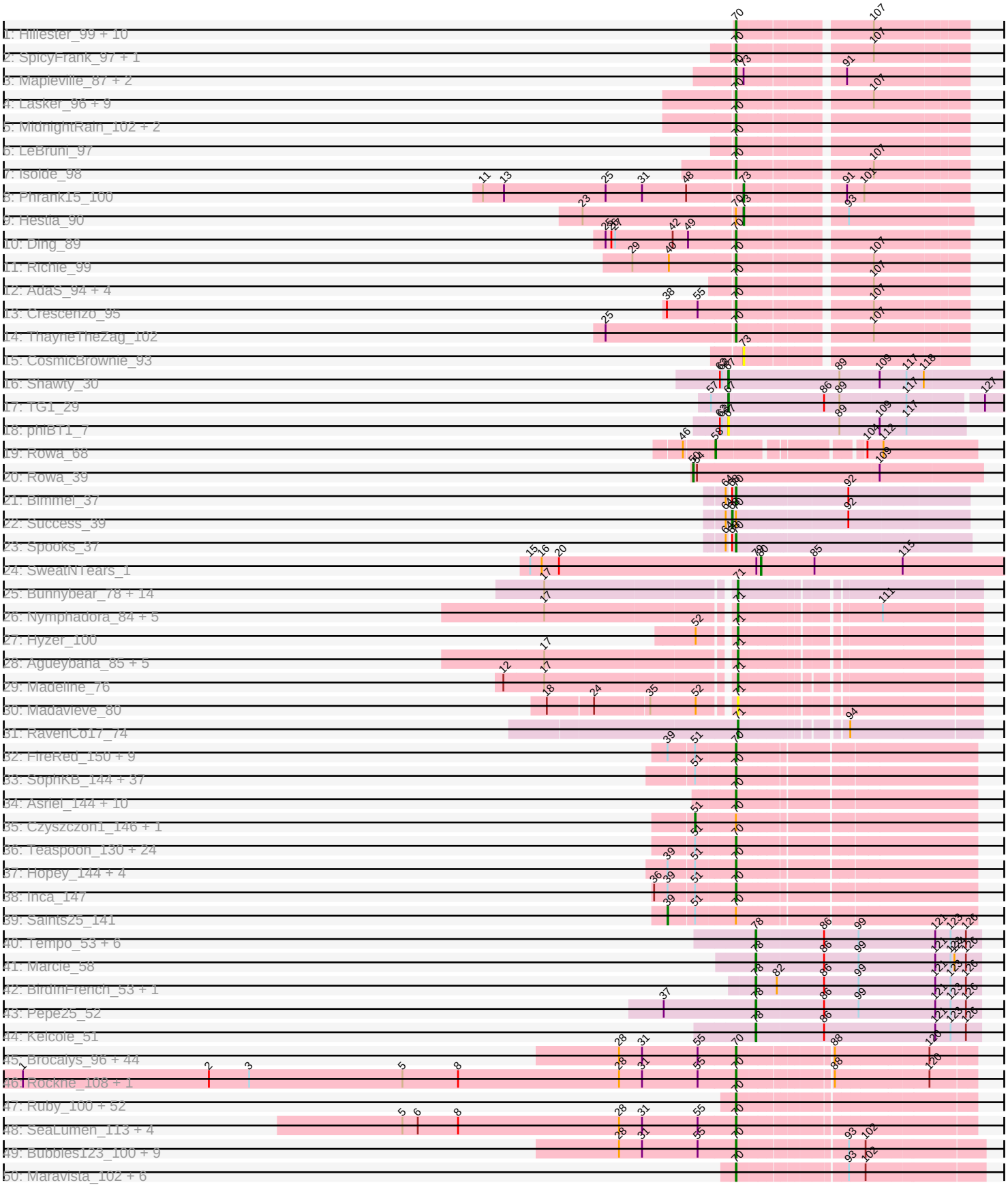
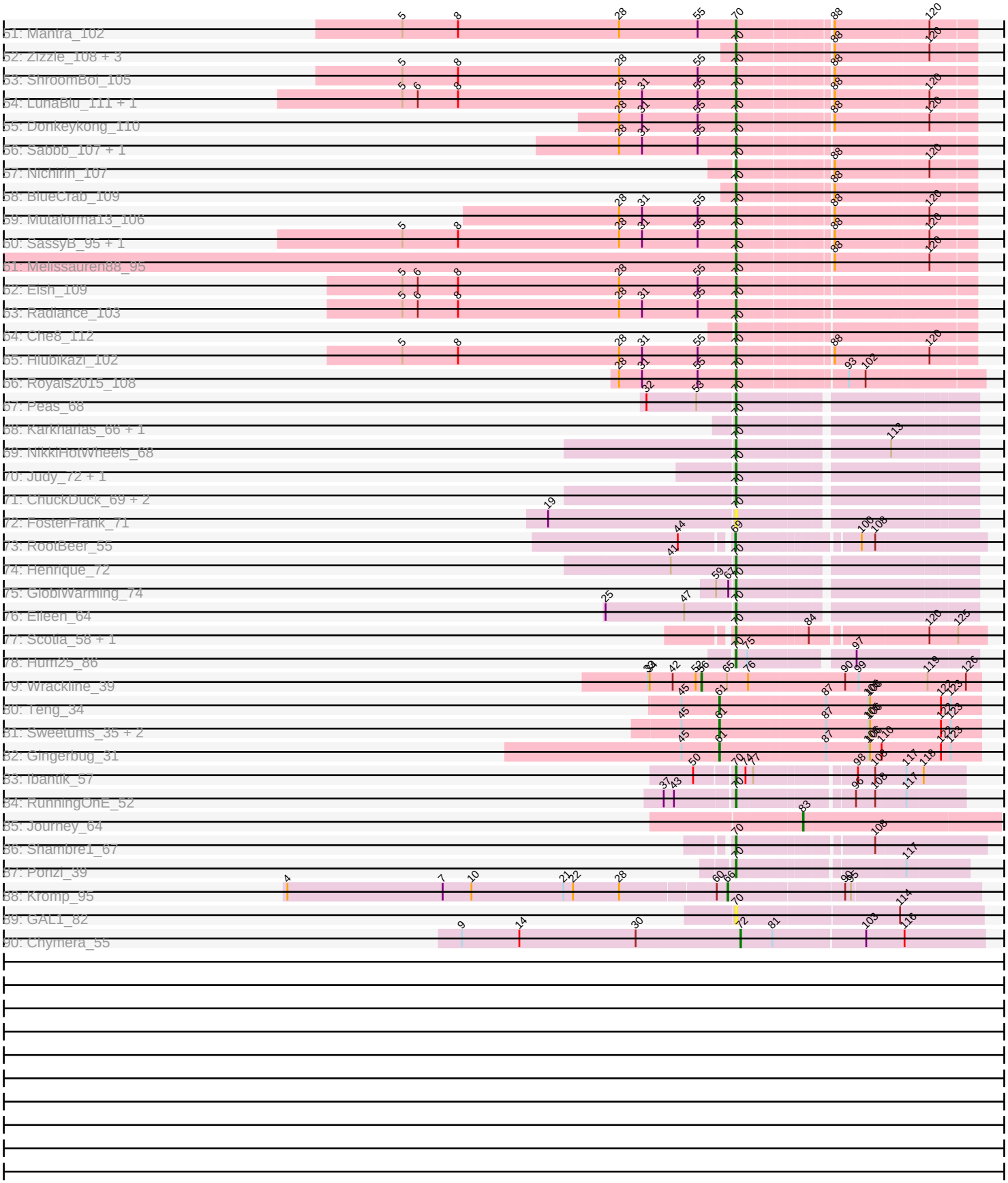
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1: Hillester_99 + 10
2: SpicyFrank_97 + 1
3: Mapleville_87 + 2
4: Lasker_96 + 9
5: MidnightRain_102 + 2
6: LeBrun_97
7: Isolde_98
8: Phrank15_100
9: Hestia_90
10: Ding_89
11: Richie_99
12: AdaS_94 + 4
13: Crescenzo_95
14: MayneTheZag_102
15: CosmicBrownie_93
16: Shawty_30
17: TG1_29
18: phiBT1_7
19: Rowa_68
20: Rowa_39
21: Bimmel_37
22: Success_39
23: Spooks_37
24: SweatNTears_1
25: Bunnybear_78 + 14
26: Nymphadora_84 + 5
27: Ryzer_100
28: Agueybana_85 + 5
29: Madeline_76
30: Madavieve_80
31: RavenCo17_74
32: FireRed_150 + 9
33: SophKB_144 + 37
34: Asriel_144 + 10
35: Czyszczon1_146 + 1
36: Teaspoon_130 + 24
37: Hopey_144 + 4
38: Inca_147
39: Saints25_141
40: Tempo_53 + 6
41: Marcie_58
42: BirdmFrench_53 + 1
43: Pepe25_52
44: Kelcole_51
45: Brocalys_96 + 44
46: Rockne_108 + 1
47: Ruby_100 + 52
48: SeaLumen_113 + 4
49: Bubbles123_100 + 9
50: Maravista_102 + 6

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51: Mantra_102
52: Zizzie_108 + 3
53: ShroomBoi_105
54: LunaBlu_111 + 1
55: Donkeykong_110
56: Sabbb_107 + 1
57: Nichirin_107
58: BlueCrab_109
59: Mutaforma13_106
60: SassyB_95 + 1
61: Melissaaren88_95
62: Eish_109
63: Radiance_103
64: Che8_112
65: Hlubikazi_102
66: Royals2015_108
67: Peas_68
68: Karkharias_66 + 1
69: NikkiHotWheels_68
70: Judy_72 + 1
71: ChuckDuck_69 + 2
72: FosterFrank_71
73: RootBeer_55
74: Henrique_72
75: GlobiWarming_74
76: Eileen_64
77: Scotia_58 + 1
78: Hum25_86
79: Wrackline_39
80: Teng_34
81: Sweetums_35 + 2
82: Gingerbug_31
83: Ibantik_57
84: RunningOnE_52
85: Journey_64
86: Shambre1_67
87: Ponzi_39
88: Kromp_95
89: GALI_82
90: Chymera_55

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 347128 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 347128 has 363 members, 17 are drafts.

Phages represented in each track:
• Track 1 : Hillester_99, Satrap_93, EvePickles_96, RadFad_100, MaterMagnus_96, BillyTP_96, Auxilium_93, BenchScraper_96, Sporco_98, Tiff81_90, MurphyJoseph_94
• Track 2 : SpicyFrank_97, Seahorse_101
• Track 3 : Mapleville_87, MUWow_98, Anekin_95
• Track 4 : Lasker_96, Globfish_96, GumGum_103, Lawnathon_100, BlueShadow_92, SonDevVon_104, Sashimi_96, BasketStar_96, Faja_96, CookieBear_95
• Track 5 : MidnightRain_102, Kabloowy_95, DarwinJr_98
• Track 6 : LeBruni_97
• Track 7 : Isolde_98
• Track 8 : Phrank15_100
• Track 9 : Hestia_90
• Track 10 : Ding_89
• Track 11 : Richie_99
• Track 12 : AdaS_94, YoungHarleezy_97, Windest_101, JellyBread_95, Raphaella_96
• Track 13 : Crescenzo_95
• Track 14 : ThayneTheZag_102
• Track 15 : CosmicBrownie_93
• Track 16 : Shawty_30
• Track 17 : TG1_29
• Track 18 : phiBT1_7
• Track 19 : Rowa_68
• Track 20 : Rowa_39
• Track 21 : Bimmel_37
• Track 22 : Success_39
• Track 23 : Spooks_37
• Track 24 : SweatNTears_1
• Track 25 : Bunnybear_78, WelcomeAyanna_83, Maridalia_83, Neobush_81, Manasvini_81, Kita_80, Zameen_79, Antonio_78, ThankyouJordi_83, Suscepit_79, Dillpickles_84, Eudoria_79, Trumpet_79, Tayonia_79, Polly_76

• Track 26 : Nymphadora_84, Bosnia_82, Eviarto_84, Herod_84, BatStarr_83, TimTam_84
• Track 27 : Hyzer_100
• Track 28 : Agueybana_85, Bialota_79, Zirinka_79, SushiChef_82, AlumE_82, BoyNamedSue_82
• Track 29 : Madeline_76
• Track 30 : Madavieve_80
• Track 31 : RavenCo17_74
• Track 32 : FireRed_150, Palpatine_143, Thresher_148, Nala_149, Command613_149, Ukulele_143, PhatBacter_150, Highbury_141, Manda_149, BaboJay_146
• Track 33 : SophKB_144, Tuco_150, AmericanBeauty_149, Contagion_142, RiverMonster_146, StolenFromERC_148, ABCat_145, Phaux_147, Gemini_151, Easy2Say_148, Stank_150, Sotrice96_151, Icee_146, Willez_144, HufflyPuff_148, Adnama_150, Argent26_150, Maxxinista_148, GoldenSpark_150, FairyPath_147, Brewer_142, Cactus_154, Rimmer_145, Goldilocks_152, IHOP_151, Kimchi_151, Bench_149, Dumbo_149, Gage_137, Elite2014_146, Quallification_146, Wiggin_149, BadStone_145, Youngblood_150, Kanye_142, Holt_152, Lilpickle_146, ChosenOne_147
• Track 34 : Asriel_144, Traaww1_144, Glexan_150, Flypotenuse_142, Balomoji_146, Amao_151, Harella_153, Barbarian_146, Budgie_149, Pat3_147, Hoonter_148
• Track 35 : Czyszczon1_146, Marshmallow_149
• Track 36 : Teaspoon_130, NonchalantPear_146, Nimrod_145, Emmina_148, Phaja_151, DoctorDiddles_145, Phrux_143, Cookies_148, Tarkin_144, Buck_148, Thimble_138, TeamEdward_148, OrionPax_144, Miniwave_140, Murphy_148, JeTaime_144, TBrady12_151, Paperbeatsrock_144, ShereKhan_145, Myrale_146, Stark_143, BigBubba_149, NoSleep_145, MadamMonkfish_148, ShamWow_145
• Track 37 : Hopey_144, MPhalcon_148, Policronamos_145, Murica_149, MISSy_147
• Track 38 : Inca_147
• Track 39 : Saints25_141
• Track 40 : Tempo_53, RobinRose_55, CandC_52, Fregley_54, KillerQueen_54, Romm_55, OneinaGillian_53
• Track 41 : Marcie_58
• Track 42 : BirdInFrench_53, Wilca_53
• Track 43 : Pepe25_52
• Track 44 : Kelcole_51
• Track 45 : Brocalys_96, CaptainTrips_107, Medindi_110, ShowerHandel_107, SuperGrey_103, Fastidio_108, Whouxphf_108, Wee_109, Emma_109, Kenuha5_96, PhesterPhotato_109, Gorge_103, Gandalph_104, Ardmore_88, Rita_104, Pippy_103, Florinda_117, SiSi_99, NormanBulbieJr_102, Batiatus_105, IbOuu_96, Tweety_109, DLane_105, Filuzino_105, Ms6_107, Philus_108, Hamulus_105, DillTech15_111, Phalconet_106, James_108, Taj_110, Scottish_105, Akhila_99, MinionDave_103, Moonbeam_107, MilanaBonita_98, GUmbie_104, Cabrinians_101, StAnnes_110, KingMidas_105, FreddyB_113, Krakatau_97, Bipolar_106, EleanorGeorge_108, Veteran_94
• Track 46 : Rockne_108, PMC_104
• Track 47 : Ruby_100, Estave1_112, Wachhund_101, Jinglebell_111, BobaPhett_108, Nimbo_96, Grimmer_106, Leperchaun_106, JoeyJr_107, PHappiness_104, Polka14_108, Lizziana_105, Deb65_97, Kersh_107, OfUltron_111, Daenerys_102, TDanisky_112, Hades_102, Geralt_97, Martik_103, Karhdo_100, BodEinwohner17_116, ShiLan_107, SwagPigglett_106, Phasih_100, Eradicator_95, Sparkdehlily_111, Modragons_107, Byougenkin_101, KristaRAM_113, Llama_111, RedBird_105, ByChance_95, Ochi17_110, Seabastian_111, Crumble_99,

Inventum_102, OldBen_101, VRedHorse_105, MadMen_109, RitaG_103, Priscilla_105, Ibhubesi_103, DRBy19_104, Clifton_96, Spoonbill_104, MisterCuddles_104, Mattes_105, Sassafras_106, Jarcob_107, Girr_103, AlpineSix_102, DaddyRickover_106
• Track 48 : SeaLumen_113, Polo2Bam_116, NewHope4_112, Galactic_109, Enzomatic_117
• Track 49 : Bubbles123_100, Burwell21_99, Zerg_103, Phatniss_101, Chuckly_102, Dante_104, Llij_99, Whatsapiecost_99, Minnie_99, Sandalphon_103
• Track 50 : Maravista_102, Phanphagia_109, WillSterrel_103, Juniper1_98, Shauna1_106, IrishSherpFalk_105, Mahavrat_98
• Track 51 : Mantra_102
• Track 52 : Zizzle_108, Guppsters_99, DoRead_108, Jennelsea_103
• Track 53 : ShroomBoi_105
• Track 54 : LunaBlu_111, GigiOuiOui_99
• Track 55 : Donkeykong_110
• Track 56 : Sabbb_107, Pacc40_101
• Track 57 : Nichirin_107
• Track 58 : BlueCrab_109
• Track 59 : Mutaforma13_106
• Track 60 : SassyB_95, PopTart_95
• Track 61 : Melissauren88_95
• Track 62 : Eish_109
• Track 63 : Radiance_103
• Track 64 : Che8_112
• Track 65 : Hlubikazi_102
• Track 66 : Royals2015_108
• Track 67 : Peas_68
• Track 68 : Karkharias_66, Bridgette_71
• Track 69 : NikkiHotWheels_68
• Track 70 : Judy_72, NidoQ_64
• Track 71 : ChuckDuck_69, PeggyLeg03_70, KayMoney_68
• Track 72 : FosterFrank_71
• Track 73 : RootBeer_55
• Track 74 : Henrique_72
• Track 75 : GlobiWarming_74
• Track 76 : Eileen_64
• Track 77 : Scotia_58, NoSwimming_59
• Track 78 : Hum25_86
• Track 79 : Wrackline_39
• Track 80 : Teng_34
• Track 81 : Sweetums_35, Lesiram_34, DelaGarza_33
• Track 82 : Gingerbug_31
• Track 83 : Ibantik_57
• Track 84 : RunningOnE_52
• Track 85 : Journey_64
• Track 86 : Shambre1_67
• Track 87 : Ponzi_39
• Track 88 : Kromp_95
• Track 89 : GAL1_82
• Track 90 : Chymera_55

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

The start number called the most often in the published annotations is 70, it was called in 286 of the 346 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ABCat_145, AdaS_94, Adnama_150, Akhila_99, AlpineSix_102, Amao_151, AmericanBeauty_149, Anekin_95, Ardmore_88, Argent26_150, Asriel_144, Auxilium_93, BaboJay_146, BadStone_145, Balomoji_146, Barbarian_146, BasketStar_96, Batiatus_105, BenchScraper_96, Bench_149, BigBubba_149, BillyTP_96, Bimmel_37, Bipolar_106, BlueCrab_109, BlueShadow_92, BobaPhett_108, BodEinwohner17_116, Brewer_142, Bridgette_71, Brocalys_96, Bubbles123_100, Buck_148, Budgie_149, Burwell21_99, ByChance_95, Byougenkin_101, Cabrinians_101, Cactus_154, CaptainTrips_107, Che8_112, ChosenOne_147, ChuckDuck_69, Chuckly_102, Clifton_96, Command613_149, Contagion_142, CookieBear_95, Cookies_148, Crescenzo_95, Crumble_99, DLane_105, DRBy19_104, DaddyRickover_106, Daenerys_102, Dante_104, DarwinJr_98, Deb65_97, DillTech15_111, Ding_89, DoRead_108, DoctorDiddles_145, Donkeykong_110, Dumbo_149, Easy2Say_148, Eileen_64, Eish_109, EleanorGeorge_108, Elite2014_146, Emma_109, Emmina_148, Enzomatic_117, Eradicator_95, Estave1_112, EvePickles_96, FairyPath_147, Faja_96, Fastidio_108, Filuzino_105, FireRed_150, Florinda_117, Flypotenuse_142, FosterFrank_71, FreddyB_113, GAL1_82, GUmbie_104, Gage_137, Galactic_109, Gandalph_104, Gemini_151, Geralt_97, GigiOuiOui_99, Girr_103, Glexan_150, Globfish_96, GlobiWarming_74, GoldenSpark_150, Goldilocks_152, Gorge_103, Grimmer_106, GumGum_103, Guppsters_99, Hades_102, Hamulus_105, Harella_153, Henrique_72, Highbury_141, Hillester_99, Hlubikazi_102, Holt_152, Hoonter_148, Hopey_144, HufflyPuff_148, Hum25_86, IHOP_151, IbOuu_96, Ibantik_57, Ibhubesi_103, Icee_146, Inca_147, Inventum_102, IrishSherpFalk_105, Isolde_98, James_108, Jarcob_107, JeTaime_144, JellyBread_95, Jennelsea_103, Jinglebell_111, JoeyJr_107, Judy_72, Juniper1_98, Kabloowy_95, Kanye_142, Karhdo_100, Karkharias_66, KayMoney_68, Kenuha5_96, Kersh_107, Kimchi_151, KingMidas_105, Krakatau_97, KristaRAM_113, Lasker_96, Lawnathon_100, LeBruni_97, Leperchaun_106, Lilpickle_146, Lizziana_105, Llama_111, Llij_99, LunaBlu_111, MISSy_147, MPhalcon_148, MUWow_98, MadMen_109, MadamMonkfish_148, Mahavrat_98, Manda_149, Mantra_102, Mapleville_87, Maravista_102, Martik_103, MaterMagnus_96, Mattes_105, Maxxinista_148, Medindi_110, Melissauren88_95, MidnightRain_102, MilanaBonita_98, MinionDave_103, Miniwave_140, Minnie_99, MisterCuddles_104, Modragons_107, Moonbeam_107, Ms6_107, Murica_149, MurphyJoseph_94, Murphy_148, Mutaforma13_106, Myrale_146, Nala_149, NewHope4_112, Nichirin_107, NidoQ_64, NikkiHotWheels_68, Nimbo_96, Nimrod_145, NoSleep_145, NoSwimming_59, NonchalantPear_146, NormanBulbieJr_102, Ochi17_110, OfUltron_111, OldBen_101, OrionPax_144, PHappiness_104, PMC_104, Pacc40_101, Palpatine_143, Paperbeatsrock_144, Pat3_147, Peas_68, PeggyLeg03_70, Phaja_151, Phalconet_106, Phanphagia_109, Phasih_100, PhatBacter_150, Phatniss_101, Phaux_147, PhesterPhotato_109, Philus_108, Phrux_143, Pippy_103, Policronamos_145, Polka14_108, Polo2Bam_116, Ponzi_39, PopTart_95, Priscilla_105, Quallification_146, RadFad_100, Radiance_103, Raphaella_96, RedBird_105, Richie_99, Rimmer_145, RitaG_103, Rita_104, RiverMonster_146, Rockne_108, Royals2015_108, Ruby_100, RunningOnE_52, Sabbb_107, Sandalphon_103, Sashimi_96, Sassafras_106, SassyB_95, Satrap_93, Scotia_58,

Scottish_105, SeaLumen_113, Seabastian_111, Seahorse_101, ShamWow_145, Shambre1_67, Shauna1_106, ShereKhan_145, ShiLan_107, ShowerHandel_107, ShroomBoi_105, SiSi_99, SonDevVon_104, SophKB_144, Sotrice96_151, Sparkdehlily_111, SpicyFrank_97, Spooks_37, Spoonbill_104, Sporco_98, StAnnes_110, Stank_150, Stark_143, StolenFromERC_148, SuperGrey_103, SwagPigglett_106, TBrady12_151, TDanisky_112, Taj_110, Tarkin_144, TeamEdward_148, Teaspoon_130, ThayneTheZag_102, Thimble_138, Thresher_148, Tiff81_90, Traaww1_144, Tuco_150, Tweety_109, Ukulele_143, VRedHorse_105, Veteran_94, Wachhund_101, Wee_109, Whatsapiecost_99, Whouxphf_108, Wiggin_149, WillSterrel_103, Willez_144, Windest_101, YoungHarleezy_97, Youngblood_150, Zerg_103, Zizzle_108,

Genes that have the "Most Annotated" start but do not call it:
• Czyszczon1_146, Hestia_90, Marshmallow_149, Saints25_141, Success_39,

Genes that do not have the "Most Annotated" start:
• Agueybana_85, AlumE_82, Antonio_78, BatStarr_83, Bialota_79, BirdInFrench_53, Bosnia_82, BoyNamedSue_82, Bunnybear_78, CandC_52, Chymera_55, CosmicBrownie_93, DelaGarza_33, Dillpickles_84, Eudoria_79, Eviarto_84, Fregley_54, Gingerbug_31, Herod_84, Hyzer_100, Journey_64, Kelcole_51, KillerQueen_54, Kita_80, Kromp_95, Lesiram_34, Madavieve_80, Madeline_76, Manasvini_81, Marcie_58, Maridalia_83, Neobush_81, Nymphadora_84, OneinaGillian_53, Pepe25_52, Phrank15_100, Polly_76, RavenCo17_74, RobinRose_55, Romm_55, RootBeer_55, Rowa_39, Rowa_68, Shawty_30, Suscepit_79, SushiChef_82, SweatNTears_1, Sweetums_35, TG1_29, Tayonia_79, Tempo_53, Teng_34, ThankyouJordi_83, TimTam_84, Trumpet_79, WelcomeAyanna_83, Wilca_53, Wrackline_39, Zameen_79, Zirinka_79, phiBT1_7,

Summary by start number:

Start 39:
• Found in 17 of 363 (4.7%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 5.9% of time when present
• Phage (with cluster) where this start called: Saints25_141 (E),

Start 50:
• Found in 2 of 363 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Rowa_39 (BL),

Start 51:
• Found in 82 of 363 (22.6%) of genes in pham
• Manual Annotations of this start: 2 of 346
• Called 2.4% of time when present
• Phage (with cluster) where this start called: Czyszczon1_146 (E), Marshmallow_149 (E),

Start 56:
• Found in 1 of 363 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Wrackline_39 (GF),

Start 58:
• Found in 1 of 363 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rowa_68 (BL),

Start 61:
• Found in 5 of 363 (1.4%) of genes in pham
• Manual Annotations of this start: 5 of 346
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DelaGarza_33 (GF), Gingerbug_31 (GF), Lesiram_34 (GF), Sweetums_35 (GF), Teng_34 (GF),

Start 66:
• Found in 1 of 363 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kromp_95 (singleton),

Start 67:
• Found in 4 of 363 (1.1%) of genes in pham
• Manual Annotations of this start: 2 of 346
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Shawty_30 (BB1), TG1_29 (BB1), phiBT1_7 (BB1),

Start 68:
• Found in 3 of 363 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Success_39 (BT),

Start 69:
• Found in 1 of 363 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RootBeer_55 (FA),

Start 70:
• Found in 302 of 363 (83.2%) of genes in pham
• Manual Annotations of this start: 286 of 346
• Called 98.3% of time when present
• Phage (with cluster) where this start called: ABCat_145 (E), AdaS_94 (AY), Adnama_150 (E), Akhila_99 (F1), AlpineSix_102 (F1), Amao_151 (E), AmericanBeauty_149 (E), Anekin_95 (AY), Ardmore_88 (F1), Argent26_150 (E), Asriel_144 (E), Auxilium_93 (AY), BaboJay_146 (E), BadStone_145 (E), Balomoji_146 (E), Barbarian_146 (E), BasketStar_96 (AY), Batiatus_105 (F1), BenchScraper_96 (AY), Bench_149 (E), BigBubba_149 (E), BillyTP_96 (AY), Bimmel_37 (BT), Bipolar_106 (F1), BlueCrab_109 (F1), BlueShadow_92 (AY), BobaPhett_108 (F1), BodEinwohner17_116 (F1), Brewer_142 (E), Bridgette_71 (FA), Brocalys_96 (F1), Bubbles123_100 (F1), Buck_148 (E), Budgie_149 (E),

Burwell21_99 (F1), ByChance_95 (F1), Byougenkin_101 (F1), Cabrinians_101 (F1), Cactus_154 (E), CaptainTrips_107 (F1), Che8_112 (F1), ChosenOne_147 (E), ChuckDuck_69 (FA), Chuckly_102 (F1), Clifton_96 (F1), Command613_149 (E), Contagion_142 (E), CookieBear_95 (AY), Cookies_148 (E), Crescenzo_95 (AY), Crumble_99 (F1), DLane_105 (F1), DRBy19_104 (F1), DaddyRickover_106 (F1), Daenerys_102 (F1), Dante_104 (F1), DarwinJr_98 (AY), Deb65_97 (F1), DillTech15_111 (F1), Ding_89 (AY), DoRead_108 (F1), DoctorDiddles_145 (E), Donkeykong_110 (F1), Dumbo_149 (E), Easy2Say_148 (E), Eileen_64 (FA), Eish_109 (F1), EleanorGeorge_108 (F1), Elite2014_146 (E), Emma_109 (F1), Emmina_148 (E), Enzomatic_117 (F1), Eradicator_95 (F1), Estave1_112 (F1), EvePickles_96 (AY), FairyPath_147 (E), Faja_96 (AY), Fastidio_108 (F1), Filuzino_105 (F1), FireRed_150 (E), Florinda_117 (F1), Flypotenuse_142 (E), FosterFrank_71 (FA), FreddyB_113 (F1), GAL1_82 (singleton), GUmbie_104 (F1), Gage_137 (E), Galactic_109 (F1), Gandalph_104 (F1), Gemini_151 (E), Geralt_97 (F1), GigiOuiOui_99 (F1), Girr_103 (F1), Glexan_150 (E), Globfish_96 (AY), GlobiWarming_74 (FA), GoldenSpark_150 (E), Goldilocks_152 (E), Gorge_103 (F1), Grimmer_106 (F1), GumGum_103 (AY), Guppsters_99 (F1), Hades_102 (F1), Hamulus_105 (F1), Harella_153 (E), Henrique_72 (FA), Highbury_141 (E), Hillester_99 (AY), Hlubikazi_102 (F1), Holt_152 (E), Hoonter_148 (E), Hopey_144 (E), HufflyPuff_148 (E), Hum25_86 (FQ1), IHOP_151 (E), IbOuu_96 (F1), Ibantik_57 (JN), Ibhubesi_103 (F1), Icee_146 (E), Inca_147 (E), Inventum_102 (F1), IrishSherpFalk_105 (F1), Isolde_98 (AY), James_108 (F1), Jarcob_107 (F1), JeTaime_144 (E), JellyBread_95 (AY), Jennelsea_103 (F1), Jinglebell_111 (F1), JoeyJr_107 (F1), Judy_72 (FA), Juniper1_98 (F1), Kabloowy_95 (AY), Kanye_142 (E), Karhdo_100 (F1), Karkharias_66 (FA), KayMoney_68 (FA), Kenuha5_96 (F1), Kersh_107 (F1), Kimchi_151 (E), KingMidas_105 (F1), Krakatau_97 (F1), KristaRAM_113 (F1), Lasker_96 (AY), Lawnathon_100 (AY), LeBruni_97 (AY), Leperchaun_106 (F1), Lilpickle_146 (E), Lizziana_105 (F1), Llama_111 (F1), Llij_99 (F1), LunaBlu_111 (F1), MISSy_147 (E), MPhalcon_148 (E), MUWow_98 (AY), MadMen_109 (F1), MadamMonkfish_148 (E), Mahavrat_98 (F1), Manda_149 (E), Mantra_102 (F1), Mapleville_87 (AY), Maravista_102 (F1), Martik_103 (F1), MaterMagnus_96 (AY), Mattes_105 (F1), Maxxinista_148 (E), Medindi_110 (F1), Melissauren88_95 (F1), MidnightRain_102 (AY), MilanaBonita_98 (F1), MinionDave_103 (F1), Miniwave_140 (E), Minnie_99 (F1), MisterCuddles_104 (F1), Modragons_107 (F1), Moonbeam_107 (F1), Ms6_107 (F1), Murica_149 (E), MurphyJoseph_94 (AY), Murphy_148 (E), Mutaforma13_106 (F1), Myrale_146 (E), Nala_149 (E), NewHope4_112 (F1), Nichirin_107 (F1), NidoQ_64 (FA), NikkiHotWheels_68 (FA), Nimbo_96 (F1), Nimrod_145 (E), NoSleep_145 (E), NoSwimming_59 (FO), NonchalantPear_146 (E), NormanBulbieJr_102 (F1), Ochi17_110 (F1), OfUltron_111 (F1), OldBen_101 (F1), OrionPax_144 (E), PHappiness_104 (F1), PMC_104 (F1), Pacc40_101 (F1), Palpatine_143 (E), Paperbeatsrock_144 (E), Pat3_147 (E), Peas_68 (FA), PeggyLeg03_70 (FA), Phaja_151 (E), Phalconet_106 (F1), Phanphagia_109 (F1), Phasih_100 (F1), PhatBacter_150 (E), Phatniss_101 (F1), Phaux_147 (E), PhesterPhotato_109 (F1), Philus_108 (F1), Phrux_143 (E), Pippy_103 (F1), Policronamos_145 (E), Polka14_108 (F1), Polo2Bam_116 (F1), Ponzi_39 (singleton), PopTart_95 (F1), Priscilla_105 (F1), Quallification_146 (E), RadFad_100 (AY), Radiance_103 (F1), Raphaella_96 (AY), RedBird_105 (F1), Richie_99 (AY), Rimmer_145 (E), RitaG_103 (F1), Rita_104 (F1), RiverMonster_146 (E), Rockne_108 (F1), Royals2015_108 (F1), Ruby_100 (F1), RunningOnE_52 (JN), Sabbb_107 (F1), Sandalphon_103 (F1), Sashimi_96 (AY), Sassafras_106 (F1), SassyB_95 (F1), Satrap_93 (AY), Scotia_58 (FO), Scottish_105 (F1), SeaLumen_113 (F1), Seabastian_111 (F1), Seahorse_101 (AY), ShamWow_145 (E), Shambre1_67 (singleton), Shauna1_106 (F1),

ShereKhan_145 (E), ShiLan_107 (F1), ShowerHandel_107 (F1), ShroomBoi_105 (F1), SiSi_99 (F1), SonDevVon_104 (AY), SophKB_144 (E), Sotrice96_151 (E), Sparkdehlily_111 (F1), SpicyFrank_97 (AY), Spooks_37 (BT), Spoonbill_104 (F1), Sporco_98 (AY), StAnnes_110 (F1), Stank_150 (E), Stark_143 (E), StolenFromERC_148 (E), SuperGrey_103 (F1), SwagPigglett_106 (F1), TBrady12_151 (E), TDanisky_112 (F1), Taj_110 (F1), Tarkin_144 (E), TeamEdward_148 (E), Teaspoon_130 (E), ThayneTheZag_102 (AY), Thimble_138 (E), Thresher_148 (E), Tiff81_90 (AY), Traaww1_144 (E), Tuco_150 (E), Tweety_109 (F1), Ukulele_143 (E), VRedHorse_105 (F1), Veteran_94 (F1), Wachhund_101 (F1), Wee_109 (F1), Whatsapiecost_99 (F1), Whouxphf_108 (F1), Wiggin_149 (E), WillSterrel_103 (F1), Willez_144 (E), Windest_101 (AY), YoungHarleezy_97 (AY), Youngblood_150 (E), Zerg_103 (F1), Zizzle_108 (F1),

Start 71:
• Found in 31 of 363 (8.5%) of genes in pham
• Manual Annotations of this start: 28 of 346
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agueybana_85 (CZ1), AlumE_82 (CZ1), Antonio_78 (CZ1), BatStarr_83 (CZ1), Bialota_79 (CZ1), Bosnia_82 (CZ1), BoyNamedSue_82 (CZ1), Bunnybear_78 (CZ), Dillpickles_84 (CZ1), Eudoria_79 (CZ1), Eviarto_84 (CZ1), Herod_84 (CZ1), Hyzer_100 (CZ1), Kita_80 (CZ1), Madavieve_80 (CZ1), Madeline_76 (CZ1), Manasvini_81 (CZ1), Maridalia_83 (CZ1), Neobush_81 (CZ1), Nymphadora_84 (CZ1), Polly_76 (CZ1), RavenCo17_74 (CZ8), Suscepit_79 (CZ1), SushiChef_82 (CZ), Tayonia_79 (CZ1), ThankyouJordi_83 (CZ1), TimTam_84 (CZ1), Trumpet_79 (CZ1), WelcomeAyanna_83 (CZ1), Zameen_79 (CZ1), Zirinka_79 (CZ1),

Start 72:
• Found in 1 of 363 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chymera_55 (singleton),

Start 73:
• Found in 6 of 363 (1.7%) of genes in pham
• Manual Annotations of this start: 2 of 346
• Called 50.0% of time when present
• Phage (with cluster) where this start called: CosmicBrownie_93 (AY), Hestia_90 (AY), Phrank15_100 (AY),

Start 78:
• Found in 12 of 363 (3.3%) of genes in pham
• Manual Annotations of this start: 11 of 346
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BirdInFrench_53 (EG), CandC_52 (EG), Fregley_54 (EG), Kelcole_51 (EG), KillerQueen_54 (EG), Marcie_58 (EG), OneinaGillian_53 (EG), Pepe25_52 (EG), RobinRose_55 (EG), Romm_55 (EG), Tempo_53 (EG), Wilca_53 (EG),

Start 80:
• Found in 1 of 363 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 100.0% of time when present

• Phage (with cluster) where this start called: SweatNTears_1 (CT),

Start 83:
• Found in 1 of 363 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 346
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Journey_64 (N),

Summary by clusters:

There are 18 clusters represented in this pham: F1, CZ8, E, GF, CZ, BL, EG, CZ1, CT, singleton, N, BT, FA, JN, AY, FQ1, BB1, FO,

Info for manual annotations of cluster AY:
•Start number 70 was manually annotated 37 times for cluster AY.
•Start number 73 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster BB1:
•Start number 67 was manually annotated 2 times for cluster BB1.

Info for manual annotations of cluster BL:
•Start number 50 was manually annotated 1 time for cluster BL.
•Start number 58 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster BT:
•Start number 68 was manually annotated 1 time for cluster BT.
•Start number 70 was manually annotated 2 times for cluster BT.

Info for manual annotations of cluster CT:
•Start number 80 was manually annotated 1 time for cluster CT.

Info for manual annotations of cluster CZ:
•Start number 71 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 71 was manually annotated 26 times for cluster CZ1.

Info for manual annotations of cluster CZ8:
•Start number 71 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster E:
•Start number 39 was manually annotated 1 time for cluster E.
•Start number 51 was manually annotated 2 times for cluster E.
•Start number 70 was manually annotated 90 times for cluster E.

Info for manual annotations of cluster EG:
•Start number 78 was manually annotated 11 times for cluster EG.

Info for manual annotations of cluster F1:
•Start number 70 was manually annotated 138 times for cluster F1.

Info for manual annotations of cluster FA:
•Start number 69 was manually annotated 1 time for cluster FA.

•Start number 70 was manually annotated 12 times for cluster FA.

Info for manual annotations of cluster FO:
•Start number 70 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster FQ1:
•Start number 70 was manually annotated 1 time for cluster FQ1.

Info for manual annotations of cluster GF:
•Start number 56 was manually annotated 1 time for cluster GF.
•Start number 61 was manually annotated 5 times for cluster GF.

Info for manual annotations of cluster JN:
•Start number 70 was manually annotated 2 times for cluster JN.

Info for manual annotations of cluster N:
•Start number 83 was manually annotated 1 time for cluster N.

Gene Information:

Gene: ABCat_145 Start: 75550, Stop: 75897, Start Num: 70
Candidate Starts for ABCat_145:
(Start: 51 @75493 has 2 MA's), (Start: 70 @75550 has 286 MA's),

Gene: AdaS_94 Start: 50303, Stop: 50629, Start Num: 70
Candidate Starts for AdaS_94:
(Start: 70 @50303 has 286 MA's), (107, 50483),

Gene: Adnama_150 Start: 74627, Stop: 74974, Start Num: 70
Candidate Starts for Adnama_150:
(Start: 51 @74570 has 2 MA's), (Start: 70 @74627 has 286 MA's),

Gene: Agueybana_85 Start: 52421, Stop: 52756, Start Num: 71
Candidate Starts for Agueybana_85:
(17, 52148), (Start: 71 @52421 has 28 MA's),

Gene: Akhila_99 Start: 55783, Stop: 56109, Start Num: 70
Candidate Starts for Akhila_99:
(28, 55609), (31, 55645), (55, 55732), (Start: 70 @55783 has 286 MA's), (88, 55906), (120, 56041),

Gene: AlpineSix_102 Start: 56250, Stop: 56576, Start Num: 70
Candidate Starts for AlpineSix_102:
(Start: 70 @56250 has 286 MA's),

Gene: AlumE_82 Start: 52312, Stop: 52647, Start Num: 71
Candidate Starts for AlumE_82:
(17, 52039), (Start: 71 @52312 has 28 MA's),

Gene: Amao_151 Start: 76132, Stop: 76479, Start Num: 70
Candidate Starts for Amao_151:
(Start: 70 @76132 has 286 MA's),

Gene: AmericanBeauty_149 Start: 74669, Stop: 75016, Start Num: 70
Candidate Starts for AmericanBeauty_149:
(Start: 51 @74612 has 2 MA's), (Start: 70 @74669 has 286 MA's),

Gene: Anekin_95 Start: 52237, Stop: 52560, Start Num: 70
Candidate Starts for Anekin_95:
(Start: 70 @52237 has 286 MA's), (Start: 73 @52249 has 2 MA's), (91, 52375),

Gene: Antonio_78 Start: 49950, Stop: 50285, Start Num: 71
Candidate Starts for Antonio_78:
(17, 49677), (Start: 71 @49950 has 28 MA's),

Gene: Ardmore_88 Start: 51672, Stop: 51998, Start Num: 70
Candidate Starts for Ardmore_88:
(28, 51498), (31, 51534), (55, 51621), (Start: 70 @51672 has 286 MA's), (88, 51795), (120, 51930),

Gene: Argent26_150 Start: 74551, Stop: 74898, Start Num: 70
Candidate Starts for Argent26_150:
(Start: 51 @74494 has 2 MA's), (Start: 70 @74551 has 286 MA's),

Gene: Asriel_144 Start: 74013, Stop: 74360, Start Num: 70
Candidate Starts for Asriel_144:
(Start: 70 @74013 has 286 MA's),

Gene: Auxilium_93 Start: 49043, Stop: 49363, Start Num: 70
Candidate Starts for Auxilium_93:
(Start: 70 @49043 has 286 MA's), (107, 49223),

Gene: BaboJay_146 Start: 75796, Stop: 76143, Start Num: 70
Candidate Starts for BaboJay_146:
(Start: 39 @75700 has 1 MA's), (Start: 51 @75739 has 2 MA's), (Start: 70 @75796 has 286 MA's),

Gene: BadStone_145 Start: 75098, Stop: 75445, Start Num: 70
Candidate Starts for BadStone_145:
(Start: 51 @75041 has 2 MA's), (Start: 70 @75098 has 286 MA's),

Gene: Balomoji_146 Start: 75838, Stop: 76185, Start Num: 70
Candidate Starts for Balomoji_146:
(Start: 70 @75838 has 286 MA's),

Gene: Barbarian_146 Start: 74013, Stop: 74360, Start Num: 70
Candidate Starts for Barbarian_146:
(Start: 70 @74013 has 286 MA's),

Gene: BasketStar_96 Start: 52523, Stop: 52843, Start Num: 70
Candidate Starts for BasketStar_96:
(Start: 70 @52523 has 286 MA's), (107, 52703),

Gene: BatStarr_83 Start: 53046, Stop: 53381, Start Num: 71
Candidate Starts for BatStarr_83:
(17, 52773), (Start: 71 @53046 has 28 MA's), (111, 53232),

Gene: Batiatus_105 Start: 57269, Stop: 57595, Start Num: 70
Candidate Starts for Batiatus_105:
(28, 57095), (31, 57131), (55, 57218), (Start: 70 @57269 has 286 MA's), (88, 57392), (120, 57527),

Gene: Bench_149 Start: 75511, Stop: 75858, Start Num: 70
Candidate Starts for Bench_149:
(Start: 51 @75454 has 2 MA's), (Start: 70 @75511 has 286 MA's),

Gene: BenchScraper_96 Start: 50794, Stop: 51114, Start Num: 70
Candidate Starts for BenchScraper_96:
(Start: 70 @50794 has 286 MA's), (107, 50974),

Gene: Bialota_79 Start: 51706, Stop: 52038, Start Num: 71
Candidate Starts for Bialota_79:
(17, 51433), (Start: 71 @51706 has 28 MA's),

Gene: BigBubba_149 Start: 74425, Stop: 74772, Start Num: 70
Candidate Starts for BigBubba_149:
(Start: 51 @74368 has 2 MA's), (Start: 70 @74425 has 286 MA's),

Gene: BillyTP_96 Start: 52593, Stop: 52919, Start Num: 70
Candidate Starts for BillyTP_96:
(Start: 70 @52593 has 286 MA's), (107, 52773),

Gene: Bimmel_37 Start: 23518, Stop: 23859, Start Num: 70
Candidate Starts for Bimmel_37:
(64, 23509), (Start: 68 @23512 has 1 MA's), (Start: 70 @23518 has 286 MA's), (92, 23677),

Gene: Bipolar_106 Start: 58515, Stop: 58841, Start Num: 70
Candidate Starts for Bipolar_106:
(28, 58341), (31, 58377), (55, 58464), (Start: 70 @58515 has 286 MA's), (88, 58638), (120, 58773),

Gene: BirdInFrench_53 Start: 37040, Stop: 36696, Start Num: 78
Candidate Starts for BirdInFrench_53:
(Start: 78 @37040 has 11 MA's), (82, 37010), (86, 36941), (99, 36887), (121, 36767), (123, 36743), (126, 36719),

Gene: BlueCrab_109 Start: 58669, Stop: 58995, Start Num: 70
Candidate Starts for BlueCrab_109:
(Start: 70 @58669 has 286 MA's), (88, 58792),

Gene: BlueShadow_92 Start: 52029, Stop: 52349, Start Num: 70
Candidate Starts for BlueShadow_92:
(Start: 70 @52029 has 286 MA's), (107, 52209),

Gene: BobaPhett_108 Start: 59318, Stop: 59644, Start Num: 70
Candidate Starts for BobaPhett_108:
(Start: 70 @59318 has 286 MA's),

Gene: BodEinwohner17_116 Start: 59725, Stop: 60051, Start Num: 70
Candidate Starts for BodEinwohner17_116:
(Start: 70 @59725 has 286 MA's),

Gene: Bosnia_82 Start: 54160, Stop: 54495, Start Num: 71
Candidate Starts for Bosnia_82:
(17, 53887), (Start: 71 @54160 has 28 MA's), (111, 54346),

Gene: BoyNamedSue_82 Start: 52312, Stop: 52647, Start Num: 71
Candidate Starts for BoyNamedSue_82:
(17, 52039), (Start: 71 @52312 has 28 MA's),

Gene: Brewer_142 Start: 73364, Stop: 73711, Start Num: 70
Candidate Starts for Brewer_142:
(Start: 51 @73307 has 2 MA's), (Start: 70 @73364 has 286 MA's),

Gene: Bridgette_71 Start: 42699, Stop: 43043, Start Num: 70
Candidate Starts for Bridgette_71:
(Start: 70 @42699 has 286 MA's),

Gene: Brocalys_96 Start: 54283, Stop: 54609, Start Num: 70
Candidate Starts for Brocalys_96:
(28, 54109), (31, 54145), (55, 54232), (Start: 70 @54283 has 286 MA's), (88, 54406), (120, 54541),

Gene: Bubbles123_100 Start: 56967, Stop: 57311, Start Num: 70
Candidate Starts for Bubbles123_100:
(28, 56793), (31, 56829), (55, 56916), (Start: 70 @56967 has 286 MA's), (93, 57111), (102, 57135),

Gene: Buck_148 Start: 76107, Stop: 76454, Start Num: 70
Candidate Starts for Buck_148:
(Start: 51 @76050 has 2 MA's), (Start: 70 @76107 has 286 MA's),

Gene: Budgie_149 Start: 75438, Stop: 75785, Start Num: 70
Candidate Starts for Budgie_149:
(Start: 70 @75438 has 286 MA's),

Gene: Bunnybear_78 Start: 50882, Stop: 51217, Start Num: 71
Candidate Starts for Bunnybear_78:
(17, 50609), (Start: 71 @50882 has 28 MA's),

Gene: Burwell21_99 Start: 56858, Stop: 57202, Start Num: 70
Candidate Starts for Burwell21_99:
(28, 56684), (31, 56720), (55, 56807), (Start: 70 @56858 has 286 MA's), (93, 57002), (102, 57026),

Gene: ByChance_95 Start: 52655, Stop: 52981, Start Num: 70
Candidate Starts for ByChance_95:
(Start: 70 @52655 has 286 MA's),

Gene: Byougenkin_101 Start: 54217, Stop: 54543, Start Num: 70
Candidate Starts for Byougenkin_101:
(Start: 70 @54217 has 286 MA's),

Gene: Cabrinians_101 Start: 56202, Stop: 56528, Start Num: 70
Candidate Starts for Cabrinians_101:
(28, 56028), (31, 56064), (55, 56151), (Start: 70 @56202 has 286 MA's), (88, 56325), (120, 56460),

Gene: Cactus_154 Start: 75022, Stop: 75369, Start Num: 70

Candidate Starts for Cactus_154:
(Start: 51 @74965 has 2 MA's), (Start: 70 @75022 has 286 MA's),

Gene: CandC_52 Start: 36674, Stop: 36330, Start Num: 78
Candidate Starts for CandC_52:
(Start: 78 @36674 has 11 MA's), (86, 36575), (99, 36521), (121, 36401), (123, 36377), (126, 36353),

Gene: CaptainTrips_107 Start: 56860, Stop: 57186, Start Num: 70
Candidate Starts for CaptainTrips_107:
(28, 56686), (31, 56722), (55, 56809), (Start: 70 @56860 has 286 MA's), (88, 56983), (120, 57118),

Gene: Che8_112 Start: 58974, Stop: 59300, Start Num: 70
Candidate Starts for Che8_112:
(Start: 70 @58974 has 286 MA's),

Gene: ChosenOne_147 Start: 74389, Stop: 74736, Start Num: 70
Candidate Starts for ChosenOne_147:
(Start: 51 @74332 has 2 MA's), (Start: 70 @74389 has 286 MA's),

Gene: ChuckDuck_69 Start: 42418, Stop: 42762, Start Num: 70
Candidate Starts for ChuckDuck_69:
(Start: 70 @42418 has 286 MA's),

Gene: Chuckly_102 Start: 53949, Stop: 54293, Start Num: 70
Candidate Starts for Chuckly_102:
(28, 53775), (31, 53811), (55, 53898), (Start: 70 @53949 has 286 MA's), (93, 54093), (102, 54117),

Gene: Chymera_55 Start: 34305, Stop: 34673, Start Num: 72
Candidate Starts for Chymera_55:
(9, 33873), (14, 33963), (30, 34143), (Start: 72 @34305 has 1 MA's), (81, 34353), (103, 34488), (116, 34548),

Gene: Clifton_96 Start: 55258, Stop: 55584, Start Num: 70
Candidate Starts for Clifton_96:
(Start: 70 @55258 has 286 MA's),

Gene: Command613_149 Start: 75444, Stop: 75791, Start Num: 70
Candidate Starts for Command613_149:
(Start: 39 @75348 has 1 MA's), (Start: 51 @75387 has 2 MA's), (Start: 70 @75444 has 286 MA's),

Gene: Contagion_142 Start: 73952, Stop: 74299, Start Num: 70
Candidate Starts for Contagion_142:
(Start: 51 @73895 has 2 MA's), (Start: 70 @73952 has 286 MA's),

Gene: CookieBear_95 Start: 51777, Stop: 52097, Start Num: 70
Candidate Starts for CookieBear_95:
(Start: 70 @51777 has 286 MA's), (107, 51957),

Gene: Cookies_148 Start: 75759, Stop: 76106, Start Num: 70
Candidate Starts for Cookies_148:
(Start: 51 @75702 has 2 MA's), (Start: 70 @75759 has 286 MA's),

Gene: CosmicBrownie_93 Start: 50511, Stop: 50822, Start Num: 73

Candidate Starts for CosmicBrownie_93:
(Start: 73 @50511 has 2 MA's),

Gene: Crescenzo_95 Start: 52946, Stop: 53266, Start Num: 70
Candidate Starts for Crescenzo_95:
(38, 52847), (55, 52895), (Start: 70 @52946 has 286 MA's), (107, 53126),

Gene: Crumble_99 Start: 52956, Stop: 53282, Start Num: 70
Candidate Starts for Crumble_99:
(Start: 70 @52956 has 286 MA's),

Gene: Czyszczon1_146 Start: 74437, Stop: 74841, Start Num: 51
Candidate Starts for Czyszczon1_146:
(Start: 51 @74437 has 2 MA's), (Start: 70 @74494 has 286 MA's),

Gene: DLane_105 Start: 58431, Stop: 58757, Start Num: 70
Candidate Starts for DLane_105:
(28, 58257), (31, 58293), (55, 58380), (Start: 70 @58431 has 286 MA's), (88, 58554), (120, 58689),

Gene: DRBy19_104 Start: 57899, Stop: 58225, Start Num: 70
Candidate Starts for DRBy19_104:
(Start: 70 @57899 has 286 MA's),

Gene: DaddyRickover_106 Start: 57378, Stop: 57704, Start Num: 70
Candidate Starts for DaddyRickover_106:
(Start: 70 @57378 has 286 MA's),

Gene: Daenerys_102 Start: 57545, Stop: 57871, Start Num: 70
Candidate Starts for Daenerys_102:
(Start: 70 @57545 has 286 MA's),

Gene: Dante_104 Start: 58406, Stop: 58750, Start Num: 70
Candidate Starts for Dante_104:
(28, 58232), (31, 58268), (55, 58355), (Start: 70 @58406 has 286 MA's), (93, 58550), (102, 58574),

Gene: DarwinJr_98 Start: 53274, Stop: 53627, Start Num: 70
Candidate Starts for DarwinJr_98:
(Start: 70 @53274 has 286 MA's),

Gene: Deb65_97 Start: 55269, Stop: 55595, Start Num: 70
Candidate Starts for Deb65_97:
(Start: 70 @55269 has 286 MA's),

Gene: DelaGarza_33 Start: 22446, Stop: 22048, Start Num: 61
Candidate Starts for DelaGarza_33:
(45, 22503), (Start: 61 @22446 has 5 MA's), (87, 22290), (105, 22224), (106, 22221), (122, 22110), (123, 22095),

Gene: DillTech15_111 Start: 57330, Stop: 57656, Start Num: 70
Candidate Starts for DillTech15_111:
(28, 57156), (31, 57192), (55, 57279), (Start: 70 @57330 has 286 MA's), (88, 57453), (120, 57588),

Gene: Dillpickles_84 Start: 49994, Stop: 50329, Start Num: 71

Candidate Starts for Dillpickles_84:
(17, 49721), (Start: 71 @49994 has 28 MA's),

Gene: Ding_89 Start: 52235, Stop: 52555, Start Num: 70
Candidate Starts for Ding_89:
(25, 52037), (26, 52046), (27, 52052), (42, 52142), (49, 52166), (Start: 70 @52235 has 286 MA's),

Gene: DoRead_108 Start: 55713, Stop: 56039, Start Num: 70
Candidate Starts for DoRead_108:
(Start: 70 @55713 has 286 MA's), (88, 55836), (120, 55971),

Gene: DoctorDiddles_145 Start: 74489, Stop: 74836, Start Num: 70
Candidate Starts for DoctorDiddles_145:
(Start: 51 @74432 has 2 MA's), (Start: 70 @74489 has 286 MA's),

Gene: Donkeykong_110 Start: 59010, Stop: 59336, Start Num: 70
Candidate Starts for Donkeykong_110:
(28, 58836), (31, 58872), (55, 58959), (Start: 70 @59010 has 286 MA's), (88, 59133), (120, 59268),

Gene: Dumbo_149 Start: 75155, Stop: 75502, Start Num: 70
Candidate Starts for Dumbo_149:
(Start: 51 @75098 has 2 MA's), (Start: 70 @75155 has 286 MA's),

Gene: Easy2Say_148 Start: 75017, Stop: 75364, Start Num: 70
Candidate Starts for Easy2Say_148:
(Start: 51 @74960 has 2 MA's), (Start: 70 @75017 has 286 MA's),

Gene: Eileen_64 Start: 40750, Stop: 41094, Start Num: 70
Candidate Starts for Eileen_64:
(25, 40555), (47, 40678), (Start: 70 @40750 has 286 MA's),

Gene: Eish_109 Start: 57682, Stop: 58008, Start Num: 70
Candidate Starts for Eish_109:
(5, 57169), (6, 57193), (8, 57256), (28, 57508), (55, 57631), (Start: 70 @57682 has 286 MA's),

Gene: EleanorGeorge_108 Start: 59015, Stop: 59341, Start Num: 70
Candidate Starts for EleanorGeorge_108:
(28, 58841), (31, 58877), (55, 58964), (Start: 70 @59015 has 286 MA's), (88, 59138), (120, 59273),

Gene: Elite2014_146 Start: 74388, Stop: 74735, Start Num: 70
Candidate Starts for Elite2014_146:
(Start: 51 @74331 has 2 MA's), (Start: 70 @74388 has 286 MA's),

Gene: Emma_109 Start: 55950, Stop: 56276, Start Num: 70
Candidate Starts for Emma_109:
(28, 55776), (31, 55812), (55, 55899), (Start: 70 @55950 has 286 MA's), (88, 56073), (120, 56208),

Gene: Emmina_148 Start: 74714, Stop: 75061, Start Num: 70
Candidate Starts for Emmina_148:
(Start: 51 @74657 has 2 MA's), (Start: 70 @74714 has 286 MA's),

Gene: Enzomatic_117 Start: 56795, Stop: 57121, Start Num: 70
Candidate Starts for Enzomatic_117:

(5, 56282), (6, 56306), (8, 56369), (28, 56621), (31, 56657), (55, 56744), (Start: 70 @56795 has 286 MA's),

Gene: Eradicator_95 Start: 55231, Stop: 55557, Start Num: 70
Candidate Starts for Eradicator_95:
(Start: 70 @55231 has 286 MA's),

Gene: Estave1_112 Start: 60259, Stop: 60585, Start Num: 70
Candidate Starts for Estave1_112:
(Start: 70 @60259 has 286 MA's),

Gene: Eudoria_79 Start: 49950, Stop: 50285, Start Num: 71
Candidate Starts for Eudoria_79:
(17, 49677), (Start: 71 @49950 has 28 MA's),

Gene: EvePickles_96 Start: 52994, Stop: 53314, Start Num: 70
Candidate Starts for EvePickles_96:
(Start: 70 @52994 has 286 MA's), (107, 53174),

Gene: Eviarto_84 Start: 53021, Stop: 53356, Start Num: 71
Candidate Starts for Eviarto_84:
(17, 52748), (Start: 71 @53021 has 28 MA's), (111, 53207),

Gene: FairyPath_147 Start: 75177, Stop: 75524, Start Num: 70
Candidate Starts for FairyPath_147:
(Start: 51 @75120 has 2 MA's), (Start: 70 @75177 has 286 MA's),

Gene: Faja_96 Start: 52066, Stop: 52386, Start Num: 70
Candidate Starts for Faja_96:
(Start: 70 @52066 has 286 MA's), (107, 52246),

Gene: Fastidio_108 Start: 55371, Stop: 55697, Start Num: 70
Candidate Starts for Fastidio_108:
(28, 55197), (31, 55233), (55, 55320), (Start: 70 @55371 has 286 MA's), (88, 55494), (120, 55629),

Gene: Filuzino_105 Start: 58837, Stop: 59163, Start Num: 70
Candidate Starts for Filuzino_105:
(28, 58663), (31, 58699), (55, 58786), (Start: 70 @58837 has 286 MA's), (88, 58960), (120, 59095),

Gene: FireRed_150 Start: 75636, Stop: 75983, Start Num: 70
Candidate Starts for FireRed_150:
(Start: 39 @75540 has 1 MA's), (Start: 51 @75579 has 2 MA's), (Start: 70 @75636 has 286 MA's),

Gene: Florinda_117 Start: 58948, Stop: 59274, Start Num: 70
Candidate Starts for Florinda_117:
(28, 58774), (31, 58810), (55, 58897), (Start: 70 @58948 has 286 MA's), (88, 59071), (120, 59206),

Gene: Flypotenuse_142 Start: 74667, Stop: 75014, Start Num: 70
Candidate Starts for Flypotenuse_142:
(Start: 70 @74667 has 286 MA's),

Gene: FosterFrank_71 Start: 42119, Stop: 42463, Start Num: 70
Candidate Starts for FosterFrank_71:

(19, 41831), (Start: 70 @42119 has 286 MA's),

Gene: FreddyB_113 Start: 57850, Stop: 58176, Start Num: 70
Candidate Starts for FreddyB_113:
(28, 57676), (31, 57712), (55, 57799), (Start: 70 @57850 has 286 MA's), (88, 57973), (120, 58108),

Gene: Fregley_54 Start: 37235, Stop: 36891, Start Num: 78
Candidate Starts for Fregley_54:
(Start: 78 @37235 has 11 MA's), (86, 37136), (99, 37082), (121, 36962), (123, 36938), (126, 36914),

Gene: GAL1_82 Start: 49576, Stop: 49935, Start Num: 70
Candidate Starts for GAL1_82:
(Start: 70 @49576 has 286 MA's), (114, 49810),

Gene: GUmbie_104 Start: 56919, Stop: 57245, Start Num: 70
Candidate Starts for GUmbie_104:
(28, 56745), (31, 56781), (55, 56868), (Start: 70 @56919 has 286 MA's), (88, 57042), (120, 57177),

Gene: Gage_137 Start: 71069, Stop: 71416, Start Num: 70
Candidate Starts for Gage_137:
(Start: 51 @71012 has 2 MA's), (Start: 70 @71069 has 286 MA's),

Gene: Galactic_109 Start: 57393, Stop: 57719, Start Num: 70
Candidate Starts for Galactic_109:
(5, 56880), (6, 56904), (8, 56967), (28, 57219), (31, 57255), (55, 57342), (Start: 70 @57393 has 286 MA's),

Gene: Gandalph_104 Start: 54506, Stop: 54832, Start Num: 70
Candidate Starts for Gandalph_104:
(28, 54332), (31, 54368), (55, 54455), (Start: 70 @54506 has 286 MA's), (88, 54629), (120, 54764),

Gene: Gemini_151 Start: 75068, Stop: 75415, Start Num: 70
Candidate Starts for Gemini_151:
(Start: 51 @75011 has 2 MA's), (Start: 70 @75068 has 286 MA's),

Gene: Geralt_97 Start: 55267, Stop: 55593, Start Num: 70
Candidate Starts for Geralt_97:
(Start: 70 @55267 has 286 MA's),

Gene: GigiOuiOui_99 Start: 55921, Stop: 56247, Start Num: 70
Candidate Starts for GigiOuiOui_99:
(5, 55408), (6, 55432), (8, 55495), (28, 55747), (31, 55783), (55, 55870), (Start: 70 @55921 has 286 MA's), (88, 56044), (120, 56179),

Gene: Gingerbug_31 Start: 22564, Stop: 22166, Start Num: 61
Candidate Starts for Gingerbug_31:
(45, 22621), (Start: 61 @22564 has 5 MA's), (87, 22408), (105, 22342), (106, 22339), (110, 22321), (122, 22228), (123, 22213),

Gene: Girr_103 Start: 57256, Stop: 57582, Start Num: 70
Candidate Starts for Girr_103:
(Start: 70 @57256 has 286 MA's),

Gene: Glexan_150 Start: 75917, Stop: 76264, Start Num: 70
Candidate Starts for Glexan_150:
(Start: 70 @75917 has 286 MA's),

Gene: Globfish_96 Start: 50972, Stop: 51292, Start Num: 70
Candidate Starts for Globfish_96:
(Start: 70 @50972 has 286 MA's), (107, 51152),

Gene: GlobiWarming_74 Start: 42547, Stop: 42891, Start Num: 70
Candidate Starts for GlobiWarming_74:
(59, 42526), (Start: 67 @42541 has 2 MA's), (Start: 70 @42547 has 286 MA's),

Gene: GoldenSpark_150 Start: 74551, Stop: 74898, Start Num: 70
Candidate Starts for GoldenSpark_150:
(Start: 51 @74494 has 2 MA's), (Start: 70 @74551 has 286 MA's),

Gene: Goldilocks_152 Start: 75147, Stop: 75494, Start Num: 70
Candidate Starts for Goldilocks_152:
(Start: 51 @75090 has 2 MA's), (Start: 70 @75147 has 286 MA's),

Gene: Gorge_103 Start: 57487, Stop: 57813, Start Num: 70
Candidate Starts for Gorge_103:
(28, 57313), (31, 57349), (55, 57436), (Start: 70 @57487 has 286 MA's), (88, 57610), (120, 57745),

Gene: Grimmer_106 Start: 54827, Stop: 55153, Start Num: 70
Candidate Starts for Grimmer_106:
(Start: 70 @54827 has 286 MA's),

Gene: GumGum_103 Start: 53268, Stop: 53588, Start Num: 70
Candidate Starts for GumGum_103:
(Start: 70 @53268 has 286 MA's), (107, 53448),

Gene: Guppsters_99 Start: 54367, Stop: 54693, Start Num: 70
Candidate Starts for Guppsters_99:
(Start: 70 @54367 has 286 MA's), (88, 54490), (120, 54625),

Gene: Hades_102 Start: 54518, Stop: 54844, Start Num: 70
Candidate Starts for Hades_102:
(Start: 70 @54518 has 286 MA's),

Gene: Hamulus_105 Start: 56687, Stop: 57013, Start Num: 70
Candidate Starts for Hamulus_105:
(28, 56513), (31, 56549), (55, 56636), (Start: 70 @56687 has 286 MA's), (88, 56810), (120, 56945),

Gene: Harella_153 Start: 76278, Stop: 76625, Start Num: 70
Candidate Starts for Harella_153:
(Start: 70 @76278 has 286 MA's),

Gene: Henrique_72 Start: 42189, Stop: 42533, Start Num: 70
Candidate Starts for Henrique_72:
(41, 42093), (Start: 70 @42189 has 286 MA's),

Gene: Herod_84 Start: 53440, Stop: 53775, Start Num: 71

Candidate Starts for Herod_84:
(17, 53167), (Start: 71 @53440 has 28 MA's), (111, 53626),

Gene: Hestia_90 Start: 50238, Stop: 50558, Start Num: 73
Candidate Starts for Hestia_90:
(23, 49992), (Start: 70 @50226 has 286 MA's), (Start: 73 @50238 has 2 MA's), (93, 50367),

Gene: Highbury_141 Start: 72834, Stop: 73181, Start Num: 70
Candidate Starts for Highbury_141:
(Start: 39 @72738 has 1 MA's), (Start: 51 @72777 has 2 MA's), (Start: 70 @72834 has 286 MA's),

Gene: Hillester_99 Start: 52313, Stop: 52633, Start Num: 70
Candidate Starts for Hillester_99:
(Start: 70 @52313 has 286 MA's), (107, 52493),

Gene: Hlubikazi_102 Start: 55002, Stop: 55328, Start Num: 70
Candidate Starts for Hlubikazi_102:
(5, 54489), (8, 54576), (28, 54828), (31, 54864), (55, 54951), (Start: 70 @55002 has 286 MA's), (88, 55125), (120, 55260),

Gene: Holt_152 Start: 75334, Stop: 75681, Start Num: 70
Candidate Starts for Holt_152:
(Start: 51 @75277 has 2 MA's), (Start: 70 @75334 has 286 MA's),

Gene: Hoonter_148 Start: 74686, Stop: 75033, Start Num: 70
Candidate Starts for Hoonter_148:
(Start: 70 @74686 has 286 MA's),

Gene: Hopey_144 Start: 75005, Stop: 75352, Start Num: 70
Candidate Starts for Hopey_144:
(Start: 39 @74909 has 1 MA's), (Start: 51 @74948 has 2 MA's), (Start: 70 @75005 has 286 MA's),

Gene: HufflyPuff_148 Start: 75742, Stop: 76089, Start Num: 70
Candidate Starts for HufflyPuff_148:
(Start: 51 @75685 has 2 MA's), (Start: 70 @75742 has 286 MA's),

Gene: Hum25_86 Start: 42285, Stop: 42626, Start Num: 70
Candidate Starts for Hum25_86:
(Start: 70 @42285 has 286 MA's), (75, 42303), (97, 42438),

Gene: Hyzer_100 Start: 60183, Stop: 60518, Start Num: 71
Candidate Starts for Hyzer_100:
(52, 60138), (Start: 71 @60183 has 28 MA's),

Gene: IHOP_151 Start: 75087, Stop: 75434, Start Num: 70
Candidate Starts for IHOP_151:
(Start: 51 @75030 has 2 MA's), (Start: 70 @75087 has 286 MA's),

Gene: IbOuu_96 Start: 54829, Stop: 55155, Start Num: 70
Candidate Starts for IbOuu_96:
(28, 54655), (31, 54691), (55, 54778), (Start: 70 @54829 has 286 MA's), (88, 54952), (120, 55087),

Gene: Ibantik_57 Start: 25161, Stop: 25478, Start Num: 70

Candidate Starts for Ibantik_57:
(Start: 50 @25107 has 1 MA's), (Start: 70 @25161 has 286 MA's), (74, 25176), (77, 25185), (98, 25320), (108, 25347), (117, 25392), (118, 25416),

Gene: Ibhubesi_103 Start: 55132, Stop: 55458, Start Num: 70
Candidate Starts for Ibhubesi_103:
(Start: 70 @55132 has 286 MA's),

Gene: Icee_146 Start: 73588, Stop: 73935, Start Num: 70
Candidate Starts for Icee_146:
(Start: 51 @73531 has 2 MA's), (Start: 70 @73588 has 286 MA's),

Gene: Inca_147 Start: 73489, Stop: 73836, Start Num: 70
Candidate Starts for Inca_147:
(36, 73372), (Start: 39 @73393 has 1 MA's), (Start: 51 @73432 has 2 MA's), (Start: 70 @73489 has 286 MA's),

Gene: Inventum_102 Start: 56555, Stop: 56881, Start Num: 70
Candidate Starts for Inventum_102:
(Start: 70 @56555 has 286 MA's),

Gene: IrishSherpFalk_105 Start: 57329, Stop: 57673, Start Num: 70
Candidate Starts for IrishSherpFalk_105:
(Start: 70 @57329 has 286 MA's), (93, 57473), (102, 57497),

Gene: Isolde_98 Start: 52809, Stop: 53129, Start Num: 70
Candidate Starts for Isolde_98:
(Start: 70 @52809 has 286 MA's), (107, 52989),

Gene: James_108 Start: 59148, Stop: 59474, Start Num: 70
Candidate Starts for James_108:
(28, 58974), (31, 59010), (55, 59097), (Start: 70 @59148 has 286 MA's), (88, 59271), (120, 59406),

Gene: Jarcob_107 Start: 58468, Stop: 58794, Start Num: 70
Candidate Starts for Jarcob_107:
(Start: 70 @58468 has 286 MA's),

Gene: JeTaime_144 Start: 74518, Stop: 74865, Start Num: 70
Candidate Starts for JeTaime_144:
(Start: 51 @74461 has 2 MA's), (Start: 70 @74518 has 286 MA's),

Gene: JellyBread_95 Start: 53015, Stop: 53341, Start Num: 70
Candidate Starts for JellyBread_95:
(Start: 70 @53015 has 286 MA's), (107, 53195),

Gene: Jennelsea_103 Start: 56048, Stop: 56374, Start Num: 70
Candidate Starts for Jennelsea_103:
(Start: 70 @56048 has 286 MA's), (88, 56171), (120, 56306),

Gene: Jinglebell_111 Start: 58360, Stop: 58686, Start Num: 70
Candidate Starts for Jinglebell_111:
(Start: 70 @58360 has 286 MA's),

Gene: JoeyJr_107 Start: 58463, Stop: 58789, Start Num: 70
Candidate Starts for JoeyJr_107:
(Start: 70 @58463 has 286 MA's),

Gene: Journey_64 Start: 41500, Stop: 41799, Start Num: 83
Candidate Starts for Journey_64:
(Start: 83 @41500 has 1 MA's),

Gene: Judy_72 Start: 43025, Stop: 43369, Start Num: 70
Candidate Starts for Judy_72:
(Start: 70 @43025 has 286 MA's),

Gene: Juniper1_98 Start: 56030, Stop: 56374, Start Num: 70
Candidate Starts for Juniper1_98:
(Start: 70 @56030 has 286 MA's), (93, 56174), (102, 56198),

Gene: Kabloowy_95 Start: 52731, Stop: 53084, Start Num: 70
Candidate Starts for Kabloowy_95:
(Start: 70 @52731 has 286 MA's),

Gene: Kanye_142 Start: 74872, Stop: 75219, Start Num: 70
Candidate Starts for Kanye_142:
(Start: 51 @74815 has 2 MA's), (Start: 70 @74872 has 286 MA's),

Gene: Karhdo_100 Start: 54911, Stop: 55237, Start Num: 70
Candidate Starts for Karhdo_100:
(Start: 70 @54911 has 286 MA's),

Gene: Karkharias_66 Start: 42195, Stop: 42539, Start Num: 70
Candidate Starts for Karkharias_66:
(Start: 70 @42195 has 286 MA's),

Gene: KayMoney_68 Start: 42631, Stop: 42975, Start Num: 70
Candidate Starts for KayMoney_68:
(Start: 70 @42631 has 286 MA's),

Gene: Kelcole_51 Start: 36869, Stop: 36525, Start Num: 78
Candidate Starts for Kelcole_51:
(Start: 78 @36869 has 11 MA's), (86, 36770), (121, 36596), (123, 36572), (126, 36548),

Gene: Kenuha5_96 Start: 56035, Stop: 56361, Start Num: 70
Candidate Starts for Kenuha5_96:
(28, 55861), (31, 55897), (55, 55984), (Start: 70 @56035 has 286 MA's), (88, 56158), (120, 56293),

Gene: Kersh_107 Start: 59723, Stop: 60049, Start Num: 70
Candidate Starts for Kersh_107:
(Start: 70 @59723 has 286 MA's),

Gene: KillerQueen_54 Start: 37119, Stop: 36775, Start Num: 78
Candidate Starts for KillerQueen_54:
(Start: 78 @37119 has 11 MA's), (86, 37020), (99, 36966), (121, 36846), (123, 36822), (126, 36798),

Gene: Kimchi_151 Start: 75248, Stop: 75595, Start Num: 70

Candidate Starts for Kimchi_151:
(Start: 51 @75191 has 2 MA's), (Start: 70 @75248 has 286 MA's),

Gene: KingMidas_105 Start: 56917, Stop: 57243, Start Num: 70
Candidate Starts for KingMidas_105:
(28, 56743), (31, 56779), (55, 56866), (Start: 70 @56917 has 286 MA's), (88, 57040), (120, 57175),

Gene: Kita_80 Start: 49959, Stop: 50294, Start Num: 71
Candidate Starts for Kita_80:
(17, 49686), (Start: 71 @49959 has 28 MA's),

Gene: Krakatau_97 Start: 52590, Stop: 52916, Start Num: 70
Candidate Starts for Krakatau_97:
(28, 52416), (31, 52452), (55, 52539), (Start: 70 @52590 has 286 MA's), (88, 52713), (120, 52848),

Gene: KristaRAM_113 Start: 58232, Stop: 58558, Start Num: 70
Candidate Starts for KristaRAM_113:
(Start: 70 @58232 has 286 MA's),

Gene: Kromp_95 Start: 57607, Stop: 57981, Start Num: 66
Candidate Starts for Kromp_95:
(4, 56935), (7, 57178), (10, 57223), (21, 57367), (22, 57382), (28, 57454), (60, 57592), (Start: 66 @57607 has 1 MA's), (90, 57775), (95, 57784),

Gene: Lasker_96 Start: 53398, Stop: 53718, Start Num: 70
Candidate Starts for Lasker_96:
(Start: 70 @53398 has 286 MA's), (107, 53578),

Gene: Lawnathon_100 Start: 52639, Stop: 52959, Start Num: 70
Candidate Starts for Lawnathon_100:
(Start: 70 @52639 has 286 MA's), (107, 52819),

Gene: LeBruni_97 Start: 51926, Stop: 52246, Start Num: 70
Candidate Starts for LeBruni_97:
(Start: 70 @51926 has 286 MA's),

Gene: Leperchaun_106 Start: 57697, Stop: 58023, Start Num: 70
Candidate Starts for Leperchaun_106:
(Start: 70 @57697 has 286 MA's),

Gene: Lesiram_34 Start: 22418, Stop: 22020, Start Num: 61
Candidate Starts for Lesiram_34:
(45, 22475), (Start: 61 @22418 has 5 MA's), (87, 22262), (105, 22196), (106, 22193), (122, 22082), (123, 22067),

Gene: Lilpickle_146 Start: 74388, Stop: 74735, Start Num: 70
Candidate Starts for Lilpickle_146:
(Start: 51 @74331 has 2 MA's), (Start: 70 @74388 has 286 MA's),

Gene: Lizziana_105 Start: 57926, Stop: 58252, Start Num: 70
Candidate Starts for Lizziana_105:
(Start: 70 @57926 has 286 MA's),

Gene: Llama_111 Start: 58003, Stop: 58329, Start Num: 70
Candidate Starts for Llama_111:
(Start: 70 @58003 has 286 MA's),

Gene: Llij_99 Start: 55622, Stop: 55966, Start Num: 70
Candidate Starts for Llij_99:
(28, 55448), (31, 55484), (55, 55571), (Start: 70 @55622 has 286 MA's), (93, 55766), (102, 55790),

Gene: LunaBlu_111 Start: 58815, Stop: 59141, Start Num: 70
Candidate Starts for LunaBlu_111:
(5, 58302), (6, 58326), (8, 58389), (28, 58641), (31, 58677), (55, 58764), (Start: 70 @58815 has 286 MA's), (88, 58938), (120, 59073),

Gene: MISSy_147 Start: 75227, Stop: 75574, Start Num: 70
Candidate Starts for MISSy_147:
(Start: 39 @75131 has 1 MA's), (Start: 51 @75170 has 2 MA's), (Start: 70 @75227 has 286 MA's),

Gene: MPhalcon_148 Start: 75024, Stop: 75371, Start Num: 70
Candidate Starts for MPhalcon_148:
(Start: 39 @74928 has 1 MA's), (Start: 51 @74967 has 2 MA's), (Start: 70 @75024 has 286 MA's),

Gene: MUWow_98 Start: 53802, Stop: 54125, Start Num: 70
Candidate Starts for MUWow_98:
(Start: 70 @53802 has 286 MA's), (Start: 73 @53814 has 2 MA's), (91, 53940),

Gene: MadMen_109 Start: 57291, Stop: 57617, Start Num: 70
Candidate Starts for MadMen_109:
(Start: 70 @57291 has 286 MA's),

Gene: MadamMonkfish_148 Start: 74973, Stop: 75320, Start Num: 70
Candidate Starts for MadamMonkfish_148:
(Start: 51 @74916 has 2 MA's), (Start: 70 @74973 has 286 MA's),

Gene: Madavieve_80 Start: 51628, Stop: 51963, Start Num: 71
Candidate Starts for Madavieve_80:
(18, 51364), (24, 51433), (35, 51514), (52, 51583), (Start: 71 @51628 has 28 MA's),

Gene: Madeline_76 Start: 51284, Stop: 51616, Start Num: 71
Candidate Starts for Madeline_76:
(12, 50948), (17, 51011), (Start: 71 @51284 has 28 MA's),

Gene: Mahavrat_98 Start: 54698, Stop: 55042, Start Num: 70
Candidate Starts for Mahavrat_98:
(Start: 70 @54698 has 286 MA's), (93, 54842), (102, 54866),

Gene: Manasvini_81 Start: 49974, Stop: 50309, Start Num: 71
Candidate Starts for Manasvini_81:
(17, 49701), (Start: 71 @49974 has 28 MA's),

Gene: Manda_149 Start: 75442, Stop: 75789, Start Num: 70
Candidate Starts for Manda_149:
(Start: 39 @75346 has 1 MA's), (Start: 51 @75385 has 2 MA's), (Start: 70 @75442 has 286 MA's),

Gene: Mantra_102 Start: 56533, Stop: 56859, Start Num: 70
Candidate Starts for Mantra_102:
(5, 56020), (8, 56107), (28, 56359), (55, 56482), (Start: 70 @56533 has 286 MA's), (88, 56656), (120, 56791),

Gene: Mapleville_87 Start: 50199, Stop: 50522, Start Num: 70
Candidate Starts for Mapleville_87:
(Start: 70 @50199 has 286 MA's), (Start: 73 @50211 has 2 MA's), (91, 50337),

Gene: Maravista_102 Start: 58887, Stop: 59231, Start Num: 70
Candidate Starts for Maravista_102:
(Start: 70 @58887 has 286 MA's), (93, 59031), (102, 59055),

Gene: Marcie_58 Start: 37738, Stop: 37394, Start Num: 78
Candidate Starts for Marcie_58:
(Start: 78 @37738 has 11 MA's), (86, 37639), (99, 37585), (121, 37465), (123, 37441), (124, 37435), (126, 37417),

Gene: Maridalia_83 Start: 51242, Stop: 51577, Start Num: 71
Candidate Starts for Maridalia_83:
(17, 50969), (Start: 71 @51242 has 28 MA's),

Gene: Marshmallow_149 Start: 76102, Stop: 76506, Start Num: 51
Candidate Starts for Marshmallow_149:
(Start: 51 @76102 has 2 MA's), (Start: 70 @76159 has 286 MA's),

Gene: Martik_103 Start: 58387, Stop: 58713, Start Num: 70
Candidate Starts for Martik_103:
(Start: 70 @58387 has 286 MA's),

Gene: MaterMagnus_96 Start: 52654, Stop: 52974, Start Num: 70
Candidate Starts for MaterMagnus_96:
(Start: 70 @52654 has 286 MA's), (107, 52834),

Gene: Mattes_105 Start: 57605, Stop: 57931, Start Num: 70
Candidate Starts for Mattes_105:
(Start: 70 @57605 has 286 MA's),

Gene: Maxxinista_148 Start: 74634, Stop: 74981, Start Num: 70
Candidate Starts for Maxxinista_148:
(Start: 51 @74577 has 2 MA's), (Start: 70 @74634 has 286 MA's),

Gene: Medindi_110 Start: 58213, Stop: 58539, Start Num: 70
Candidate Starts for Medindi_110:
(28, 58039), (31, 58075), (55, 58162), (Start: 70 @58213 has 286 MA's), (88, 58336), (120, 58471),

Gene: Melissauren88_95 Start: 53888, Stop: 54214, Start Num: 70
Candidate Starts for Melissauren88_95:
(Start: 70 @53888 has 286 MA's), (88, 54011), (120, 54146),

Gene: MidnightRain_102 Start: 53249, Stop: 53569, Start Num: 70
Candidate Starts for MidnightRain_102:
(Start: 70 @53249 has 286 MA's),

Gene: MilanaBonita_98 Start: 55783, Stop: 56109, Start Num: 70
Candidate Starts for MilanaBonita_98:
(28, 55609), (31, 55645), (55, 55732), (Start: 70 @55783 has 286 MA's), (88, 55906), (120, 56041),

Gene: MinionDave_103 Start: 57559, Stop: 57885, Start Num: 70
Candidate Starts for MinionDave_103:
(28, 57385), (31, 57421), (55, 57508), (Start: 70 @57559 has 286 MA's), (88, 57682), (120, 57817),

Gene: Miniwave_140 Start: 74380, Stop: 74727, Start Num: 70
Candidate Starts for Miniwave_140:
(Start: 51 @74323 has 2 MA's), (Start: 70 @74380 has 286 MA's),

Gene: Minnie_99 Start: 58017, Stop: 58361, Start Num: 70
Candidate Starts for Minnie_99:
(28, 57843), (31, 57879), (55, 57966), (Start: 70 @58017 has 286 MA's), (93, 58161), (102, 58185),

Gene: MisterCuddles_104 Start: 57256, Stop: 57582, Start Num: 70
Candidate Starts for MisterCuddles_104:
(Start: 70 @57256 has 286 MA's),

Gene: Modragons_107 Start: 57991, Stop: 58317, Start Num: 70
Candidate Starts for Modragons_107:
(Start: 70 @57991 has 286 MA's),

Gene: Moonbeam_107 Start: 57515, Stop: 57841, Start Num: 70
Candidate Starts for Moonbeam_107:
(28, 57341), (31, 57377), (55, 57464), (Start: 70 @57515 has 286 MA's), (88, 57638), (120, 57773),

Gene: Ms6_107 Start: 53778, Stop: 54104, Start Num: 70
Candidate Starts for Ms6_107:
(28, 53604), (31, 53640), (55, 53727), (Start: 70 @53778 has 286 MA's), (88, 53901), (120, 54036),

Gene: Murica_149 Start: 76472, Stop: 76819, Start Num: 70
Candidate Starts for Murica_149:
(Start: 39 @76376 has 1 MA's), (Start: 51 @76415 has 2 MA's), (Start: 70 @76472 has 286 MA's),

Gene: Murphy_148 Start: 75598, Stop: 75945, Start Num: 70
Candidate Starts for Murphy_148:
(Start: 51 @75541 has 2 MA's), (Start: 70 @75598 has 286 MA's),

Gene: MurphyJoseph_94 Start: 50348, Stop: 50668, Start Num: 70
Candidate Starts for MurphyJoseph_94:
(Start: 70 @50348 has 286 MA's), (107, 50528),

Gene: Mutaforma13_106 Start: 57233, Stop: 57559, Start Num: 70
Candidate Starts for Mutaforma13_106:
(28, 57059), (31, 57095), (55, 57182), (Start: 70 @57233 has 286 MA's), (88, 57356), (120, 57491),

Gene: Myrale_146 Start: 75838, Stop: 76185, Start Num: 70
Candidate Starts for Myrale_146:
(Start: 51 @75781 has 2 MA's), (Start: 70 @75838 has 286 MA's),

Gene: Nala_149 Start: 75313, Stop: 75660, Start Num: 70
Candidate Starts for Nala_149:
(Start: 39 @75217 has 1 MA's), (Start: 51 @75256 has 2 MA's), (Start: 70 @75313 has 286 MA's),

Gene: Neobush_81 Start: 50518, Stop: 50853, Start Num: 71
Candidate Starts for Neobush_81:
(17, 50245), (Start: 71 @50518 has 28 MA's),

Gene: NewHope4_112 Start: 56941, Stop: 57267, Start Num: 70
Candidate Starts for NewHope4_112:
(5, 56428), (6, 56452), (8, 56515), (28, 56767), (31, 56803), (55, 56890), (Start: 70 @56941 has 286 MA's),

Gene: Nichirin_107 Start: 58147, Stop: 58473, Start Num: 70
Candidate Starts for Nichirin_107:
(Start: 70 @58147 has 286 MA's), (88, 58270), (120, 58405),

Gene: NidoQ_64 Start: 42149, Stop: 42493, Start Num: 70
Candidate Starts for NidoQ_64:
(Start: 70 @42149 has 286 MA's),

Gene: NikkiHotWheels_68 Start: 41859, Stop: 42203, Start Num: 70
Candidate Starts for NikkiHotWheels_68:
(Start: 70 @41859 has 286 MA's), (113, 42075),

Gene: Nimbo_96 Start: 55269, Stop: 55595, Start Num: 70
Candidate Starts for Nimbo_96:
(Start: 70 @55269 has 286 MA's),

Gene: Nimrod_145 Start: 75854, Stop: 76201, Start Num: 70
Candidate Starts for Nimrod_145:
(Start: 51 @75797 has 2 MA's), (Start: 70 @75854 has 286 MA's),

Gene: NoSleep_145 Start: 74074, Stop: 74421, Start Num: 70
Candidate Starts for NoSleep_145:
(Start: 51 @74017 has 2 MA's), (Start: 70 @74074 has 286 MA's),

Gene: NoSwimming_59 Start: 40976, Stop: 41329, Start Num: 70
Candidate Starts for NoSwimming_59:
(Start: 70 @40976 has 286 MA's), (84, 41072), (120, 41240), (125, 41285),

Gene: NonchalantPear_146 Start: 73641, Stop: 73988, Start Num: 70
Candidate Starts for NonchalantPear_146:
(Start: 51 @73584 has 2 MA's), (Start: 70 @73641 has 286 MA's),

Gene: NormanBulbieJr_102 Start: 57635, Stop: 57961, Start Num: 70
Candidate Starts for NormanBulbieJr_102:
(28, 57461), (31, 57497), (55, 57584), (Start: 70 @57635 has 286 MA's), (88, 57758), (120, 57893),

Gene: Nymphadora_84 Start: 53045, Stop: 53380, Start Num: 71
Candidate Starts for Nymphadora_84:
(17, 52772), (Start: 71 @53045 has 28 MA's), (111, 53231),

Gene: Ochi17_110 Start: 57598, Stop: 57924, Start Num: 70
Candidate Starts for Ochi17_110:
(Start: 70 @57598 has 286 MA's),

Gene: OfUltron_111 Start: 58147, Stop: 58473, Start Num: 70
Candidate Starts for OfUltron_111:
(Start: 70 @58147 has 286 MA's),

Gene: OldBen_101 Start: 56661, Stop: 56987, Start Num: 70
Candidate Starts for OldBen_101:
(Start: 70 @56661 has 286 MA's),

Gene: OneinaGillian_53 Start: 36771, Stop: 36427, Start Num: 78
Candidate Starts for OneinaGillian_53:
(Start: 78 @36771 has 11 MA's), (86, 36672), (99, 36618), (121, 36498), (123, 36474), (126, 36450),

Gene: OrionPax_144 Start: 74532, Stop: 74879, Start Num: 70
Candidate Starts for OrionPax_144:
(Start: 51 @74475 has 2 MA's), (Start: 70 @74532 has 286 MA's),

Gene: PHappiness_104 Start: 57490, Stop: 57816, Start Num: 70
Candidate Starts for PHappiness_104:
(Start: 70 @57490 has 286 MA's),

Gene: PMC_104 Start: 56224, Stop: 56550, Start Num: 70
Candidate Starts for PMC_104:
(1, 55117), (2, 55408), (3, 55471), (5, 55711), (8, 55798), (28, 56050), (31, 56086), (55, 56173), (Start: 70 @56224 has 286 MA's), (88, 56347), (120, 56482),

Gene: Pacc40_101 Start: 58086, Stop: 58412, Start Num: 70
Candidate Starts for Pacc40_101:
(28, 57912), (31, 57948), (55, 58035), (Start: 70 @58086 has 286 MA's),

Gene: Palpatine_143 Start: 75228, Stop: 75575, Start Num: 70
Candidate Starts for Palpatine_143:
(Start: 39 @75132 has 1 MA's), (Start: 51 @75171 has 2 MA's), (Start: 70 @75228 has 286 MA's),

Gene: Paperbeatsrock_144 Start: 75058, Stop: 75405, Start Num: 70
Candidate Starts for Paperbeatsrock_144:
(Start: 51 @75001 has 2 MA's), (Start: 70 @75058 has 286 MA's),

Gene: Pat3_147 Start: 75094, Stop: 75441, Start Num: 70
Candidate Starts for Pat3_147:
(Start: 70 @75094 has 286 MA's),

Gene: Peas_68 Start: 43688, Stop: 44032, Start Num: 70
Candidate Starts for Peas_68:
(32, 43556), (53, 43634), (Start: 70 @43688 has 286 MA's),

Gene: PeggyLeg03_70 Start: 42854, Stop: 43198, Start Num: 70
Candidate Starts for PeggyLeg03_70:
(Start: 70 @42854 has 286 MA's),

Gene: Pepe25_52 Start: 36314, Stop: 35970, Start Num: 78
Candidate Starts for Pepe25_52:
(37, 36455), (Start: 78 @36314 has 11 MA's), (86, 36215), (99, 36161), (121, 36041), (123, 36017), (126, 35993),

Gene: Phaja_151 Start: 75104, Stop: 75451, Start Num: 70
Candidate Starts for Phaja_151:
(Start: 51 @75047 has 2 MA's), (Start: 70 @75104 has 286 MA's),

Gene: Phalconet_106 Start: 57180, Stop: 57506, Start Num: 70
Candidate Starts for Phalconet_106:
(28, 57006), (31, 57042), (55, 57129), (Start: 70 @57180 has 286 MA's), (88, 57303), (120, 57438),

Gene: Phanphagia_109 Start: 58459, Stop: 58803, Start Num: 70
Candidate Starts for Phanphagia_109:
(Start: 70 @58459 has 286 MA's), (93, 58603), (102, 58627),

Gene: Phasih_100 Start: 55657, Stop: 55983, Start Num: 70
Candidate Starts for Phasih_100:
(Start: 70 @55657 has 286 MA's),

Gene: PhatBacter_150 Start: 75636, Stop: 75983, Start Num: 70
Candidate Starts for PhatBacter_150:
(Start: 39 @75540 has 1 MA's), (Start: 51 @75579 has 2 MA's), (Start: 70 @75636 has 286 MA's),

Gene: Phatniss_101 Start: 56036, Stop: 56380, Start Num: 70
Candidate Starts for Phatniss_101:
(28, 55862), (31, 55898), (55, 55985), (Start: 70 @56036 has 286 MA's), (93, 56180), (102, 56204),

Gene: Phaux_147 Start: 75898, Stop: 76245, Start Num: 70
Candidate Starts for Phaux_147:
(Start: 51 @75841 has 2 MA's), (Start: 70 @75898 has 286 MA's),

Gene: PhesterPhotato_109 Start: 57154, Stop: 57480, Start Num: 70
Candidate Starts for PhesterPhotato_109:
(28, 56980), (31, 57016), (55, 57103), (Start: 70 @57154 has 286 MA's), (88, 57277), (120, 57412),

Gene: Philus_108 Start: 58766, Stop: 59092, Start Num: 70
Candidate Starts for Philus_108:
(28, 58592), (31, 58628), (55, 58715), (Start: 70 @58766 has 286 MA's), (88, 58889), (120, 59024),

Gene: Phrank15_100 Start: 52150, Stop: 52461, Start Num: 73
Candidate Starts for Phrank15_100:
(11, 51760), (13, 51793), (25, 51952), (31, 52009), (48, 52078), (Start: 73 @52150 has 2 MA's), (91, 52276), (101, 52303),

Gene: Phrux_143 Start: 74130, Stop: 74477, Start Num: 70
Candidate Starts for Phrux_143:
(Start: 51 @74073 has 2 MA's), (Start: 70 @74130 has 286 MA's),

Gene: Pippy_103 Start: 56195, Stop: 56521, Start Num: 70
Candidate Starts for Pippy_103:
(28, 56021), (31, 56057), (55, 56144), (Start: 70 @56195 has 286 MA's), (88, 56318), (120, 56453),

Gene: Policronamos_145 Start: 75313, Stop: 75660, Start Num: 70
Candidate Starts for Policronamos_145:
(Start: 39 @75217 has 1 MA's), (Start: 51 @75256 has 2 MA's), (Start: 70 @75313 has 286 MA's),

Gene: Polka14_108 Start: 58259, Stop: 58585, Start Num: 70
Candidate Starts for Polka14_108:
(Start: 70 @58259 has 286 MA's),

Gene: Polly_76 Start: 49393, Stop: 49728, Start Num: 71
Candidate Starts for Polly_76:
(17, 49120), (Start: 71 @49393 has 28 MA's),

Gene: Polo2Bam_116 Start: 56795, Stop: 57121, Start Num: 70
Candidate Starts for Polo2Bam_116:
(5, 56282), (6, 56306), (8, 56369), (28, 56621), (31, 56657), (55, 56744), (Start: 70 @56795 has 286 MA's),

Gene: Ponzi_39 Start: 21753, Stop: 22079, Start Num: 70
Candidate Starts for Ponzi_39:
(Start: 70 @21753 has 286 MA's), (117, 21984),

Gene: PopTart_95 Start: 54627, Stop: 54953, Start Num: 70
Candidate Starts for PopTart_95:
(5, 54114), (8, 54201), (28, 54453), (31, 54489), (55, 54576), (Start: 70 @54627 has 286 MA's), (88, 54750), (120, 54885),

Gene: Priscilla_105 Start: 57733, Stop: 58059, Start Num: 70
Candidate Starts for Priscilla_105:
(Start: 70 @57733 has 286 MA's),

Gene: Quallification_146 Start: 75327, Stop: 75674, Start Num: 70
Candidate Starts for Quallification_146:
(Start: 51 @75270 has 2 MA's), (Start: 70 @75327 has 286 MA's),

Gene: RadFad_100 Start: 52313, Stop: 52633, Start Num: 70
Candidate Starts for RadFad_100:
(Start: 70 @52313 has 286 MA's), (107, 52493),

Gene: Radiance_103 Start: 56827, Stop: 57153, Start Num: 70
Candidate Starts for Radiance_103:
(5, 56314), (6, 56338), (8, 56401), (28, 56653), (31, 56689), (55, 56776), (Start: 70 @56827 has 286 MA's),

Gene: Raphaella_96 Start: 51282, Stop: 51608, Start Num: 70
Candidate Starts for Raphaella_96:
(Start: 70 @51282 has 286 MA's), (107, 51462),

Gene: RavenCo17_74 Start: 49279, Stop: 49611, Start Num: 71
Candidate Starts for RavenCo17_74:
(Start: 71 @49279 has 28 MA's), (94, 49411),

Gene: RedBird_105 Start: 58237, Stop: 58563, Start Num: 70

Candidate Starts for RedBird_105:
(Start: 70 @58237 has 286 MA's),

Gene: Richie_99 Start: 53442, Stop: 53762, Start Num: 70
Candidate Starts for Richie_99:
(29, 53286), (40, 53343), (Start: 70 @53442 has 286 MA's), (107, 53622),

Gene: Rimmer_145 Start: 75079, Stop: 75426, Start Num: 70
Candidate Starts for Rimmer_145:
(Start: 51 @75022 has 2 MA's), (Start: 70 @75079 has 286 MA's),

Gene: Rita_104 Start: 58303, Stop: 58629, Start Num: 70
Candidate Starts for Rita_104:
(28, 58129), (31, 58165), (55, 58252), (Start: 70 @58303 has 286 MA's), (88, 58426), (120, 58561),

Gene: RitaG_103 Start: 57292, Stop: 57618, Start Num: 70
Candidate Starts for RitaG_103:
(Start: 70 @57292 has 286 MA's),

Gene: RiverMonster_146 Start: 74984, Stop: 75331, Start Num: 70
Candidate Starts for RiverMonster_146:
(Start: 51 @74927 has 2 MA's), (Start: 70 @74984 has 286 MA's),

Gene: RobinRose_55 Start: 37280, Stop: 36936, Start Num: 78
Candidate Starts for RobinRose_55:
(Start: 78 @37280 has 11 MA's), (86, 37181), (99, 37127), (121, 37007), (123, 36983), (126, 36959),

Gene: Rockne_108 Start: 56236, Stop: 56562, Start Num: 70
Candidate Starts for Rockne_108:
(1, 55129), (2, 55420), (3, 55483), (5, 55723), (8, 55810), (28, 56062), (31, 56098), (55, 56185), (Start: 70 @56236 has 286 MA's), (88, 56359), (120, 56494),

Gene: Romm_55 Start: 37280, Stop: 36936, Start Num: 78
Candidate Starts for Romm_55:
(Start: 78 @37280 has 11 MA's), (86, 37181), (99, 37127), (121, 37007), (123, 36983), (126, 36959),

Gene: RootBeer_55 Start: 38956, Stop: 39309, Start Num: 69
Candidate Starts for RootBeer_55:
(44, 38890), (Start: 69 @38956 has 1 MA's), (100, 39118), (108, 39139),

Gene: Rowa_68 Start: 42116, Stop: 42472, Start Num: 58
Candidate Starts for Rowa_68:
(46, 42074), (Start: 58 @42116 has 1 MA's), (104, 42302), (112, 42326),

Gene: Rowa_39 Start: 26669, Stop: 27115, Start Num: 50
Candidate Starts for Rowa_39:
(Start: 50 @26669 has 1 MA's), (54, 26675), (109, 26957),

Gene: Royals2015_108 Start: 56107, Stop: 56451, Start Num: 70
Candidate Starts for Royals2015_108:
(28, 55933), (31, 55969), (55, 56056), (Start: 70 @56107 has 286 MA's), (93, 56251), (102, 56275),

Gene: Ruby_100 Start: 57258, Stop: 57584, Start Num: 70

Candidate Starts for Ruby_100:
(Start: 70 @57258 has 286 MA's),

Gene: RunningOnE_52 Start: 25257, Stop: 25574, Start Num: 70
Candidate Starts for RunningOnE_52:
(37, 25158), (43, 25173), (Start: 70 @25257 has 286 MA's), (96, 25413), (108, 25443), (117, 25488),

Gene: Sabbb_107 Start: 55263, Stop: 55589, Start Num: 70
Candidate Starts for Sabbb_107:
(28, 55089), (31, 55125), (55, 55212), (Start: 70 @55263 has 286 MA's),

Gene: Saints25_141 Start: 72738, Stop: 73181, Start Num: 39
Candidate Starts for Saints25_141:
(Start: 39 @72738 has 1 MA's), (Start: 51 @72777 has 2 MA's), (Start: 70 @72834 has 286 MA's),

Gene: Sandalphon_103 Start: 58290, Stop: 58634, Start Num: 70
Candidate Starts for Sandalphon_103:
(28, 58116), (31, 58152), (55, 58239), (Start: 70 @58290 has 286 MA's), (93, 58434), (102, 58458),

Gene: Sashimi_96 Start: 51797, Stop: 52117, Start Num: 70
Candidate Starts for Sashimi_96:
(Start: 70 @51797 has 286 MA's), (107, 51977),

Gene: Sassafras_106 Start: 56554, Stop: 56880, Start Num: 70
Candidate Starts for Sassafras_106:
(Start: 70 @56554 has 286 MA's),

Gene: SassyB_95 Start: 54627, Stop: 54953, Start Num: 70
Candidate Starts for SassyB_95:
(5, 54114), (8, 54201), (28, 54453), (31, 54489), (55, 54576), (Start: 70 @54627 has 286 MA's), (88, 54750), (120, 54885),

Gene: Satrap_93 Start: 51478, Stop: 51798, Start Num: 70
Candidate Starts for Satrap_93:
(Start: 70 @51478 has 286 MA's), (107, 51658),

Gene: Scotia_58 Start: 39984, Stop: 40337, Start Num: 70
Candidate Starts for Scotia_58:
(Start: 70 @39984 has 286 MA's), (84, 40080), (120, 40248), (125, 40293),

Gene: Scottish_105 Start: 56356, Stop: 56682, Start Num: 70
Candidate Starts for Scottish_105:
(28, 56182), (31, 56218), (55, 56305), (Start: 70 @56356 has 286 MA's), (88, 56479), (120, 56614),

Gene: SeaLumen_113 Start: 56795, Stop: 57121, Start Num: 70
Candidate Starts for SeaLumen_113:
(5, 56282), (6, 56306), (8, 56369), (28, 56621), (31, 56657), (55, 56744), (Start: 70 @56795 has 286 MA's),

Gene: Seabastian_111 Start: 58148, Stop: 58474, Start Num: 70
Candidate Starts for Seabastian_111:
(Start: 70 @58148 has 286 MA's),

Gene: Seahorse_101 Start: 56066, Stop: 56386, Start Num: 70
Candidate Starts for Seahorse_101:
(Start: 70 @56066 has 286 MA's), (107, 56246),

Gene: ShamWow_145 Start: 75352, Stop: 75699, Start Num: 70
Candidate Starts for ShamWow_145:
(Start: 51 @75295 has 2 MA's), (Start: 70 @75352 has 286 MA's),

Gene: Shambre1_67 Start: 41812, Stop: 42165, Start Num: 70
Candidate Starts for Shambre1_67:
(Start: 70 @41812 has 286 MA's), (108, 41995),

Gene: Shauna1_106 Start: 58075, Stop: 58419, Start Num: 70
Candidate Starts for Shauna1_106:
(Start: 70 @58075 has 286 MA's), (93, 58219), (102, 58243),

Gene: Shawty_30 Start: 23340, Stop: 23774, Start Num: 67
Candidate Starts for Shawty_30:
(62, 23328), (63, 23331), (Start: 67 @23340 has 2 MA's), (89, 23514), (109, 23574), (117, 23616), (118, 23643),

Gene: ShereKhan_145 Start: 75552, Stop: 75899, Start Num: 70
Candidate Starts for ShereKhan_145:
(Start: 51 @75495 has 2 MA's), (Start: 70 @75552 has 286 MA's),

Gene: ShiLan_107 Start: 59324, Stop: 59650, Start Num: 70
Candidate Starts for ShiLan_107:
(Start: 70 @59324 has 286 MA's),

Gene: ShowerHandel_107 Start: 57093, Stop: 57419, Start Num: 70
Candidate Starts for ShowerHandel_107:
(28, 56919), (31, 56955), (55, 57042), (Start: 70 @57093 has 286 MA's), (88, 57216), (120, 57351),

Gene: ShroomBoi_105 Start: 57753, Stop: 58079, Start Num: 70
Candidate Starts for ShroomBoi_105:
(5, 57240), (8, 57327), (28, 57579), (55, 57702), (Start: 70 @57753 has 286 MA's), (88, 57876),

Gene: SiSi_99 Start: 55811, Stop: 56137, Start Num: 70
Candidate Starts for SiSi_99:
(28, 55637), (31, 55673), (55, 55760), (Start: 70 @55811 has 286 MA's), (88, 55934), (120, 56069),

Gene: SonDevVon_104 Start: 52766, Stop: 53086, Start Num: 70
Candidate Starts for SonDevVon_104:
(Start: 70 @52766 has 286 MA's), (107, 52946),

Gene: SophKB_144 Start: 75004, Stop: 75351, Start Num: 70
Candidate Starts for SophKB_144:
(Start: 51 @74947 has 2 MA's), (Start: 70 @75004 has 286 MA's),

Gene: Sotrice96_151 Start: 75718, Stop: 76065, Start Num: 70
Candidate Starts for Sotrice96_151:
(Start: 51 @75661 has 2 MA's), (Start: 70 @75718 has 286 MA's),

Gene: Sparkdehlily_111 Start: 55806, Stop: 56132, Start Num: 70
Candidate Starts for Sparkdehlily_111:
(Start: 70 @55806 has 286 MA's),

Gene: SpicyFrank_97 Start: 51851, Stop: 52171, Start Num: 70
Candidate Starts for SpicyFrank_97:
(Start: 70 @51851 has 286 MA's), (107, 52031),

Gene: Spooks_37 Start: 24524, Stop: 24868, Start Num: 70
Candidate Starts for Spooks_37:
(64, 24515), (Start: 68 @24518 has 1 MA's), (Start: 70 @24524 has 286 MA's),

Gene: Spoonbill_104 Start: 55237, Stop: 55563, Start Num: 70
Candidate Starts for Spoonbill_104:
(Start: 70 @55237 has 286 MA's),

Gene: Sporco_98 Start: 53553, Stop: 53879, Start Num: 70
Candidate Starts for Sporco_98:
(Start: 70 @53553 has 286 MA's), (107, 53733),

Gene: StAnnes_110 Start: 58889, Stop: 59215, Start Num: 70
Candidate Starts for StAnnes_110:
(28, 58715), (31, 58751), (55, 58838), (Start: 70 @58889 has 286 MA's), (88, 59012), (120, 59147),

Gene: Stank_150 Start: 75344, Stop: 75691, Start Num: 70
Candidate Starts for Stank_150:
(Start: 51 @75287 has 2 MA's), (Start: 70 @75344 has 286 MA's),

Gene: Stark_143 Start: 74150, Stop: 74497, Start Num: 70
Candidate Starts for Stark_143:
(Start: 51 @74093 has 2 MA's), (Start: 70 @74150 has 286 MA's),

Gene: StolenFromERC_148 Start: 74689, Stop: 75036, Start Num: 70
Candidate Starts for StolenFromERC_148:
(Start: 51 @74632 has 2 MA's), (Start: 70 @74689 has 286 MA's),

Gene: Success_39 Start: 23746, Stop: 24093, Start Num: 68
Candidate Starts for Success_39:
(64, 23743), (Start: 68 @23746 has 1 MA's), (Start: 70 @23752 has 286 MA's), (92, 23911),

Gene: SuperGrey_103 Start: 58875, Stop: 59201, Start Num: 70
Candidate Starts for SuperGrey_103:
(28, 58701), (31, 58737), (55, 58824), (Start: 70 @58875 has 286 MA's), (88, 58998), (120, 59133),

Gene: Suscepit_79 Start: 49951, Stop: 50286, Start Num: 71
Candidate Starts for Suscepit_79:
(17, 49678), (Start: 71 @49951 has 28 MA's),

Gene: SushiChef_82 Start: 52422, Stop: 52757, Start Num: 71
Candidate Starts for SushiChef_82:
(17, 52149), (Start: 71 @52422 has 28 MA's),

Gene: SwagPigglett_106 Start: 58433, Stop: 58759, Start Num: 70

Candidate Starts for SwagPigglett_106:
(Start: 70 @58433 has 286 MA's),

Gene: SweatNTears_1 Start: 378, Stop: 770, Start Num: 80
Candidate Starts for SweatNTears_1:
(15, 18), (16, 36), (20, 63), (79, 372), (Start: 80 @378 has 1 MA's), (85, 462), (115, 600),

Gene: Sweetums_35 Start: 22539, Stop: 22141, Start Num: 61
Candidate Starts for Sweetums_35:
(45, 22596), (Start: 61 @22539 has 5 MA's), (87, 22383), (105, 22317), (106, 22314), (122, 22203), (123, 22188),

Gene: TBrady12_151 Start: 74778, Stop: 75125, Start Num: 70
Candidate Starts for TBrady12_151:
(Start: 51 @74721 has 2 MA's), (Start: 70 @74778 has 286 MA's),

Gene: TDanisky_112 Start: 55806, Stop: 56132, Start Num: 70
Candidate Starts for TDanisky_112:
(Start: 70 @55806 has 286 MA's),

Gene: TG1_29 Start: 22916, Stop: 23344, Start Num: 67
Candidate Starts for TG1_29:
(57, 22892), (Start: 67 @22916 has 2 MA's), (86, 23063), (89, 23087), (117, 23189), (127, 23297),

Gene: Taj_110 Start: 58080, Stop: 58430, Start Num: 70
Candidate Starts for Taj_110:
(28, 57906), (31, 57942), (55, 58029), (Start: 70 @58080 has 286 MA's), (88, 58203), (120, 58338),

Gene: Tarkin_144 Start: 75417, Stop: 75764, Start Num: 70
Candidate Starts for Tarkin_144:
(Start: 51 @75360 has 2 MA's), (Start: 70 @75417 has 286 MA's),

Gene: Tayonia_79 Start: 49950, Stop: 50285, Start Num: 71
Candidate Starts for Tayonia_79:
(17, 49677), (Start: 71 @49950 has 28 MA's),

Gene: TeamEdward_148 Start: 75876, Stop: 76223, Start Num: 70
Candidate Starts for TeamEdward_148:
(Start: 51 @75819 has 2 MA's), (Start: 70 @75876 has 286 MA's),

Gene: Teaspoon_130 Start: 70361, Stop: 70708, Start Num: 70
Candidate Starts for Teaspoon_130:
(Start: 51 @70304 has 2 MA's), (Start: 70 @70361 has 286 MA's),

Gene: Tempo_53 Start: 37160, Stop: 36816, Start Num: 78
Candidate Starts for Tempo_53:
(Start: 78 @37160 has 11 MA's), (86, 37061), (99, 37007), (121, 36887), (123, 36863), (126, 36839),

Gene: Teng_34 Start: 22456, Stop: 22058, Start Num: 61
Candidate Starts for Teng_34:
(45, 22513), (Start: 61 @22456 has 5 MA's), (87, 22300), (105, 22234), (106, 22231), (122, 22120), (123, 22105),

Gene: ThankyouJordi_83 Start: 53067, Stop: 53414, Start Num: 71
Candidate Starts for ThankyouJordi_83:
(17, 52794), (Start: 71 @53067 has 28 MA's),

Gene: ThayneTheZag_102 Start: 53366, Stop: 53686, Start Num: 70
Candidate Starts for ThayneTheZag_102:
(25, 53168), (Start: 70 @53366 has 286 MA's), (107, 53546),

Gene: Thimble_138 Start: 70885, Stop: 71232, Start Num: 70
Candidate Starts for Thimble_138:
(Start: 51 @70828 has 2 MA's), (Start: 70 @70885 has 286 MA's),

Gene: Thresher_148 Start: 75611, Stop: 75958, Start Num: 70
Candidate Starts for Thresher_148:
(Start: 39 @75515 has 1 MA's), (Start: 51 @75554 has 2 MA's), (Start: 70 @75611 has 286 MA's),

Gene: Tiff81_90 Start: 50115, Stop: 50435, Start Num: 70
Candidate Starts for Tiff81_90:
(Start: 70 @50115 has 286 MA's), (107, 50295),

Gene: TimTam_84 Start: 53045, Stop: 53380, Start Num: 71
Candidate Starts for TimTam_84:
(17, 52772), (Start: 71 @53045 has 28 MA's), (111, 53231),

Gene: Traaww1_144 Start: 74842, Stop: 75189, Start Num: 70
Candidate Starts for Traaww1_144:
(Start: 70 @74842 has 286 MA's),

Gene: Trumpet_79 Start: 49951, Stop: 50286, Start Num: 71
Candidate Starts for Trumpet_79:
(17, 49678), (Start: 71 @49951 has 28 MA's),

Gene: Tuco_150 Start: 76363, Stop: 76710, Start Num: 70
Candidate Starts for Tuco_150:
(Start: 51 @76306 has 2 MA's), (Start: 70 @76363 has 286 MA's),

Gene: Tweety_109 Start: 58225, Stop: 58551, Start Num: 70
Candidate Starts for Tweety_109:
(28, 58051), (31, 58087), (55, 58174), (Start: 70 @58225 has 286 MA's), (88, 58348), (120, 58483),

Gene: Ukulele_143 Start: 74533, Stop: 74880, Start Num: 70
Candidate Starts for Ukulele_143:
(Start: 39 @74437 has 1 MA's), (Start: 51 @74476 has 2 MA's), (Start: 70 @74533 has 286 MA's),

Gene: VRedHorse_105 Start: 54331, Stop: 54657, Start Num: 70
Candidate Starts for VRedHorse_105:
(Start: 70 @54331 has 286 MA's),

Gene: Veteran_94 Start: 55679, Stop: 56005, Start Num: 70
Candidate Starts for Veteran_94:
(28, 55505), (31, 55541), (55, 55628), (Start: 70 @55679 has 286 MA's), (88, 55802), (120, 55937),

Gene: Wachhund_101 Start: 54046, Stop: 54372, Start Num: 70

Candidate Starts for Wachhund_101:
(Start: 70 @54046 has 286 MA's),

Gene: Wee_109 Start: 58763, Stop: 59089, Start Num: 70
Candidate Starts for Wee_109:
(28, 58589), (31, 58625), (55, 58712), (Start: 70 @58763 has 286 MA's), (88, 58886), (120, 59021),

Gene: WelcomeAyanna_83 Start: 53214, Stop: 53561, Start Num: 71
Candidate Starts for WelcomeAyanna_83:
(17, 52941), (Start: 71 @53214 has 28 MA's),

Gene: Whatsapiecost_99 Start: 52358, Stop: 52702, Start Num: 70
Candidate Starts for Whatsapiecost_99:
(28, 52184), (31, 52220), (55, 52307), (Start: 70 @52358 has 286 MA's), (93, 52502), (102, 52526),

Gene: Whouxphf_108 Start: 58625, Stop: 58951, Start Num: 70
Candidate Starts for Whouxphf_108:
(28, 58451), (31, 58487), (55, 58574), (Start: 70 @58625 has 286 MA's), (88, 58748), (120, 58883),

Gene: Wiggin_149 Start: 74322, Stop: 74669, Start Num: 70
Candidate Starts for Wiggin_149:
(Start: 51 @74265 has 2 MA's), (Start: 70 @74322 has 286 MA's),

Gene: Wilca_53 Start: 37040, Stop: 36696, Start Num: 78
Candidate Starts for Wilca_53:
(Start: 78 @37040 has 11 MA's), (82, 37010), (86, 36941), (99, 36887), (121, 36767), (123, 36743), (126, 36719),

Gene: WillSterrel_103 Start: 57362, Stop: 57706, Start Num: 70
Candidate Starts for WillSterrel_103:
(Start: 70 @57362 has 286 MA's), (93, 57506), (102, 57530),

Gene: Willez_144 Start: 73995, Stop: 74342, Start Num: 70
Candidate Starts for Willez_144:
(Start: 51 @73938 has 2 MA's), (Start: 70 @73995 has 286 MA's),

Gene: Windest_101 Start: 51370, Stop: 51690, Start Num: 70
Candidate Starts for Windest_101:
(Start: 70 @51370 has 286 MA's), (107, 51550),

Gene: Wrackline_39 Start: 23464, Stop: 23033, Start Num: 56
Candidate Starts for Wrackline_39:
(33, 23548), (34, 23545), (42, 23509), (52, 23473), (Start: 56 @23464 has 1 MA's), (65, 23425), (76, 23392), (90, 23245), (99, 23224), (119, 23116), (126, 23056),

Gene: YoungHarleezy_97 Start: 52603, Stop: 52923, Start Num: 70
Candidate Starts for YoungHarleezy_97:
(Start: 70 @52603 has 286 MA's), (107, 52783),

Gene: Youngblood_150 Start: 75315, Stop: 75662, Start Num: 70
Candidate Starts for Youngblood_150:
(Start: 51 @75258 has 2 MA's), (Start: 70 @75315 has 286 MA's),

Gene: Zameen_79 Start: 49950, Stop: 50285, Start Num: 71
Candidate Starts for Zameen_79:
(17, 49677), (Start: 71 @49950 has 28 MA's),

Gene: Zerg_103 Start: 56837, Stop: 57181, Start Num: 70
Candidate Starts for Zerg_103:
(28, 56663), (31, 56699), (55, 56786), (Start: 70 @56837 has 286 MA's), (93, 56981), (102, 57005),

Gene: Zirinka_79 Start: 51694, Stop: 52026, Start Num: 71
Candidate Starts for Zirinka_79:
(17, 51421), (Start: 71 @51694 has 28 MA's),

Gene: Zizzle_108 Start: 58913, Stop: 59239, Start Num: 70
Candidate Starts for Zizzle_108:
(Start: 70 @58913 has 286 MA's), (88, 59036), (120, 59171),

Gene: phiBT1_7 Start: 24178, Stop: 24540, Start Num: 67
Candidate Starts for phiBT1_7:
(62, 24166), (63, 24169), (Start: 67 @24178 has 2 MA's), (89, 24349), (109, 24409), (117, 24451),