_97 (K1), Blizzard_97 (K1), Boiiii_97 (K1), CREW_95 (K1), CallaLilly_96 (K1), Capricorn_97 (K1), CaseJules_100 (K1), CheetoDust_96 (K1), Clipper_100 (K1), CrimD_96 (K1), Dalmuri_97 (K1), DartGoblin_97 (K1), DarthP_95 (K6), Dartin_98 (K1), Deby_96 (K1), Devera_103 (K1), DismalFunk_94 (K2), DismalStressor_94 (K2), Dole_99 (K1), DrHayes_98 (K1), Durfee_97 (K1), Efra2_104 (K1), Ekdilam_92 (K6), Ellie_96 (K6), Emerson_101 (K1), Fefferhead_98 (K6), Findley_94 (K2), Ganymede_96 (K1), Geraldini_97 (K1), Guanica15_103 (K1), Hammy_95 (K6), HedwigODU_96 (K1), Homura_95 (K1), Hyperbowlee_95 (K1), Illumine_100 (K1), Inky_96 (K1), JAWS_95 (K1), Jarvi_96 (K1), Jayhawk_100 (K1), Jeckyll_97 (K1), Joy99_98 (K1), LaterM_96 (K1), Lavahound_96 (K6), LindNT_94 (K1), Llorens_96 (K1), Lunahalos_96 (K1), MacKat_92 (K1), Marcoliusprime_92 (K2), Marshawn_96 (K6), McMater_98 (K1), MeaningOfLife_98 (K1), Megsy_102 (K1), Milly_94 (K2), Mufasa_94 (K2), Murucutumbu_96 (K1), Mynx_97 (K1), Niklas_98 (K1), November_94 (K6), Padfoot_96 (K1), Padpat_101 (K1), Peanam_99 (K1), Peel_96 (K1), Piatt_95 (K1), Pisa1_97 (K1), Pisa4_91 (K1), Pokerus_96 (K1), Prithvi_98 (K1), QuincyRose_94

(K1), Ramen_97 (K1), Rapunzel97_99 (K1), Richo_98 (K1), Rosmarinus_97 (K1), SamuelLPlaqson_98 (K1), Shaobing_96 (K1), ShiaSurprise_99 (K1), Slimphazie_99 (K1), Spock_96 (K1), Stinson_97 (K1), Strobilo_95 (K2), Sulley_95 (K1), Tachez_97 (K1), TaiwanKao_98 (K1), TiniBug_95 (K1), Tiri_97 (K1), Topper_96 (K1), TreyKay_98 (K1), TruffulaTree_98 (K1), Twitch_97 (K1), Urkel_98 (K1), Validus_106 (K1), Veliki_97 (K1), YoureAdopted_95 (K1), Yunkel11_101 (K1), Zabiza_92 (K1), Zavala_98 (K1), ZoeJ_92 (K2),

Start 27:
• Found in 23 of 351 (6.6%) of genes in pham
• Manual Annotations of this start: 20 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amelie_77 (K1), Biglebops_77 (K1), Curiosium_104 (K1), Enkosi_79 (K1), Hurricane_98 (K3), Keshu_101 (K3), LastHope_103 (K1), Lea83_98 (K3), LilPharaoh_78 (K1), MacnCheese_99 (K3), Mdavu_78 (K1), Nikao_80 (K1), Nutello_77 (K1), Pharb_97 (K3), Pixie_100 (K3), SgtBeansprout_78 (K1), ShedlockHolmes_100 (K3), TBond007_97 (K3), Teejan_79 (K1), TingHuaYa_101 (K1), Torres_80 (K1), TribleTrouble_97 (K3), Trice_77 (K1),

Start 28:
• Found in 4 of 351 (1.1%) of genes in pham
• Manual Annotations of this start: 4 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BuzzLyseyear_1 (F1), Madiba_1 (F1), Marker_1 (F1), Pollywog_1 (F1),

Start 29:
• Found in 30 of 351 (8.5%) of genes in pham
• Manual Annotations of this start: 29 of 333
• Called 96.7% of time when present
• Phage (with cluster) where this start called: Alexphander_1 (F1), Beakin_1 (F1), Beanstalk_1 (F1), BigPhil_1 (F1), Bobi_1 (F1), Boomer_1 (F1), Brookers_1 (F1), Cerasum_1 (F1), Coco12_1 (F1), DaWorst_1 (F1), DirtMcgirt_1 (F1), DosHalletts_1 (F1), Drago_1 (F1), Enby_1 (F1), JalFarm20_1 (F1), Kingsley_1 (F1), Leozinho_1 (F1), Lorde_1 (F1), Lucia_1 (F1), Oksu_1 (F1), OwlsT2W_1 (F1), Peridot_1 (F1), RockyHorror_1 (F1), Sarma624_1 (F1), Spikelee_1 (F1), Stap_1 (F1), Tootsieroll_1 (F1), UncleRicky_1 (F1), Velveteen_1 (F1),

Start 30:
• Found in 1 of 351 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sleepyhead_67 (singleton),

Start 31:
• Found in 3 of 351 (0.9%) of genes in pham
• Manual Annotations of this start: 2 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: InLimbo_72 (DH), Morkie_74 (DH), PhorbesPhlower_72 (DH),

Start 32:
• Found in 3 of 351 (0.9%) of genes in pham

• Manual Annotations of this start: 2 of 333
• Called 66.7% of time when present
• Phage (with cluster) where this start called: LilSpotty_85 (singleton), Pitbull_79 (FQ1),

Start 33:
• Found in 1 of 351 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 333
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Lucky10_70 (DH),

Summary by clusters:

There are 19 clusters represented in this pham: F1, singleton, G, G3, G2, G1, AJ, G5, K3, K2, K1, G4, K7, K6, DH, K4, K5, K8, FQ1,

Info for manual annotations of cluster AJ:
•Start number 14 was manually annotated 1 time for cluster AJ.

Info for manual annotations of cluster DH:
•Start number 31 was manually annotated 2 times for cluster DH.
•Start number 33 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster F1:
•Start number 19 was manually annotated 1 time for cluster F1.
•Start number 28 was manually annotated 4 times for cluster F1.
•Start number 29 was manually annotated 29 times for cluster F1.

Info for manual annotations of cluster FQ1:
•Start number 32 was manually annotated 1 time for cluster FQ1.

Info for manual annotations of cluster G:
•Start number 16 was manually annotated 2 times for cluster G.

Info for manual annotations of cluster G1:
•Start number 16 was manually annotated 70 times for cluster G1.

Info for manual annotations of cluster G2:
•Start number 16 was manually annotated 4 times for cluster G2.

Info for manual annotations of cluster G3:
•Start number 16 was manually annotated 3 times for cluster G3.

Info for manual annotations of cluster G4:
•Start number 16 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:
•Start number 16 was manually annotated 3 times for cluster G5.

Info for manual annotations of cluster K1:
•Start number 24 was manually annotated 7 times for cluster K1.
•Start number 26 was manually annotated 95 times for cluster K1.
•Start number 27 was manually annotated 11 times for cluster K1.

Info for manual annotations of cluster K2:
•Start number 24 was manually annotated 3 times for cluster K2.
•Start number 26 was manually annotated 8 times for cluster K2.

Info for manual annotations of cluster K3:
•Start number 27 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:
•Start number 25 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K5:
•Start number 24 was manually annotated 25 times for cluster K5.

Info for manual annotations of cluster K6:
•Start number 23 was manually annotated 1 time for cluster K6.
•Start number 24 was manually annotated 13 times for cluster K6.
•Start number 26 was manually annotated 11 times for cluster K6.

Info for manual annotations of cluster K7:
•Start number 22 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:
•Start number 25 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: ActinUp_97 Start: 59451, Stop: 59753, Start Num: 26
Candidate Starts for ActinUp_97:
(21, 59430), (Start: 26 @59451 has 114 MA's), (39, 59526), (63, 59712), (66, 59727),

Gene: Adephagia_95 Start: 59285, Stop: 59587, Start Num: 26
Candidate Starts for Adephagia_95:
(21, 59264), (Start: 26 @59285 has 114 MA's), (39, 59360), (63, 59546), (66, 59561),

Gene: Adonis_96 Start: 59670, Stop: 59972, Start Num: 26
Candidate Starts for Adonis_96:
(21, 59649), (Start: 26 @59670 has 114 MA's), (39, 59745), (63, 59931), (66, 59946),

Gene: Agent47_97 Start: 60723, Stop: 61028, Start Num: 24
Candidate Starts for Agent47_97:
(Start: 24 @60723 has 48 MA's), (47, 60891),

Gene: Ageofdapage_100 Start: 60254, Stop: 60556, Start Num: 26
Candidate Starts for Ageofdapage_100:
(21, 60233), (Start: 26 @60254 has 114 MA's), (36, 60305), (39, 60329), (63, 60515), (66, 60530),

Gene: AizenPogi_63 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for AizenPogi_63:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Alexphander_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Alexphander_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: AlishaPH_89 Start: 56673, Stop: 56975, Start Num: 26
Candidate Starts for AlishaPH_89:
(21, 56652), (Start: 26 @56673 has 114 MA's), (39, 56748), (63, 56934), (66, 56949),

Gene: AlleyCat_100 Start: 61692, Stop: 61997, Start Num: 24
Candidate Starts for AlleyCat_100:
(Start: 24 @61692 has 48 MA's), (42, 61830),

Gene: Amelie_77 Start: 56074, Stop: 56379, Start Num: 27
Candidate Starts for Amelie_77:
(6, 55942), (Start: 27 @56074 has 20 MA's), (39, 56149), (42, 56194), (63, 56338), (64, 56344), (66, 56353),

Gene: Amgine_97 Start: 61886, Stop: 62176, Start Num: 26
Candidate Starts for Amgine_97:
(Start: 26 @61886 has 114 MA's), (39, 61961), (59, 62123),

Gene: Aminay_104 Start: 59192, Stop: 59479, Start Num: 22
Candidate Starts for Aminay_104:
(Start: 22 @59192 has 1 MA's), (46, 59342),

Gene: Amohnition_95 Start: 61401, Stop: 61697, Start Num: 26
Candidate Starts for Amohnition_95:
(Start: 26 @61401 has 114 MA's), (35, 61449), (39, 61476), (58, 61635), (64, 61662),

Gene: Anaya_99 Start: 60473, Stop: 60775, Start Num: 26
Candidate Starts for Anaya_99:
(21, 60452), (Start: 26 @60473 has 114 MA's), (39, 60548), (63, 60734), (66, 60749),

Gene: Angel_60 Start: 40665, Stop: 40991, Start Num: 16
Candidate Starts for Angel_60:
(Start: 16 @40665 has 84 MA's), (47, 40860), (57, 40938),

Gene: Angelica_95 Start: 59237, Stop: 59539, Start Num: 26
Candidate Starts for Angelica_95:
(21, 59216), (Start: 26 @59237 has 114 MA's), (39, 59312), (63, 59498), (66, 59513),

Gene: Anma_96 Start: 60168, Stop: 60470, Start Num: 26
Candidate Starts for Anma_96:
(21, 60147), (Start: 26 @60168 has 114 MA's), (39, 60243), (63, 60429), (66, 60444),

Gene: Annihilator_61 Start: 41117, Stop: 41443, Start Num: 16
Candidate Starts for Annihilator_61:
(Start: 16 @41117 has 84 MA's), (47, 41312), (57, 41390),

Gene: Antsirabe_65 Start: 44050, Stop: 44373, Start Num: 16
Candidate Starts for Antsirabe_65:
(Start: 16 @44050 has 84 MA's), (34, 44101), (43, 44221), (44, 44224), (46, 44236),

Gene: Apocalypse_99 Start: 59588, Stop: 59890, Start Num: 26
Candidate Starts for Apocalypse_99:
(21, 59567), (Start: 26 @59588 has 114 MA's), (39, 59663), (41, 59699), (63, 59849), (66, 59864),

Gene: Applecrisp_95 Start: 61604, Stop: 61894, Start Num: 26
Candidate Starts for Applecrisp_95:
(Start: 26 @61604 has 114 MA's), (39, 61679), (59, 61841),

Gene: Aroostook_62 Start: 41127, Stop: 41453, Start Num: 16
Candidate Starts for Aroostook_62:
(Start: 16 @41127 has 84 MA's), (47, 41322), (57, 41400),

Gene: Asayake_97 Start: 59544, Stop: 59846, Start Num: 26
Candidate Starts for Asayake_97:
(21, 59523), (Start: 26 @59544 has 114 MA's), (39, 59619), (63, 59805), (66, 59820),

Gene: Atiba_97 Start: 59195, Stop: 59497, Start Num: 26
Candidate Starts for Atiba_97:
(21, 59174), (Start: 26 @59195 has 114 MA's), (39, 59270), (63, 59456), (66, 59471),

Gene: Avocado_67 Start: 44700, Stop: 45026, Start Num: 16
Candidate Starts for Avocado_67:
(Start: 16 @44700 has 84 MA's), (34, 44754),

Gene: Avrafan_61 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Avrafan_61:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: AzulaCat_63 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for AzulaCat_63:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: BEEST_96 Start: 59545, Stop: 59847, Start Num: 26
Candidate Starts for BEEST_96:
(21, 59524), (Start: 26 @59545 has 114 MA's), (39, 59620), (63, 59806), (66, 59821),

Gene: BGlluviae_96 Start: 58947, Stop: 59249, Start Num: 26
Candidate Starts for BGlluviae_96:
(21, 58926), (Start: 26 @58947 has 114 MA's), (39, 59022), (63, 59208), (66, 59223),

Gene: BPs_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for BPs_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: BQuat_61 Start: 41117, Stop: 41443, Start Num: 16
Candidate Starts for BQuat_61:
(Start: 16 @41117 has 84 MA's), (47, 41312), (57, 41390),

Gene: BaghaKamala_96 Start: 58771, Stop: 59073, Start Num: 26
Candidate Starts for BaghaKamala_96:
(21, 58750), (Start: 26 @58771 has 114 MA's), (39, 58846), (63, 59032), (66, 59047),

Gene: BananenDer11_99 Start: 60975, Stop: 61280, Start Num: 24
Candidate Starts for BananenDer11_99:
(Start: 24 @60975 has 48 MA's), (47, 61143),

Gene: Barkley26_59 Start: 40570, Stop: 40896, Start Num: 16
Candidate Starts for Barkley26_59:
(Start: 16 @40570 has 84 MA's),

Gene: BarrelRoll_96 Start: 59311, Stop: 59613, Start Num: 26
Candidate Starts for BarrelRoll_96:
(21, 59290), (Start: 26 @59311 has 114 MA's), (39, 59386), (63, 59572), (66, 59587),

Gene: Beakin_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Beakin_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Beanstalk_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Beanstalk_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Beezoo_100 Start: 60133, Stop: 60435, Start Num: 26
Candidate Starts for Beezoo_100:
(21, 60112), (Start: 26 @60133 has 114 MA's), (39, 60208), (63, 60394), (66, 60409),

Gene: Bella96_98 Start: 60366, Stop: 60668, Start Num: 26
Candidate Starts for Bella96_98:
(21, 60345), (Start: 26 @60366 has 114 MA's), (39, 60441), (63, 60627),

Gene: Belladonna_97 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Belladonna_97:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: Bern_97 Start: 58007, Stop: 58309, Start Num: 26
Candidate Starts for Bern_97:
(21, 57986), (Start: 26 @58007 has 114 MA's), (39, 58082), (63, 58268), (66, 58283),

Gene: BigPhil_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for BigPhil_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Biglebops_77 Start: 56089, Stop: 56394, Start Num: 27
Candidate Starts for Biglebops_77:
(6, 55957), (Start: 27 @56089 has 20 MA's), (39, 56164), (42, 56209), (63, 56353), (64, 56359), (66, 56368),

Gene: Blizzard_97 Start: 59544, Stop: 59846, Start Num: 26
Candidate Starts for Blizzard_97:
(21, 59523), (Start: 26 @59544 has 114 MA's), (39, 59619), (63, 59805), (66, 59820),

Gene: Bobi_1 Start: 41, Stop: 373, Start Num: 29

Candidate Starts for Bobi_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Bobquesha_91 Start: 54304, Stop: 54585, Start Num: 25
Candidate Starts for Bobquesha_91:
(Start: 25 @54304 has 23 MA's), (65, 54553), (66, 54559),

Gene: Boiiii_97 Start: 59546, Stop: 59848, Start Num: 26
Candidate Starts for Boiiii_97:
(21, 59525), (Start: 26 @59546 has 114 MA's), (39, 59621), (63, 59807), (66, 59822),

Gene: Boilgate_83 Start: 56925, Stop: 57236, Start Num: 25
Candidate Starts for Boilgate_83:
(Start: 25 @56925 has 23 MA's), (66, 57207),

Gene: Boomer_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Boomer_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: BoostSeason_94 Start: 57637, Stop: 57918, Start Num: 24
Candidate Starts for BoostSeason_94:
(Start: 24 @57637 has 48 MA's), (Start: 26 @57640 has 114 MA's), (66, 57898),

Gene: Brookers_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Brookers_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: BruceB_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for BruceB_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Bryler_94 Start: 57308, Stop: 57616, Start Num: 24
Candidate Starts for Bryler_94:
(Start: 24 @57308 has 48 MA's), (39, 57383), (66, 57590),

Gene: BuzzLyseyear_1 Start: 40, Stop: 372, Start Num: 28
Candidate Starts for BuzzLyseyear_1:
(17, 7), (20, 13), (Start: 28 @40 has 4 MA's), (38, 118), (46, 211), (55, 283), (63, 337), (66, 352),

Gene: CLED96_61 Start: 40680, Stop: 41006, Start Num: 16
Candidate Starts for CLED96_61:
(Start: 16 @40680 has 84 MA's), (47, 40875), (57, 40953),

Gene: CREW_95 Start: 59346, Stop: 59648, Start Num: 26
Candidate Starts for CREW_95:
(21, 59325), (Start: 26 @59346 has 114 MA's), (39, 59421), (63, 59607), (66, 59622),

Gene: Cain_102 Start: 60455, Stop: 60763, Start Num: 24
Candidate Starts for Cain_102:
(Start: 24 @60455 has 48 MA's), (39, 60530), (66, 60737),

Gene: CallaLilly_96 Start: 59270, Stop: 59572, Start Num: 26
Candidate Starts for CallaLilly_96:
(21, 59249), (Start: 26 @59270 has 114 MA's), (39, 59345), (63, 59531), (66, 59546),

Gene: Cambiare_66 Start: 44472, Stop: 44798, Start Num: 16
Candidate Starts for Cambiare_66:
(Start: 16 @44472 has 84 MA's), (34, 44526), (43, 44646),

Gene: Camri_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Camri_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Capricorn_97 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Capricorn_97:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: CaseJules_100 Start: 59544, Stop: 59846, Start Num: 26
Candidate Starts for CaseJules_100:
(21, 59523), (Start: 26 @59544 has 114 MA's), (39, 59619), (63, 59805), (66, 59820),

Gene: CassieYates_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for CassieYates_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Cedasite_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Cedasite_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Cerasum_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Cerasum_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Chance64_62 Start: 41127, Stop: 41453, Start Num: 16
Candidate Starts for Chance64_62:
(Start: 16 @41127 has 84 MA's), (47, 41322), (57, 41400),

Gene: Chancellor_94 Start: 56785, Stop: 57090, Start Num: 25
Candidate Starts for Chancellor_94:
(Start: 25 @56785 has 23 MA's), (66, 57064),

Gene: CheetoDust_96 Start: 58941, Stop: 59243, Start Num: 26
Candidate Starts for CheetoDust_96:
(21, 58920), (Start: 26 @58941 has 114 MA's), (39, 59016), (63, 59202), (66, 59217),

Gene: Cheetobro_92 Start: 56341, Stop: 56646, Start Num: 25
Candidate Starts for Cheetobro_92:
(Start: 25 @56341 has 23 MA's), (66, 56620),

Gene: Cherrybomb426_61 Start: 40680, Stop: 41006, Start Num: 16
Candidate Starts for Cherrybomb426_61:
(Start: 16 @40680 has 84 MA's), (47, 40875), (57, 40953),

Gene: Chris_101 Start: 61722, Stop: 62015, Start Num: 24
Candidate Starts for Chris_101:
(Start: 24 @61722 has 48 MA's), (53, 61914), (54, 61923), (62, 61971), (68, 62001),

Gene: Clipper_100 Start: 60197, Stop: 60499, Start Num: 26
Candidate Starts for Clipper_100:
(Start: 26 @60197 has 114 MA's), (39, 60272), (63, 60458), (66, 60473),

Gene: Cloudyecho_65 Start: 44342, Stop: 44665, Start Num: 16
Candidate Starts for Cloudyecho_65:
(Start: 16 @44342 has 84 MA's), (34, 44393), (44, 44516), (46, 44528), (67, 44651),

Gene: Coco12_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Coco12_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Coleslaw_61 Start: 41117, Stop: 41443, Start Num: 16
Candidate Starts for Coleslaw_61:
(Start: 16 @41117 has 84 MA's), (47, 41312), (57, 41390),

Gene: Collard_95 Start: 60975, Stop: 61280, Start Num: 24
Candidate Starts for Collard_95:
(Start: 24 @60975 has 48 MA's), (47, 61143),

Gene: Crespo_61 Start: 41126, Stop: 41452, Start Num: 16
Candidate Starts for Crespo_61:
(Start: 16 @41126 has 84 MA's), (47, 41321), (57, 41399),

Gene: CrimD_96 Start: 59439, Stop: 59741, Start Num: 26
Candidate Starts for CrimD_96:
(21, 59418), (Start: 26 @59439 has 114 MA's), (39, 59514), (63, 59700), (66, 59715),

Gene: Curiosium_104 Start: 60864, Stop: 61154, Start Num: 27
Candidate Starts for Curiosium_104:
(Start: 27 @60864 has 20 MA's),

Gene: DMoney_61 Start: 41104, Stop: 41430, Start Num: 16
Candidate Starts for DMoney_61:
(Start: 16 @41104 has 84 MA's), (47, 41299), (57, 41377),

Gene: DNAIII_0059 Start: 38754, Stop: 39080, Start Num: 16
Candidate Starts for DNAIII_0059:
(Start: 16 @38754 has 84 MA's), (47, 38949), (57, 39027),

Gene: DaWorst_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for DaWorst_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Dadosky_100 Start: 61693, Stop: 61998, Start Num: 24
Candidate Starts for Dadosky_100:

(Start: 24 @61693 has 48 MA's), (42, 61831),

Gene: Dalmuri_97 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Dalmuri_97:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: DanSyl44_97 Start: 58171, Stop: 58476, Start Num: 25
Candidate Starts for DanSyl44_97:
(Start: 25 @58171 has 23 MA's), (66, 58450),

Gene: Darionha_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Darionha_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: DartGoblin_97 Start: 60040, Stop: 60342, Start Num: 26
Candidate Starts for DartGoblin_97:
(21, 60019), (Start: 26 @60040 has 114 MA's), (39, 60115), (63, 60301), (66, 60316),

Gene: DarthP_95 Start: 61234, Stop: 61530, Start Num: 26
Candidate Starts for DarthP_95:
(Start: 26 @61234 has 114 MA's), (35, 61282), (39, 61309), (58, 61468), (64, 61495),

Gene: Dartin_98 Start: 61054, Stop: 61341, Start Num: 26
Candidate Starts for Dartin_98:
(2, 60727), (11, 60991), (Start: 26 @61054 has 114 MA's), (39, 61129), (53, 61246), (60, 61291), (68, 61327),

Gene: Deby_96 Start: 60102, Stop: 60404, Start Num: 26
Candidate Starts for Deby_96:
(21, 60081), (Start: 26 @60102 has 114 MA's), (39, 60177), (63, 60363), (66, 60378),

Gene: Devera_103 Start: 60259, Stop: 60561, Start Num: 26
Candidate Starts for Devera_103:
(21, 60238), (Start: 26 @60259 has 114 MA's), (36, 60310), (39, 60334), (63, 60520), (66, 60535),

Gene: DingDing_63 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for DingDing_63:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: DirtMcgirt_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for DirtMcgirt_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: DismalFunk_94 Start: 57690, Stop: 57968, Start Num: 26
Candidate Starts for DismalFunk_94:
(Start: 24 @57687 has 48 MA's), (Start: 26 @57690 has 114 MA's), (47, 57840), (66, 57948),

Gene: DismalStressor_94 Start: 57690, Stop: 57968, Start Num: 26
Candidate Starts for DismalStressor_94:
(Start: 24 @57687 has 48 MA's), (Start: 26 @57690 has 114 MA's), (47, 57840), (66, 57948),

Gene: Dole_99 Start: 60262, Stop: 60564, Start Num: 26

Candidate Starts for Dole_99:
(21, 60241), (Start: 26 @60262 has 114 MA's), (36, 60313), (39, 60337), (63, 60523), (66, 60538),

Gene: DosHalletts_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for DosHalletts_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: DoubleChamp_96 Start: 60975, Stop: 61280, Start Num: 24
Candidate Starts for DoubleChamp_96:
(Start: 24 @60975 has 48 MA's), (47, 61143),

Gene: Doughnut_95 Start: 57819, Stop: 58100, Start Num: 24
Candidate Starts for Doughnut_95:
(Start: 24 @57819 has 48 MA's), (Start: 26 @57822 has 114 MA's), (66, 58080),

Gene: DrHayes_98 Start: 60168, Stop: 60470, Start Num: 26
Candidate Starts for DrHayes_98:
(21, 60147), (Start: 26 @60168 has 114 MA's), (39, 60243), (63, 60429), (66, 60444),

Gene: Drago_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Drago_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Durfee_97 Start: 59544, Stop: 59846, Start Num: 26
Candidate Starts for Durfee_97:
(21, 59523), (Start: 26 @59544 has 114 MA's), (39, 59619), (63, 59805), (66, 59820),

Gene: ECartman_60 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for ECartman_60:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Edugator_92 Start: 62924, Stop: 63229, Start Num: 24
Candidate Starts for Edugator_92:
(Start: 24 @62924 has 48 MA's), (42, 63062), (47, 63092),

Gene: Efra2_104 Start: 60929, Stop: 61216, Start Num: 26
Candidate Starts for Efra2_104:
(Start: 26 @60929 has 114 MA's), (60, 61166), (64, 61181), (65, 61184),

Gene: Ekdilam_92 Start: 61413, Stop: 61709, Start Num: 26
Candidate Starts for Ekdilam_92:
(3, 61107), (Start: 26 @61413 has 114 MA's), (35, 61461), (39, 61488), (58, 61647), (64, 61674),

Gene: Ellie_96 Start: 61595, Stop: 61885, Start Num: 26
Candidate Starts for Ellie_96:
(Start: 26 @61595 has 114 MA's), (39, 61670), (59, 61832),

Gene: Emerson_101 Start: 59949, Stop: 60251, Start Num: 26
Candidate Starts for Emerson_101:
(21, 59928), (Start: 26 @59949 has 114 MA's), (39, 60024), (63, 60210), (66, 60225),

Gene: Enby_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Enby_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Enkosi_79 Start: 58687, Stop: 58992, Start Num: 27
Candidate Starts for Enkosi_79:
(6, 58555), (Start: 27 @58687 has 20 MA's), (39, 58762), (42, 58807), (63, 58951), (64, 58957), (66, 58966),

Gene: Eponine_96 Start: 57765, Stop: 58070, Start Num: 25
Candidate Starts for Eponine_96:
(Start: 25 @57765 has 23 MA's), (40, 57870), (66, 58044),

Gene: Fefferhead_98 Start: 61016, Stop: 61306, Start Num: 26
Candidate Starts for Fefferhead_98:
(Start: 26 @61016 has 114 MA's), (39, 61091), (59, 61253),

Gene: Feyre_98 Start: 63125, Stop: 63430, Start Num: 24
Candidate Starts for Feyre_98:
(Start: 24 @63125 has 48 MA's),

Gene: Findley_94 Start: 57711, Stop: 57989, Start Num: 26
Candidate Starts for Findley_94:
(Start: 24 @57708 has 48 MA's), (Start: 26 @57711 has 114 MA's), (47, 57861), (66, 57969),

Gene: Fionnbharth_94 Start: 57163, Stop: 57468, Start Num: 25
Candidate Starts for Fionnbharth_94:
(Start: 25 @57163 has 23 MA's), (40, 57268), (66, 57442),

Gene: FlagStaff_64 Start: 43887, Stop: 44213, Start Num: 16
Candidate Starts for FlagStaff_64:
(Start: 16 @43887 has 84 MA's), (34, 43941), (43, 44061),

Gene: Frosty24_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Frosty24_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Ganymede_96 Start: 59358, Stop: 59660, Start Num: 26
Candidate Starts for Ganymede_96:
(21, 59337), (Start: 26 @59358 has 114 MA's), (39, 59433), (63, 59619), (66, 59634),

Gene: Gengar_96 Start: 61193, Stop: 61498, Start Num: 24
Candidate Starts for Gengar_96:
(Start: 24 @61193 has 48 MA's),

Gene: Geraldini_97 Start: 59457, Stop: 59759, Start Num: 26
Candidate Starts for Geraldini_97:
(21, 59436), (Start: 26 @59457 has 114 MA's), (39, 59532), (63, 59718), (66, 59733),

Gene: Gideon_62 Start: 41127, Stop: 41453, Start Num: 16
Candidate Starts for Gideon_62:
(Start: 16 @41127 has 84 MA's), (47, 41322), (57, 41400),

Gene: GodSpeed_61 Start: 43389, Stop: 43715, Start Num: 16
Candidate Starts for GodSpeed_61:
(Start: 16 @43389 has 84 MA's), (34, 43443), (43, 43563), (47, 43584), (57, 43662),

Gene: GoldenAsh_60 Start: 40665, Stop: 40991, Start Num: 16
Candidate Starts for GoldenAsh_60:
(Start: 16 @40665 has 84 MA's), (47, 40860), (57, 40938),

Gene: Gomashi_61 Start: 41127, Stop: 41453, Start Num: 16
Candidate Starts for Gomashi_61:
(Start: 16 @41127 has 84 MA's), (47, 41322), (57, 41400),

Gene: Grizzly_61 Start: 40976, Stop: 41302, Start Num: 16
Candidate Starts for Grizzly_61:
(Start: 16 @40976 has 84 MA's), (47, 41171), (57, 41249),

Gene: Guanica15_103 Start: 60618, Stop: 60905, Start Num: 26
Candidate Starts for Guanica15_103:
(Start: 26 @60618 has 114 MA's), (60, 60855), (64, 60870), (65, 60873),

Gene: Guillsminger_96 Start: 62720, Stop: 63025, Start Num: 24
Candidate Starts for Guillsminger_96:
(Start: 24 @62720 has 48 MA's),

Gene: Halo_63 Start: 41673, Stop: 41999, Start Num: 16
Candidate Starts for Halo_63:
(Start: 16 @41673 has 84 MA's), (47, 41868), (57, 41946),

Gene: Hammy_95 Start: 61452, Stop: 61748, Start Num: 26
Candidate Starts for Hammy_95:
(Start: 26 @61452 has 114 MA's), (35, 61500), (39, 61527), (58, 61686), (64, 61713),

Gene: HedwigODU_96 Start: 59451, Stop: 59753, Start Num: 26
Candidate Starts for HedwigODU_96:
(21, 59430), (Start: 26 @59451 has 114 MA's), (39, 59526), (63, 59712), (66, 59727),

Gene: Heftyboy_96 Start: 61535, Stop: 61840, Start Num: 24
Candidate Starts for Heftyboy_96:
(Start: 24 @61535 has 48 MA's),

Gene: Homura_95 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Homura_95:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: Hope_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Hope_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Hotshotbaby7_62 Start: 41127, Stop: 41453, Start Num: 16
Candidate Starts for Hotshotbaby7_62:
(Start: 16 @41127 has 84 MA's), (47, 41322), (57, 41400),

Gene: Hurricane_98 Start: 60965, Stop: 61252, Start Num: 27
Candidate Starts for Hurricane_98:
(13, 60923), (18, 60938), (Start: 27 @60965 has 20 MA's), (61, 61202), (66, 61226),

Gene: Hyperbowlee_95 Start: 59544, Stop: 59846, Start Num: 26
Candidate Starts for Hyperbowlee_95:
(21, 59523), (Start: 26 @59544 has 114 MA's), (39, 59619), (63, 59805), (66, 59820),

Gene: IdentityCrisis_61 Start: 37798, Stop: 38148, Start Num: 14
Candidate Starts for IdentityCrisis_61:
(Start: 14 @37798 has 1 MA's),

Gene: Illumine_100 Start: 60261, Stop: 60563, Start Num: 26
Candidate Starts for Illumine_100:
(21, 60240), (Start: 26 @60261 has 114 MA's), (36, 60312), (39, 60336), (63, 60522), (66, 60537),

Gene: InLimbo_72 Start: 41229, Stop: 41534, Start Num: 31
Candidate Starts for InLimbo_72:
(10, 41133), (Start: 31 @41229 has 2 MA's), (53, 41439),

Gene: Inky_96 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Inky_96:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: InvictusManeo_97 Start: 60727, Stop: 61032, Start Num: 24
Candidate Starts for InvictusManeo_97:
(Start: 24 @60727 has 48 MA's), (47, 60895),

Gene: JAWS_95 Start: 59388, Stop: 59690, Start Num: 26
Candidate Starts for JAWS_95:
(21, 59367), (Start: 26 @59388 has 114 MA's), (39, 59463), (63, 59649), (66, 59664),

Gene: JF1_94 Start: 57078, Stop: 57383, Start Num: 25
Candidate Starts for JF1_94:
(Start: 25 @57078 has 23 MA's), (40, 57183), (66, 57357),

Gene: JalFarm20_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for JalFarm20_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Jane_63 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Jane_63:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Jarvi_96 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Jarvi_96:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: Jayhawk_100 Start: 59371, Stop: 59673, Start Num: 26
Candidate Starts for Jayhawk_100:
(21, 59350), (Start: 26 @59371 has 114 MA's), (39, 59446), (63, 59632), (66, 59647),

Gene: Jeckyll_97 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Jeckyll_97:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: Jeilious_62 Start: 41124, Stop: 41450, Start Num: 16
Candidate Starts for Jeilious_62:
(Start: 16 @41124 has 84 MA's), (47, 41319), (57, 41397),

Gene: Jolene_62 Start: 41529, Stop: 41855, Start Num: 16
Candidate Starts for Jolene_62:
(Start: 16 @41529 has 84 MA's), (47, 41724), (57, 41802),

Gene: Jolie2_61 Start: 43385, Stop: 43714, Start Num: 16
Candidate Starts for Jolie2_61:
(Start: 16 @43385 has 84 MA's), (45, 43568), (57, 43655),

Gene: Jonghyun_60 Start: 41128, Stop: 41454, Start Num: 16
Candidate Starts for Jonghyun_60:
(Start: 16 @41128 has 84 MA's), (47, 41323), (57, 41401),

Gene: JorRay_63 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for JorRay_63:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Joy99_98 Start: 59476, Stop: 59778, Start Num: 26
Candidate Starts for Joy99_98:
(21, 59455), (Start: 26 @59476 has 114 MA's), (39, 59551), (63, 59737), (66, 59752),

Gene: Juliette_96 Start: 57159, Stop: 57464, Start Num: 25
Candidate Starts for Juliette_96:
(Start: 25 @57159 has 23 MA's), (40, 57264), (66, 57438),

Gene: Kareem_63 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Kareem_63:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Kasen3_63 Start: 41114, Stop: 41440, Start Num: 16
Candidate Starts for Kasen3_63:
(Start: 16 @41114 has 84 MA's), (47, 41309), (57, 41387),

Gene: Keshu_101 Start: 60898, Stop: 61185, Start Num: 27
Candidate Starts for Keshu_101:
(7, 60787), (8, 60811), (13, 60856), (18, 60871), (Start: 27 @60898 has 20 MA's), (61, 61135), (66, 61159),

Gene: KiSi_104 Start: 62208, Stop: 62504, Start Num: 24
Candidate Starts for KiSi_104:
(Start: 24 @62208 has 48 MA's), (53, 62400), (54, 62409),

Gene: Kingsley_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Kingsley_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Kratio_100 Start: 62318, Stop: 62623, Start Num: 24
Candidate Starts for Kratio_100:
(Start: 24 @62318 has 48 MA's), (47, 62486),

Gene: Kraw_94 Start: 56894, Stop: 57199, Start Num: 25
Candidate Starts for Kraw_94:
(Start: 25 @56894 has 23 MA's), (40, 56999), (66, 57173),

Gene: Krueger_101 Start: 59962, Stop: 60270, Start Num: 24
Candidate Starts for Krueger_101:
(Start: 24 @59962 has 48 MA's), (39, 60037), (66, 60244),

Gene: Larva_98 Start: 62571, Stop: 62876, Start Num: 24
Candidate Starts for Larva_98:
(Start: 24 @62571 has 48 MA's), (42, 62709),

Gene: LastHope_103 Start: 60575, Stop: 60865, Start Num: 27
Candidate Starts for LastHope_103:
(Start: 27 @60575 has 20 MA's), (51, 60758),

Gene: LaterM_96 Start: 59784, Stop: 60086, Start Num: 26
Candidate Starts for LaterM_96:
(21, 59763), (Start: 26 @59784 has 114 MA's), (36, 59835), (39, 59859), (63, 60045), (66, 60060),

Gene: Lavahound_96 Start: 62017, Stop: 62307, Start Num: 26
Candidate Starts for Lavahound_96:
(Start: 26 @62017 has 114 MA's), (39, 62092), (59, 62254),

Gene: LeMond_103 Start: 62165, Stop: 62461, Start Num: 24
Candidate Starts for LeMond_103:
(Start: 24 @62165 has 48 MA's), (53, 62357), (54, 62366),

Gene: Lea83_98 Start: 60751, Stop: 61038, Start Num: 27
Candidate Starts for Lea83_98:
(7, 60640), (13, 60709), (18, 60724), (Start: 27 @60751 has 20 MA's), (61, 60988), (66, 61012),

Gene: Lebo14_93 Start: 57318, Stop: 57623, Start Num: 25
Candidate Starts for Lebo14_93:
(Start: 25 @57318 has 23 MA's), (66, 57597),

Gene: Lemuria_64 Start: 44074, Stop: 44403, Start Num: 16
Candidate Starts for Lemuria_64:
(Start: 16 @44074 has 84 MA's), (45, 44257), (50, 44287), (57, 44344),

Gene: Leozinho_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Leozinho_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Leston_95 Start: 61375, Stop: 61680, Start Num: 24
Candidate Starts for Leston_95:
(Start: 24 @61375 has 48 MA's),

Gene: Liefie_59 Start: 40764, Stop: 41090, Start Num: 16
Candidate Starts for Liefie_59:
(Start: 16 @40764 has 84 MA's),

Gene: LilDirt_99 Start: 60776, Stop: 61081, Start Num: 24
Candidate Starts for LilDirt_99:
(Start: 24 @60776 has 48 MA's), (47, 60944),

Gene: LilPharaoh_78 Start: 55802, Stop: 56107, Start Num: 27
Candidate Starts for LilPharaoh_78:
(6, 55670), (Start: 27 @55802 has 20 MA's), (39, 55877), (42, 55922), (63, 56066), (64, 56072), (66, 56081),

Gene: LilSpotty_85 Start: 49411, Stop: 49689, Start Num: 32
Candidate Starts for LilSpotty_85:
(Start: 32 @49411 has 2 MA's), (64, 49663),

Gene: LindNT_94 Start: 59694, Stop: 59996, Start Num: 26
Candidate Starts for LindNT_94:
(21, 59673), (Start: 26 @59694 has 114 MA's), (39, 59769), (63, 59955), (66, 59970),

Gene: Llorens_96 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Llorens_96:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: Lorde_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Lorde_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: LouisV14_64 Start: 43369, Stop: 43695, Start Num: 16
Candidate Starts for LouisV14_64:
(Start: 16 @43369 has 84 MA's), (47, 43564), (57, 43642),

Gene: Lucia_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Lucia_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Lucky10_70 Start: 42595, Stop: 42897, Start Num: 33
Candidate Starts for Lucky10_70:
(10, 42496), (Start: 33 @42595 has 1 MA's), (53, 42802),

Gene: Lunahalos_96 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Lunahalos_96:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: MOOREtheMARYer_66 Start: 43647, Stop: 43973, Start Num: 16
Candidate Starts for MOOREtheMARYer_66:
(Start: 16 @43647 has 84 MA's), (34, 43701), (43, 43821), (44, 43824),

Gene: MZKinsey_63 Start: 41125, Stop: 41451, Start Num: 16

Candidate Starts for MZKinsey_63:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: MacKat_92 Start: 55081, Stop: 55383, Start Num: 26
Candidate Starts for MacKat_92:
(Start: 26 @55081 has 114 MA's), (39, 55156), (63, 55342), (66, 55357),

Gene: MacnCheese_99 Start: 61214, Stop: 61501, Start Num: 27
Candidate Starts for MacnCheese_99:
(9, 61130), (13, 61172), (18, 61187), (Start: 27 @61214 has 20 MA's),

Gene: Madiba_1 Start: 40, Stop: 372, Start Num: 28
Candidate Starts for Madiba_1:
(17, 7), (20, 13), (Start: 28 @40 has 4 MA's), (38, 118), (49, 235), (55, 283), (63, 337), (66, 352),

Gene: Maliketh_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Maliketh_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Malthus_95 Start: 56888, Stop: 57193, Start Num: 25
Candidate Starts for Malthus_95:
(Start: 25 @56888 has 23 MA's), (40, 56993), (66, 57167),

Gene: Marcoliusprime_92 Start: 57690, Stop: 57968, Start Num: 26
Candidate Starts for Marcoliusprime_92:
(Start: 24 @57687 has 48 MA's), (Start: 26 @57690 has 114 MA's), (47, 57840), (66, 57948),

Gene: MarkPhew_103 Start: 61805, Stop: 62098, Start Num: 24
Candidate Starts for MarkPhew_103:
(Start: 24 @61805 has 48 MA's), (39, 61880), (54, 62006), (68, 62084),

Gene: Marker_1 Start: 40, Stop: 372, Start Num: 28
Candidate Starts for Marker_1:
(17, 7), (20, 13), (Start: 28 @40 has 4 MA's), (38, 118), (46, 211), (49, 235), (55, 283), (63, 337), (66, 352),

Gene: Marmie_62 Start: 41126, Stop: 41452, Start Num: 16
Candidate Starts for Marmie_62:
(Start: 16 @41126 has 84 MA's), (47, 41321), (57, 41399),

Gene: Marshawn_96 Start: 61097, Stop: 61411, Start Num: 26
Candidate Starts for Marshawn_96:
(Start: 26 @61097 has 114 MA's), (39, 61172), (65, 61379), (66, 61385),

Gene: McMater_98 Start: 61054, Stop: 61341, Start Num: 26
Candidate Starts for McMater_98:
(2, 60727), (11, 60991), (Start: 26 @61054 has 114 MA's), (39, 61129), (53, 61246), (60, 61291), (68, 61327),

Gene: Mdavu_78 Start: 56078, Stop: 56383, Start Num: 27
Candidate Starts for Mdavu_78:
(6, 55946), (Start: 27 @56078 has 20 MA's), (39, 56153), (42, 56198), (63, 56342), (64, 56348), (66, 56357),

Gene: MeaningOfLife_98 Start: 60071, Stop: 60373, Start Num: 26
Candidate Starts for MeaningOfLife_98:
(21, 60050), (Start: 26 @60071 has 114 MA's), (39, 60146), (63, 60332), (66, 60347),

Gene: Megsy_102 Start: 59832, Stop: 60134, Start Num: 26
Candidate Starts for Megsy_102:
(21, 59811), (Start: 26 @59832 has 114 MA's), (39, 59907), (63, 60093), (66, 60108),

Gene: Mercurio_63 Start: 43953, Stop: 44282, Start Num: 16
Candidate Starts for Mercurio_63:
(Start: 16 @43953 has 84 MA's), (45, 44136), (57, 44223),

Gene: Milly_94 Start: 57772, Stop: 58050, Start Num: 26
Candidate Starts for Milly_94:
(Start: 24 @57769 has 48 MA's), (Start: 26 @57772 has 114 MA's), (47, 57922), (66, 58030),

Gene: Miryou_98 Start: 62747, Stop: 63052, Start Num: 24
Candidate Starts for Miryou_98:
(Start: 24 @62747 has 48 MA's),

Gene: MissDaisy_88 Start: 53576, Stop: 53857, Start Num: 25
Candidate Starts for MissDaisy_88:
(Start: 25 @53576 has 23 MA's), (65, 53825), (66, 53831),

Gene: Mitti_94 Start: 56983, Stop: 57288, Start Num: 25
Candidate Starts for Mitti_94:
(Start: 25 @56983 has 23 MA's), (66, 57262),

Gene: Morkie_74 Start: 41703, Stop: 42008, Start Num: 31
Candidate Starts for Morkie_74:
(10, 41607), (Start: 31 @41703 has 2 MA's), (53, 41913),

Gene: Mowgli_62 Start: 41126, Stop: 41452, Start Num: 16
Candidate Starts for Mowgli_62:
(Start: 16 @41126 has 84 MA's), (47, 41321), (57, 41399),

Gene: Mufasa_94 Start: 57627, Stop: 57905, Start Num: 26
Candidate Starts for Mufasa_94:
(Start: 24 @57624 has 48 MA's), (Start: 26 @57627 has 114 MA's), (66, 57885),

Gene: Murucutumbu_96 Start: 60249, Stop: 60551, Start Num: 26
Candidate Starts for Murucutumbu_96:
(21, 60228), (Start: 26 @60249 has 114 MA's), (36, 60300), (39, 60324), (63, 60510), (66, 60525),

Gene: Mynx_97 Start: 59694, Stop: 59996, Start Num: 26
Candidate Starts for Mynx_97:
(21, 59673), (Start: 26 @59694 has 114 MA's), (39, 59769), (63, 59955), (66, 59970),

Gene: Neighly_100 Start: 62570, Stop: 62875, Start Num: 24
Candidate Starts for Neighly_100:
(Start: 24 @62570 has 48 MA's), (42, 62708),

Gene: Neoh_62 Start: 41118, Stop: 41444, Start Num: 16
Candidate Starts for Neoh_62:
(Start: 16 @41118 has 84 MA's), (47, 41313), (57, 41391),

Gene: Nibb_103 Start: 61945, Stop: 62238, Start Num: 24
Candidate Starts for Nibb_103:
(Start: 24 @61945 has 48 MA's), (39, 62020), (54, 62146), (62, 62194),

Gene: Nikao_80 Start: 58687, Stop: 58992, Start Num: 27
Candidate Starts for Nikao_80:
(6, 58555), (Start: 27 @58687 has 20 MA's), (39, 58762), (42, 58807), (63, 58951), (64, 58957), (66, 58966),

Gene: Niklas_98 Start: 60655, Stop: 60942, Start Num: 26
Candidate Starts for Niklas_98:
(2, 60328), (11, 60592), (Start: 26 @60655 has 114 MA's), (39, 60730), (53, 60847), (60, 60892), (68, 60928),

Gene: Nolwazi_96 Start: 57120, Stop: 57425, Start Num: 25
Candidate Starts for Nolwazi_96:
(Start: 25 @57120 has 23 MA's), (66, 57399),

Gene: November_94 Start: 61155, Stop: 61454, Start Num: 26
Candidate Starts for November_94:
(Start: 26 @61155 has 114 MA's), (35, 61203), (39, 61230), (64, 61419),

Gene: Nutello_77 Start: 56074, Stop: 56379, Start Num: 27
Candidate Starts for Nutello_77:
(6, 55942), (Start: 27 @56074 has 20 MA's), (39, 56149), (42, 56194), (63, 56338), (64, 56344), (66, 56353),

Gene: OctaviousRex_61 Start: 41104, Stop: 41430, Start Num: 16
Candidate Starts for OctaviousRex_61:
(Start: 16 @41104 has 84 MA's), (47, 41299), (57, 41377),

Gene: OkiRoe_97 Start: 62228, Stop: 62533, Start Num: 24
Candidate Starts for OkiRoe_97:
(Start: 24 @62228 has 48 MA's),

Gene: Oksu_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Oksu_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (49, 236), (55, 284), (63, 338), (66, 353),

Gene: Olga_63 Start: 41126, Stop: 41452, Start Num: 16
Candidate Starts for Olga_63:
(Start: 16 @41126 has 84 MA's), (47, 41321), (57, 41399),

Gene: OmniCritical_94 Start: 57061, Stop: 57366, Start Num: 25
Candidate Starts for OmniCritical_94:
(Start: 25 @57061 has 23 MA's), (66, 57340),

Gene: Omnicron_96 Start: 61077, Stop: 61382, Start Num: 24

Candidate Starts for Omnicron_96:
(12, 61029), (Start: 24 @61077 has 48 MA's), (47, 61245),

Gene: Oscar_104 Start: 62087, Stop: 62383, Start Num: 24
Candidate Starts for Oscar_104:
(Start: 24 @62087 has 48 MA's), (53, 62279), (54, 62288),

Gene: OwlsT2W_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for OwlsT2W_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: P3MA_62 Start: 40389, Stop: 40811, Start Num: 5
Candidate Starts for P3MA_62:
(Start: 5 @40389 has 1 MA's), (Start: 14 @40497 has 1 MA's), (52, 40710), (66, 40788),

Gene: Padfoot_96 Start: 59544, Stop: 59846, Start Num: 26
Candidate Starts for Padfoot_96:
(21, 59523), (Start: 26 @59544 has 114 MA's), (39, 59619), (63, 59805), (66, 59820),

Gene: Padpat_101 Start: 59949, Stop: 60251, Start Num: 26
Candidate Starts for Padpat_101:
(21, 59928), (Start: 26 @59949 has 114 MA's), (39, 60024), (63, 60210), (66, 60225),

Gene: Paito_63 Start: 40764, Stop: 41090, Start Num: 16
Candidate Starts for Paito_63:
(Start: 16 @40764 has 84 MA's),

Gene: Paola_93 Start: 61102, Stop: 61407, Start Num: 24
Candidate Starts for Paola_93:
(Start: 24 @61102 has 48 MA's),

Gene: Patt_87 Start: 53723, Stop: 54004, Start Num: 25
Candidate Starts for Patt_87:
(Start: 25 @53723 has 23 MA's), (65, 53972), (66, 53978),

Gene: Peanam_99 Start: 60707, Stop: 60994, Start Num: 26
Candidate Starts for Peanam_99:
(2, 60395), (11, 60644), (Start: 26 @60707 has 114 MA's), (39, 60782), (53, 60899), (60, 60944), (68, 60980),

Gene: Peeb_61 Start: 41100, Stop: 41426, Start Num: 16
Candidate Starts for Peeb_61:
(Start: 16 @41100 has 84 MA's), (47, 41295), (57, 41373),

Gene: Peel_96 Start: 59350, Stop: 59652, Start Num: 26
Candidate Starts for Peel_96:
(21, 59329), (Start: 26 @59350 has 114 MA's), (39, 59425), (63, 59611), (66, 59626),

Gene: Peridot_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Peridot_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Periodt_62 Start: 41518, Stop: 41844, Start Num: 16
Candidate Starts for Periodt_62:
(Start: 16 @41518 has 84 MA's),

Gene: Pharb_97 Start: 60473, Stop: 60760, Start Num: 27
Candidate Starts for Pharb_97:
(1, 60098), (4, 60224), (7, 60362), (9, 60389), (15, 60437), (Start: 27 @60473 has 20 MA's), (35, 60521), (57, 60701),

Gene: PhelpsODU_92 Start: 56221, Stop: 56529, Start Num: 24
Candidate Starts for PhelpsODU_92:
(Start: 24 @56221 has 48 MA's), (39, 56296), (66, 56503),

Gene: Phish_61 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Phish_61:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Phloodle_63 Start: 41141, Stop: 41467, Start Num: 16
Candidate Starts for Phloodle_63:
(Start: 16 @41141 has 84 MA's), (47, 41336), (57, 41414),

Gene: PhorbesPhlower_72 Start: 41098, Stop: 41403, Start Num: 31
Candidate Starts for PhorbesPhlower_72:
(10, 41002), (Start: 31 @41098 has 2 MA's), (53, 41308),

Gene: Phrank_103 Start: 60753, Stop: 61058, Start Num: 24
Candidate Starts for Phrank_103:
(Start: 24 @60753 has 48 MA's), (39, 60828), (66, 61032),

Gene: Phreak_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Phreak_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Piatt_95 Start: 59544, Stop: 59846, Start Num: 26
Candidate Starts for Piatt_95:
(21, 59523), (Start: 26 @59544 has 114 MA's), (39, 59619), (63, 59805), (66, 59820),

Gene: PinkYoshi_62 Start: 41117, Stop: 41443, Start Num: 16
Candidate Starts for PinkYoshi_62:
(Start: 16 @41117 has 84 MA's), (47, 41312), (57, 41390),

Gene: Pinnie_65 Start: 44002, Stop: 44328, Start Num: 16
Candidate Starts for Pinnie_65:
(Start: 16 @44002 has 84 MA's), (34, 44056), (43, 44176), (44, 44179),

Gene: Pisa1_97 Start: 60084, Stop: 60386, Start Num: 26
Candidate Starts for Pisa1_97:
(21, 60063), (Start: 26 @60084 has 114 MA's), (39, 60159), (63, 60345), (66, 60360),

Gene: Pisa4_91 Start: 55453, Stop: 55755, Start Num: 26
Candidate Starts for Pisa4_91:
(21, 55432), (Start: 26 @55453 has 114 MA's), (39, 55528), (63, 55714), (66, 55729),

Gene: Pitbull_79 Start: 41146, Stop: 41412, Start Num: 32
Candidate Starts for Pitbull_79:
(Start: 32 @41146 has 2 MA's), (42, 41263), (56, 41371),

Gene: Pixie_100 Start: 60794, Stop: 61081, Start Num: 27
Candidate Starts for Pixie_100:
(7, 60683), (13, 60752), (18, 60767), (Start: 27 @60794 has 20 MA's), (61, 61031), (66, 61055),

Gene: Plagueis_62 Start: 40946, Stop: 41272, Start Num: 16
Candidate Starts for Plagueis_62:
(Start: 16 @40946 has 84 MA's), (47, 41141), (57, 41219),

Gene: Pokerus_96 Start: 59414, Stop: 59716, Start Num: 26
Candidate Starts for Pokerus_96:
(21, 59393), (Start: 26 @59414 has 114 MA's), (39, 59489), (63, 59675), (66, 59690),

Gene: Pollywog_1 Start: 40, Stop: 372, Start Num: 28
Candidate Starts for Pollywog_1:
(17, 7), (20, 13), (Start: 28 @40 has 4 MA's), (38, 118), (49, 235), (55, 283), (63, 337), (66, 352),

Gene: Primanti_61 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Primanti_61:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Prithvi_98 Start: 59952, Stop: 60254, Start Num: 26
Candidate Starts for Prithvi_98:
(21, 59931), (Start: 26 @59952 has 114 MA's), (39, 60027), (63, 60213), (66, 60228),

Gene: Psycho_98 Start: 61690, Stop: 61995, Start Num: 24
Candidate Starts for Psycho_98:
(Start: 24 @61690 has 48 MA's), (42, 61828),

Gene: Qhanda_94 Start: 56341, Stop: 56646, Start Num: 25
Candidate Starts for Qhanda_94:
(Start: 25 @56341 has 23 MA's), (66, 56620),

Gene: QuincyRose_94 Start: 59358, Stop: 59660, Start Num: 26
Candidate Starts for QuincyRose_94:
(21, 59337), (Start: 26 @59358 has 114 MA's), (39, 59433), (63, 59619), (66, 59634),

Gene: Rabbs_63 Start: 41200, Stop: 41526, Start Num: 16
Candidate Starts for Rabbs_63:
(Start: 16 @41200 has 84 MA's), (57, 41473),

Gene: Ramen_97 Start: 59101, Stop: 59403, Start Num: 26
Candidate Starts for Ramen_97:
(21, 59080), (Start: 26 @59101 has 114 MA's), (39, 59176), (63, 59362), (66, 59377),

Gene: Ramsey_1 Start: 11, Stop: 373, Start Num: 19
Candidate Starts for Ramsey_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Rando14_92 Start: 59491, Stop: 59796, Start Num: 24
Candidate Starts for Rando14_92:
(12, 59443), (Start: 24 @59491 has 48 MA's), (47, 59659),

Gene: Rapunzel97_99 Start: 59326, Stop: 59628, Start Num: 26
Candidate Starts for Rapunzel97_99:
(21, 59305), (Start: 26 @59326 has 114 MA's), (39, 59401), (63, 59587), (66, 59602),

Gene: Rattrick_62 Start: 41518, Stop: 41844, Start Num: 16
Candidate Starts for Rattrick_62:
(Start: 16 @41518 has 84 MA's),

Gene: Remy19_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Remy19_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Renaissance_61 Start: 41103, Stop: 41429, Start Num: 16
Candidate Starts for Renaissance_61:
(Start: 16 @41103 has 84 MA's), (47, 41298), (57, 41376),

Gene: Reptar3000_88 Start: 53713, Stop: 53994, Start Num: 25
Candidate Starts for Reptar3000_88:
(Start: 25 @53713 has 23 MA's), (65, 53962), (66, 53968),

Gene: Richarlison_63 Start: 41110, Stop: 41436, Start Num: 16
Candidate Starts for Richarlison_63:
(Start: 16 @41110 has 84 MA's), (47, 41305), (57, 41383),

Gene: Richo_98 Start: 61054, Stop: 61341, Start Num: 26
Candidate Starts for Richo_98:
(2, 60727), (11, 60991), (Start: 26 @61054 has 114 MA's), (39, 61129), (53, 61246), (60, 61291), (68, 61327),

Gene: RockyHorror_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for RockyHorror_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Rosmarinus_97 Start: 59335, Stop: 59637, Start Num: 26
Candidate Starts for Rosmarinus_97:
(21, 59314), (Start: 26 @59335 has 114 MA's), (39, 59410), (63, 59596), (66, 59611),

Gene: Ruriko_62 Start: 41127, Stop: 41453, Start Num: 16
Candidate Starts for Ruriko_62:
(Start: 16 @41127 has 84 MA's), (47, 41322), (57, 41400),

Gene: Ruthiejr_96 Start: 56946, Stop: 57251, Start Num: 25
Candidate Starts for Ruthiejr_96:
(Start: 25 @56946 has 23 MA's), (40, 57051), (66, 57225),

Gene: SamScheppers_93 Start: 57439, Stop: 57744, Start Num: 25
Candidate Starts for SamScheppers_93:

(Start: 25 @57439 has 23 MA's), (66, 57718),

Gene: SamuelLPlaqson_98 Start: 60168, Stop: 60470, Start Num: 26
Candidate Starts for SamuelLPlaqson_98:
(21, 60147), (Start: 26 @60168 has 114 MA's), (39, 60243), (63, 60429), (66, 60444),

Gene: Sarma624_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Sarma624_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Scarlett_103 Start: 61956, Stop: 62252, Start Num: 24
Candidate Starts for Scarlett_103:
(Start: 24 @61956 has 48 MA's), (53, 62148), (54, 62157),

Gene: Schiebel_60 Start: 40665, Stop: 40991, Start Num: 16
Candidate Starts for Schiebel_60:
(Start: 16 @40665 has 84 MA's), (47, 40860), (57, 40938),

Gene: SgtBeansprout_78 Start: 56074, Stop: 56379, Start Num: 27
Candidate Starts for SgtBeansprout_78:
(6, 55942), (Start: 27 @56074 has 20 MA's), (39, 56149), (42, 56194), (63, 56338), (64, 56344), (66, 56353),

Gene: ShaboiShabazz_61 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for ShaboiShabazz_61:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: Shadow1_100 Start: 60099, Stop: 60404, Start Num: 24
Candidate Starts for Shadow1_100:
(Start: 24 @60099 has 48 MA's), (39, 60174), (66, 60378),

Gene: Shaobing_96 Start: 60696, Stop: 60983, Start Num: 26
Candidate Starts for Shaobing_96:
(2, 60369), (11, 60633), (Start: 26 @60696 has 114 MA's), (39, 60771), (53, 60888), (60, 60933), (68, 60969),

Gene: ShedlockHolmes_100 Start: 60729, Stop: 61016, Start Num: 27
Candidate Starts for ShedlockHolmes_100:
(7, 60618), (13, 60687), (18, 60702), (Start: 27 @60729 has 20 MA's), (61, 60966), (66, 60990),

Gene: ShiaSurprise_99 Start: 59544, Stop: 59846, Start Num: 26
Candidate Starts for ShiaSurprise_99:
(21, 59523), (Start: 26 @59544 has 114 MA's), (39, 59619), (63, 59805), (66, 59820),

Gene: SirPhilip_98 Start: 61540, Stop: 61833, Start Num: 24
Candidate Starts for SirPhilip_98:
(Start: 24 @61540 has 48 MA's), (39, 61615),

Gene: Sizemore_63 Start: 41114, Stop: 41440, Start Num: 16
Candidate Starts for Sizemore_63:
(Start: 16 @41114 has 84 MA's), (47, 41309), (57, 41387),

Gene: Slarp_92 Start: 56344, Stop: 56649, Start Num: 25
Candidate Starts for Slarp_92:
(Start: 25 @56344 has 23 MA's), (66, 56623),

Gene: Sleepyhead_67 Start: 43516, Stop: 43788, Start Num: 30
Candidate Starts for Sleepyhead_67:
(Start: 30 @43516 has 1 MA's), (Start: 32 @43522 has 2 MA's),

Gene: Slimphazie_99 Start: 59782, Stop: 60084, Start Num: 26
Candidate Starts for Slimphazie_99:
(21, 59761), (Start: 26 @59782 has 114 MA's), (39, 59857), (63, 60043), (66, 60058),

Gene: Sneeze_62 Start: 41199, Stop: 41525, Start Num: 16
Candidate Starts for Sneeze_62:
(Start: 16 @41199 has 84 MA's), (57, 41472),

Gene: SoSeph_96 Start: 61535, Stop: 61840, Start Num: 24
Candidate Starts for SoSeph_96:
(Start: 24 @61535 has 48 MA's),

Gene: Spikelee_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Spikelee_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Spock_96 Start: 59348, Stop: 59650, Start Num: 26
Candidate Starts for Spock_96:
(21, 59327), (Start: 26 @59348 has 114 MA's), (39, 59423), (63, 59609), (66, 59624),

Gene: Stap_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Stap_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Stargaze_65 Start: 44492, Stop: 44815, Start Num: 16
Candidate Starts for Stargaze_65:
(Start: 16 @44492 has 84 MA's), (34, 44543), (43, 44663),

Gene: Stinson_97 Start: 59559, Stop: 59861, Start Num: 26
Candidate Starts for Stinson_97:
(21, 59538), (Start: 26 @59559 has 114 MA's), (36, 59610), (39, 59634), (63, 59820), (66, 59835),

Gene: Strobilo_95 Start: 57688, Stop: 57966, Start Num: 26
Candidate Starts for Strobilo_95:
(Start: 24 @57685 has 48 MA's), (Start: 26 @57688 has 114 MA's), (47, 57838), (66, 57946),

Gene: Sulley_95 Start: 59512, Stop: 59814, Start Num: 26
Candidate Starts for Sulley_95:
(21, 59491), (Start: 26 @59512 has 114 MA's), (39, 59587), (63, 59773), (66, 59788),

Gene: Sunflower1121_100 Start: 59857, Stop: 60162, Start Num: 24
Candidate Starts for Sunflower1121_100:
(Start: 24 @59857 has 48 MA's), (39, 59932), (66, 60136),

Gene: Sweets_62 Start: 41120, Stop: 41446, Start Num: 16
Candidate Starts for Sweets_62:
(Start: 16 @41120 has 84 MA's), (47, 41315), (57, 41393),

Gene: Syra333_99 Start: 59939, Stop: 60244, Start Num: 24
Candidate Starts for Syra333_99:
(Start: 24 @59939 has 48 MA's), (39, 60014), (66, 60218),

Gene: TBond007_97 Start: 60792, Stop: 61079, Start Num: 27
Candidate Starts for TBond007_97:
(7, 60681), (13, 60750), (18, 60765), (Start: 27 @60792 has 20 MA's), (61, 61029), (66, 61053),

Gene: TClif_100 Start: 61109, Stop: 61408, Start Num: 24
Candidate Starts for TClif_100:
(Start: 24 @61109 has 48 MA's), (37, 61175), (53, 61301), (60, 61349), (66, 61382),

Gene: TM4_92 Start: 52356, Stop: 52637, Start Num: 24
Candidate Starts for TM4_92:
(Start: 24 @52356 has 48 MA's), (Start: 26 @52359 has 114 MA's), (47, 52509), (48, 52515), (66, 52617),

Gene: Tachez_97 Start: 59195, Stop: 59497, Start Num: 26
Candidate Starts for Tachez_97:
(21, 59174), (Start: 26 @59195 has 114 MA's), (39, 59270), (63, 59456), (66, 59471),

Gene: Taheera_58 Start: 40097, Stop: 40423, Start Num: 16
Candidate Starts for Taheera_58:
(Start: 16 @40097 has 84 MA's), (60, 40382),

Gene: TaiwanKao_98 Start: 59607, Stop: 59909, Start Num: 26
Candidate Starts for TaiwanKao_98:
(21, 59586), (Start: 26 @59607 has 114 MA's), (39, 59682), (63, 59868), (66, 59883),

Gene: Taquito_94 Start: 57502, Stop: 57783, Start Num: 25
Candidate Starts for Taquito_94:
(Start: 25 @57502 has 23 MA's), (66, 57757),

Gene: Teejan_79 Start: 58687, Stop: 58992, Start Num: 27
Candidate Starts for Teejan_79:
(6, 58555), (Start: 27 @58687 has 20 MA's), (39, 58762), (42, 58807), (63, 58951), (64, 58957), (66, 58966),

Gene: Terralys_60 Start: 41059, Stop: 41385, Start Num: 16
Candidate Starts for Terralys_60:
(Start: 16 @41059 has 84 MA's), (47, 41254), (57, 41332),

Gene: Terror_58 Start: 40097, Stop: 40423, Start Num: 16
Candidate Starts for Terror_58:
(Start: 16 @40097 has 84 MA's), (60, 40382),

Gene: Thyatira_97 Start: 63441, Stop: 63746, Start Num: 24
Candidate Starts for Thyatira_97:

(Start: 24 @63441 has 48 MA's),

Gene: Tierra_102 Start: 61060, Stop: 61368, Start Num: 24
Candidate Starts for Tierra_102:
(Start: 24 @61060 has 48 MA's), (39, 61135), (66, 61342),

Gene: Tigress9_100 Start: 60290, Stop: 60598, Start Num: 24
Candidate Starts for Tigress9_100:
(Start: 24 @60290 has 48 MA's), (39, 60365), (66, 60572),

Gene: TinaBug_63 Start: 41673, Stop: 41999, Start Num: 16
Candidate Starts for TinaBug_63:
(Start: 16 @41673 has 84 MA's), (47, 41868), (57, 41946),

Gene: TingHuaYa_101 Start: 60903, Stop: 61193, Start Num: 27
Candidate Starts for TingHuaYa_101:
(Start: 27 @60903 has 20 MA's), (51, 61086),

Gene: TiniBug_95 Start: 59943, Stop: 60245, Start Num: 26
Candidate Starts for TiniBug_95:
(21, 59922), (Start: 26 @59943 has 114 MA's), (39, 60018), (63, 60204), (66, 60219),

Gene: Tiri_97 Start: 59088, Stop: 59390, Start Num: 26
Candidate Starts for Tiri_97:
(21, 59067), (Start: 26 @59088 has 114 MA's), (39, 59163), (63, 59349), (66, 59364),

Gene: TomBrady_62 Start: 41126, Stop: 41452, Start Num: 16
Candidate Starts for TomBrady_62:
(Start: 16 @41126 has 84 MA's), (47, 41321), (57, 41399),

Gene: Tootsieroll_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Tootsieroll_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Topper_96 Start: 59347, Stop: 59649, Start Num: 26
Candidate Starts for Topper_96:
(21, 59326), (Start: 26 @59347 has 114 MA's), (39, 59422), (63, 59608), (66, 59623),

Gene: Torres_80 Start: 58688, Stop: 58993, Start Num: 27
Candidate Starts for Torres_80:
(6, 58556), (Start: 27 @58688 has 20 MA's), (39, 58763), (42, 58808), (63, 58952), (64, 58958), (66, 58967),

Gene: TreyKay_98 Start: 59952, Stop: 60254, Start Num: 26
Candidate Starts for TreyKay_98:
(21, 59931), (Start: 26 @59952 has 114 MA's), (39, 60027), (63, 60213), (66, 60228),

Gene: TribleTrouble_97 Start: 61312, Stop: 61599, Start Num: 27
Candidate Starts for TribleTrouble_97:
(7, 61201), (13, 61270), (18, 61285), (Start: 27 @61312 has 20 MA's), (61, 61549), (66, 61573),

Gene: Trice_77 Start: 56075, Stop: 56380, Start Num: 27

Candidate Starts for Trice_77:
(6, 55943), (Start: 27 @56075 has 20 MA's), (39, 56150), (42, 56195), (63, 56339), (64, 56345), (66, 56354),

Gene: TruffulaTree_98 Start: 59748, Stop: 60050, Start Num: 26
Candidate Starts for TruffulaTree_98:
(21, 59727), (Start: 26 @59748 has 114 MA's), (39, 59823), (63, 60009), (66, 60024),

Gene: Twitch_97 Start: 59350, Stop: 59652, Start Num: 26
Candidate Starts for Twitch_97:
(21, 59329), (Start: 26 @59350 has 114 MA's), (39, 59425), (63, 59611), (66, 59626),

Gene: UncleRicky_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for UncleRicky_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: Urkel_98 Start: 60168, Stop: 60470, Start Num: 26
Candidate Starts for Urkel_98:
(21, 60147), (Start: 26 @60168 has 114 MA's), (39, 60243), (63, 60429), (66, 60444),

Gene: Validus_106 Start: 62130, Stop: 62417, Start Num: 26
Candidate Starts for Validus_106:
(Start: 26 @62130 has 114 MA's), (39, 62205), (53, 62322), (60, 62367), (64, 62382), (68, 62403),

Gene: Veliki_97 Start: 59373, Stop: 59675, Start Num: 26
Candidate Starts for Veliki_97:
(21, 59352), (Start: 26 @59373 has 114 MA's), (39, 59448), (63, 59634), (66, 59649),

Gene: Velveteen_1 Start: 41, Stop: 373, Start Num: 29
Candidate Starts for Velveteen_1:
(Start: 19 @11 has 1 MA's), (Start: 29 @41 has 29 MA's), (38, 119), (46, 212), (55, 284), (63, 338), (66, 353),

Gene: ViviJ_105 Start: 63064, Stop: 63369, Start Num: 24
Candidate Starts for ViviJ_105:
(Start: 24 @63064 has 48 MA's), (47, 63232),

Gene: WST1_61 Start: 37648, Stop: 37995, Start Num: 14
Candidate Starts for WST1_61:
(Start: 14 @37648 has 1 MA's), (42, 37822), (52, 37888), (66, 37966),

Gene: Waterfoul_95 Start: 60815, Stop: 61120, Start Num: 24
Candidate Starts for Waterfoul_95:
(Start: 24 @60815 has 48 MA's),

Gene: Wendigo_62 Start: 41104, Stop: 41430, Start Num: 16
Candidate Starts for Wendigo_62:
(Start: 16 @41104 has 84 MA's), (47, 41299), (57, 41377),

Gene: Wintermute_94 Start: 57134, Stop: 57439, Start Num: 25
Candidate Starts for Wintermute_94:
(Start: 25 @57134 has 23 MA's), (40, 57239), (66, 57413),

Gene: Ximenita_103 Start: 60672, Stop: 60977, Start Num: 24
Candidate Starts for Ximenita_103:
(Start: 24 @60672 has 48 MA's), (39, 60747), (66, 60951),

Gene: Y10_90 Start: 57078, Stop: 57383, Start Num: 25
Candidate Starts for Y10_90:
(Start: 25 @57078 has 23 MA's), (40, 57183), (66, 57357),

Gene: Y2_90 Start: 57078, Stop: 57383, Start Num: 25
Candidate Starts for Y2_90:
(Start: 25 @57078 has 23 MA's), (40, 57183), (66, 57357),

Gene: YangYin_66 Start: 44221, Stop: 44544, Start Num: 16
Candidate Starts for YangYin_66:
(Start: 16 @44221 has 84 MA's), (34, 44272), (43, 44392), (44, 44395), (46, 44407), (47, 44413),

Gene: YasnayaPolyana_93 Start: 57067, Stop: 57372, Start Num: 25
Candidate Starts for YasnayaPolyana_93:
(Start: 25 @57067 has 23 MA's), (66, 57346),

Gene: YoureAdopted_95 Start: 59143, Stop: 59445, Start Num: 26
Candidate Starts for YoureAdopted_95:
(21, 59122), (Start: 26 @59143 has 114 MA's), (39, 59218), (63, 59404), (66, 59419),

Gene: Yuna_100 Start: 61837, Stop: 62139, Start Num: 23
Candidate Starts for Yuna_100:
(Start: 23 @61837 has 1 MA's), (39, 61912), (63, 62098),

Gene: Yunkel11_101 Start: 60401, Stop: 60688, Start Num: 26
Candidate Starts for Yunkel11_101:
(Start: 26 @60401 has 114 MA's), (60, 60638), (64, 60653), (65, 60656),

Gene: Zabiza_92 Start: 55756, Stop: 56058, Start Num: 26
Candidate Starts for Zabiza_92:
(21, 55735), (Start: 26 @55756 has 114 MA's), (39, 55831), (63, 56017), (66, 56032),

Gene: Zavala_98 Start: 59608, Stop: 59910, Start Num: 26
Candidate Starts for Zavala_98:
(21, 59587), (Start: 26 @59608 has 114 MA's), (39, 59683), (63, 59869), (66, 59884),

Gene: ZoMa_61 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for ZoMa_61:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),

Gene: ZoeJ_92 Start: 56879, Stop: 57157, Start Num: 26
Candidate Starts for ZoeJ_92:
(Start: 24 @56876 has 48 MA's), (Start: 26 @56879 has 114 MA's), (41, 56990), (47, 57029), (66, 57137),

Gene: Zombie_62 Start: 41125, Stop: 41451, Start Num: 16
Candidate Starts for Zombie_62:
(Start: 16 @41125 has 84 MA's), (47, 41320), (57, 41398),