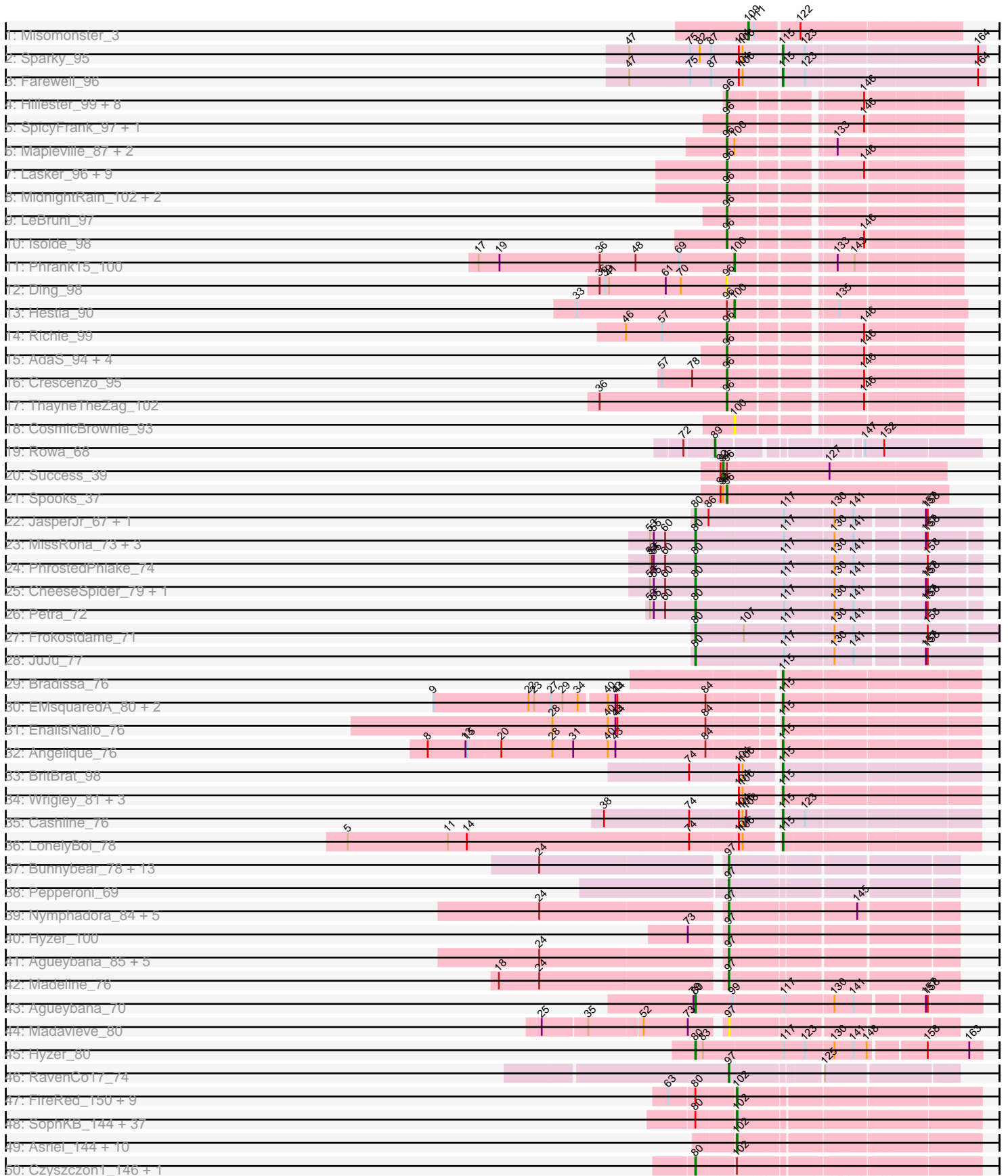
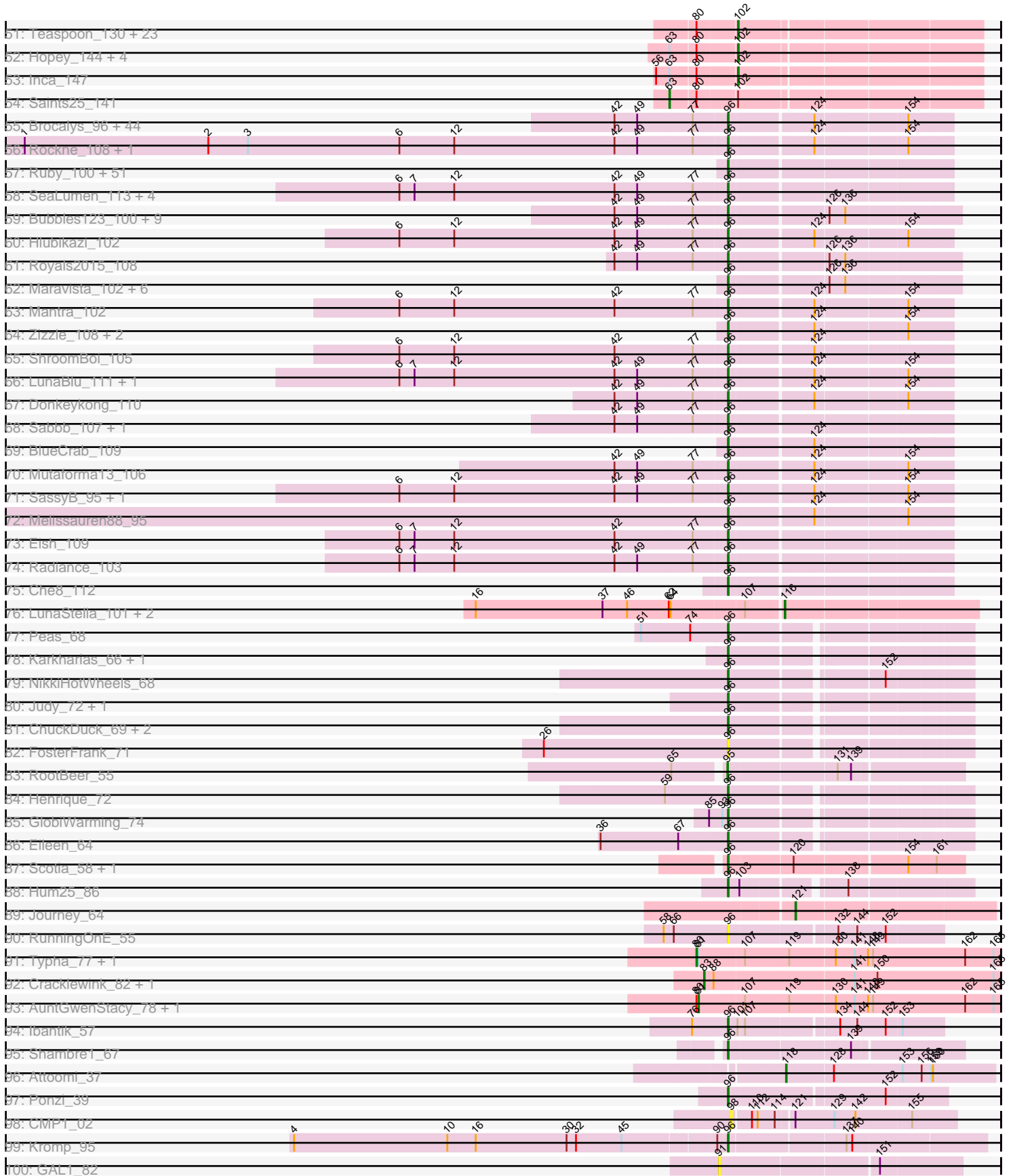


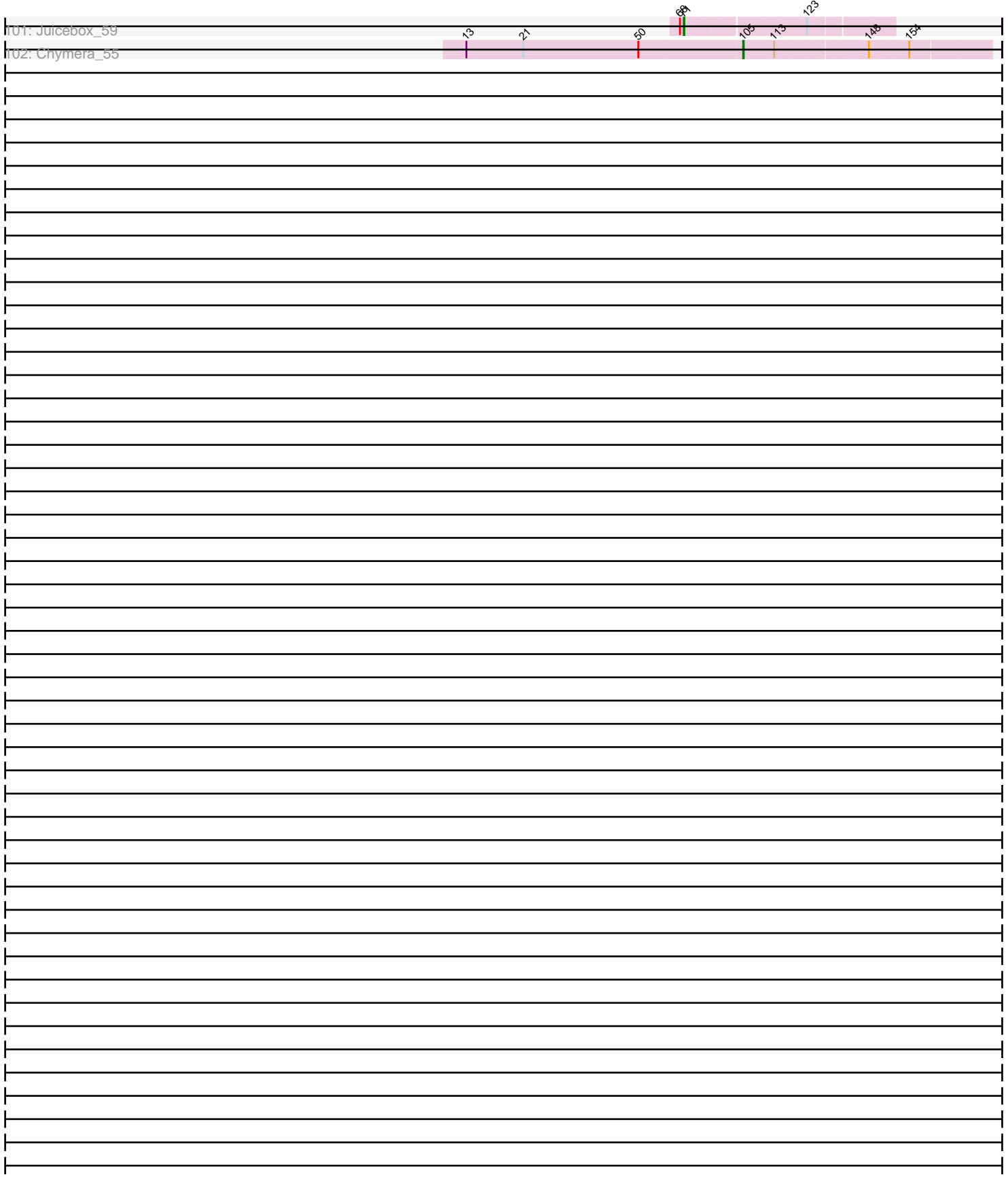
Pham 311111



Pham 311111



Pham 311111



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 311111 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311111 has 375 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Misomonster_3
- Track 2 : Sparky_95
- Track 3 : Farewell_96
- Track 4 : Hillester_99, EvePickles_96, RadFad_100, MaterMagnus_96, BillyTP_96, Auxilium_93, BenchScraper_96, Tiff81_90, MurphyJoseph_92
- Track 5 : SpicyFrank_97, Seahorse_101
- Track 6 : Mapleville_87, MUWow_98, Anekin_95
- Track 7 : Lasker_96, Globfish_96, Lawnathon_100, BlueShadow_92, SonDevVon_104, GumGum_103, Sashimi_96, BasketStar_96, Faja_96, CookieBear_95
- Track 8 : MidnightRain_102, Kabloowy_97, DarwinJr_98
- Track 9 : LeBruni_97
- Track 10 : Isolde_98
- Track 11 : Phrank15_100
- Track 12 : Ding_98
- Track 13 : Hestia_90
- Track 14 : Richie_99
- Track 15 : AdaS_94, YoungHarleezy_97, Windest_101, JellyBread_95, Raphaella_96
- Track 16 : Crescenzo_95
- Track 17 : ThayneTheZag_102
- Track 18 : CosmicBrownie_93
- Track 19 : Rowa_68
- Track 20 : Success_39
- Track 21 : Spooks_37
- Track 22 : JasperJr_67, Guacamole_67
- Track 23 : MissRona_73, Azula_73, Gambino_75, Blueberry_72
- Track 24 : PhrostedPhlake_74
- Track 25 : CheeseSpider_79, Zarbodnamra_71
- Track 26 : Petra_72
- Track 27 : Frokostdame_71
- Track 28 : JuJu_77
- Track 29 : Bradissa_76
- Track 30 : EMSquaredA_80, Pollux_82, Floral_80
- Track 31 : EnalisNailo_76
- Track 32 : Angelique_76
- Track 33 : BritBrat_98

- Track 34 : Wrigley_81, Jablanski_82, Posh_79, Pytheas_83
- Track 35 : Cashline_76
- Track 36 : LonelyBoi_78
- Track 37 : Bunnybear_78, WelcomeAyanna_83, Maridalia_83, Neobush_81, Manasvini_81, Kita_80, Zameen_79, Antonio_78, ThankyouJordi_83, Suscepit_79, Eudoria_79, Trumpet_79, Tayonia_79, Polly_76
- Track 38 : Pepperoni_69
- Track 39 : Nymphadora_84, Bosnia_82, Eviarto_84, Herod_84, BatStarr_83, TimTam_84
- Track 40 : Hyzer_100
- Track 41 : Agueybana_85, Bialota_79, Zirinka_79, SushiChef_82, AlumE_82, BoyNamedSue_82
- Track 42 : Madeline_76
- Track 43 : Agueybana_70
- Track 44 : Madavieve_80
- Track 45 : Hyzer_80
- Track 46 : RavenCo17_74
- Track 47 : FireRed_150, Palpatine_143, Thresher_148, Nala_149, Command613_149, Ukulele_143, Manda_149, PhatBacter_150, Highbury_141, BaboJay_146
- Track 48 : SophKB_144, Tuco_150, AmericanBeauty_149, Contagion_142, RiverMonster_146, StolenFromERC_148, ABCat_145, Stank_150, Phaux_147, Gemini_151, Easy2Say_148, 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, Qualification_146, Wiggin_149, BadStone_145, Youngblood_150, Kanye_142, Holt_152, Lilpickle_146, ChosenOne_147
- Track 49 : Asriel_144, Glexan_150, Flypotenuse_142, Balomoji_146, Amao_151, Harella_153, Barbarian_146, Budgie_149, Pat3_147, Traaww1_144, Hoonter_148
- Track 50 : Czyszczone1_146, Marshmallow_149
- Track 51 : Teaspoon_130, NonchalantPear_146, Nimrod_145, Emmina_148, Phaja_151, DoctorDiddles_145, ShereKhan_145, Phrux_143, Cookies_148, Tarkin_144, Buck_148, Thimble_138, OrionPax_144, Miniwave_140, Murphy_148, JeTaime_144, Stark_143, TBrady12_151, Myrale_146, BigBubba_149, NoSleep_145, MadamMonkfish_148, Paperbeatsrock_144, ShamWow_145
- Track 52 : Hopey_144, MPhalcon_148, Policronamos_145, Murica_149, MISSy_147
- Track 53 : Inca_147
- Track 54 : Saints25_141
- Track 55 : Brocalys_96, CaptainTrips_107, Medindi_110, ShowerHandel_107, Cabrinians_101, 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, Batiatus_105, NormanBulbieJr_102, 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, StAnnes_110, KingMidas_105, FreddyB_113, Krakatau_97, Bipolar_106, EleanorGeorge_108, Veteran_94
- Track 56 : Rockne_108, PMC_104
- Track 57 : Ruby_100, Estave1_112, Wachhund_101, Jinglebell_111, BobaPhett_108, Nimbo_96, 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, SwagPiggett_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, Priscilla_105, DRBy19_104, Clifton_96, Spoonbill_104, MisterCuddles_104, Mattes_105, Sassafras_106, Jarcob_107, RitaG_103, Ibhubesi_103, Girr_103, AlpineSix_102, DaddyRickover_106

- Track 58 : SeaLumen_113, Polo2Bam_116, NewHope4_112, Galactic_109, Enzomatic_117
- Track 59 : Bubbles123_100, Burwell21_99, Zerg_103, Phatniss_101, Chuckly_102, Dante_104, Llij_99, Whatsapiecost_99, Minnie_99, Sandalphon_103
- Track 60 : Hlubikazi_102
- Track 61 : Royals2015_108
- Track 62 : Maravista_102, Phanphagia_109, WillSterrel_103, Juniper1_98, Shauna1_106, IrishSherpFalk_105, Mahavrat_98
- Track 63 : Mantra_102
- Track 64 : Zizzle_108, Guppsters_99, DoRead_108
- Track 65 : ShroomBoi_105
- Track 66 : LunaBlu_111, GigiOuiOui_99
- Track 67 : Donkeykong_110
- Track 68 : Sabbb_107, Pacc40_101
- Track 69 : BlueCrab_109
- Track 70 : Mutaforma13_106
- Track 71 : SassyB_95, PopTart_95
- Track 72 : Melissauren88_95
- Track 73 : Eish_109
- Track 74 : Radiance_103
- Track 75 : Che8_112
- Track 76 : LunaStella_101, TChen_101, Renaud18_112
- Track 77 : Peas_68
- Track 78 : Karkharias_66, Bridgette_71
- Track 79 : NikkiHotWheels_68
- Track 80 : Judy_72, NidoQ_64
- Track 81 : ChuckDuck_69, PeggyLeg03_70, KayMoney_68
- Track 82 : FosterFrank_71
- Track 83 : RootBeer_55
- Track 84 : Henrique_72
- Track 85 : GlobiWarming_74
- Track 86 : Eileen_64
- Track 87 : Scotia_58, NoSwimming_59
- Track 88 : Hum25_86
- Track 89 : Journey_64
- Track 90 : RunningOnE_55
- Track 91 : Typha_77, Hilltopfarm_78
- Track 92 : Cracklewink_82, Bipper_82
- Track 93 : AuntGwenStacy_78, Faiyaz_79
- Track 94 : Ibantik_57
- Track 95 : Shambre1_67
- Track 96 : Attoomi_37
- Track 97 : Ponzi_39
- Track 98 : CMP1_02
- Track 99 : Kromp_95
- Track 100 : GAL1_82

- Track 101 : Juicebox_59
- Track 102 : 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 96, it was called in 187 of the 355 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS_94, Akhila_99, AlpineSix_102, Anekin_95, Ardmore_88, Auxilium_93, BasketStar_96, Batiatus_105, BenchScraper_96, BillyTP_96, Bipolar_106, BlueCrab_109, BlueShadow_92, BobaPhett_108, BodEinwohner17_116, Bridgette_71, Brocalys_96, Bubbles123_100, Burwell21_99, ByChance_95, Byougenkin_101, Cabrinians_101, CaptainTrips_107, Che8_112, ChuckDuck_69, Chuckly_102, Clifton_96, CookieBear_95, Crescenzo_95, Crumble_99, DLane_105, DRBy19_104, DaddyRickover_106, Daenerys_102, Dante_104, DarwinJr_98, Deb65_97, DillTech15_111, Ding_98, DoRead_108, Donkeykong_110, Eileen_64, Eish_109, EleanorGeorge_108, Emma_109, Enzomatic_117, Eradicator_95, Estave1_112, EvePickles_96, Faja_96, Fastidio_108, Filuzino_105, Florinda_117, FosterFrank_71, FreddyB_113, GUmbe_104, Galactic_109, Gandolph_104, Geralt_97, GigiOuiOui_99, Girr_103, Globfish_96, GlobiWarming_74, Gorge_103, GumGum_103, Guppsters_99, Hades_102, Hamulus_105, Henrique_72, Hillester_99, Hlubikazi_102, Hum25_86, IbOuu_96, Ibantik_57, lbhubesi_103, Inventum_102, IrishSherpFalk_105, Isolde_98, James_108, Jarcob_107, JellyBread_95, Jinglebell_111, JoeyJr_107, Judy_72, Juniper1_98, Kabloowy_97, Karhdo_100, Karkharias_66, KayMoney_68, Kenuha5_96, Kersh_107, KingMidas_105, Krakatau_97, KristaRAM_113, Kromp_95, Lasker_96, Lawnathon_100, LeBruni_97, Leperchaun_106, Lizziana_105, Llama_111, Llij_99, LunaBlu_111, MUWow_98, MadMen_109, Mahavrat_98, Mantra_102, Mapleville_87, Maravista_102, Martik_103, MaterMagnus_96, Mattes_105, Medindi_110, Melissauren88_95, MidnightRain_102, MilanaBonita_98, MinionDave_103, Minnie_99, MisterCuddles_104, Modragons_107, Moonbeam_107, Ms6_107, MurphyJoseph_92, Mutaforma13_106, NewHope4_112, NidoQ_64, NikkiHotWheels_68, Nimbo_96, NoSwimming_59, NormanBulbieJr_102, Ochi17_110, OfUltron_111, OldBen_101, PHappiness_104, PMC_104, Pacc40_101, Peas_68, PeggyLeg03_70, Phalconet_106, Phanphagia_109, Phasih_100, Phatniss_101, PhesterPhotato_109, Philus_108, Pippy_103, Polka14_108, Polo2Bam_116, Ponzi_39, PopTart_95, Priscilla_105, RadFad_100, Radiance_103, Raphaella_96, RedBird_105, Richie_99, RitaG_103, Rita_104, Rockne_108, Royals2015_108, Ruby_100, RunningOnE_55, Sabbb_107, Sandalphon_103, Sashimi_96, Sassafras_106, SassyB_95, Scotia_58, Scottish_105, SeaLumen_113, Sebastian_111, Seahorse_101, Shambre1_67, Shauna1_106, ShiLan_107, ShowerHandel_107, ShroomBoi_105, SiSi_99, SonDevVon_104, Sparkdehilly_111, SpicyFrank_97, Spooks_37, Spoonbill_104, StAnnes_110, SuperGrey_103, SwagPiggett_106, TDanisky_112, Taj_110, ThayneTheZag_102, Tiff81_90, Tweety_109, VRedHorse_105, Veteran_94, Wachhund_101, Wee_109, Whatsapiecost_99, Whouxphf_108, WillSterrel_103, Windest_101, YoungHarleezy_97, Zerg_103, Zizzle_108,

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

- Hestia_90, Success_39,

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

- ABCat_145, Adnama_150, Agueybana_70, Agueybana_85, AlumE_82, Amao_151, AmericanBeauty_149, Angelique_76, Antonio_78, Argent26_150, Asriel_144, Attoomi_37, AuntGwenStacy_78, Azula_73, BaboJay_146, BadStone_145, Balomoji_146, Barbarian_146, BatStarr_83, Bench_149, Bialota_79, BigBubba_149, Bipper_82, Blueberry_72, Bosnia_82, BoyNamedSue_82, Bradissa_76, Brewer_142, BritBrat_98, Buck_148, Budgie_149, Bunnybear_78, CMP1_02, Cactus_154, Cashline_76, CheeseSpider_79, ChosenOne_147, Chymera_55, Command613_149, Contagion_142, Cookies_148, CosmicBrownie_93, Cracklewink_82, Czystczon1_146, DoctorDiddles_145, Dumbo_149, EMSquaredA_80, Easy2Say_148, Elite2014_146, Emmina_148, EnalisNailo_76, Eudoria_79, Eviarto_84, FairyPath_147, Faiyaz_79, Farewell_96, FireRed_150, Floral_80, Flypotenuse_142, Frokostdame_71, GAL1_82, Gage_137, Gambino_75, Gemini_151, Glexan_150, GoldenSpark_150, Goldilocks_152, Guacamole_67, Harella_153, Herod_84, Highbury_141, Hilltopfarm_78, Holt_152, Hoonter_148, Hopey_144, HuffyPuff_148, Hyzer_100, Hyzer_80, IHOP_151, Icee_146, Inca_147, Jablanski_82, JasperJr_67, JeTaime_144, Journey_64, JuJu_77, Juicebox_59, Kanye_142, Kimchi_151, Kita_80, Lilpickle_146, LonelyBoi_78, LunaStella_101, MISSy_147, MPhalcon_148, MadamMonkfish_148, Madavieve_80, Madeline_76, Manasvini_81, Manda_149, Maridalia_83, Marshmallow_149, Maxxinista_148, Miniwave_140, Misomonster_3, MissRona_73, Murica_149, Murphy_148, Myrale_146, Nala_149, Neobush_81, Nimrod_145, NoSleep_145, NonchalantPear_146, Nymphadora_84, OrionPax_144, Palpatine_143, Paperbeatsrock_144, Pat3_147, Pepperoni_69, Petra_72, Phaja_151, PhatBacter_150, Phaux_147, Phrank15_100, PhrostedPhlake_74, Phrux_143, Policronamos_145, Pollux_82, Polly_76, Posh_79, Pytheas_83, Qualification_146, RavenCo17_74, Renaud18_112, Rimmer_145, RiverMonster_146, RootBeer_55, Rowa_68, Saints25_141, ShamWow_145, ShereKhan_145, SophKB_144, Sotrice96_151, Sparky_95, Stank_150, Stark_143, StolenFromERC_148, Suscepit_79, SushiChef_82, TBrady12_151, TChen_101, Tarkin_144, Tayonia_79, Teaspoon_130, ThankyouJordi_83, Thimble_138, Thresher_148, TimTam_84, Traaww1_144, Trumpet_79, Tuco_150, Typha_77, Ukulele_143, WelcomeAyanna_83, Wiggin_149, Willez_144, Wrigley_81, Youngblood_150, Zameen_79, Zarbodnamra_71, Zirinka_79,

Summary by start number:

Start 63:

- Found in 17 of 375 (4.5%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Saints25_141 (E),

Start 71:

- Found in 1 of 375 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juicebox_59 (singleton),

Start 80:

- Found in 99 of 375 (26.4%) of genes in pham

- Manual Annotations of this start: 17 of 355
- Called 18.2% of time when present
- Phage (with cluster) where this start called: Agueybana_70 (CZ1), Azula_73 (CV), Blueberry_72 (CV), CheeseSpider_79 (CV), Czystoczon1_146 (E), Frokostdame_71 (CV), Gambino_75 (CV), Guacamole_67 (CV), Hilltopfarm_78 (Y), Hyzer_80 (CZ1), JasperJr_67 (CV), JuJu_77 (CV), Marshmallow_149 (E), MissRona_73 (CV), Petra_72 (CV), PhrostedPhlake_74 (CV), Typha_77 (Y), Zarbodnamra_71 (CV),

Start 81:

- Found in 4 of 375 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 355
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy_78 (Y), Faiyaz_79 (Y),

Start 83:

- Found in 3 of 375 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 355
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bipper_82 (Y), Cracklewink_82 (Y),

Start 89:

- Found in 1 of 375 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rowa_68 (BL),

Start 91:

- Found in 1 of 375 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_82 (singleton),

Start 94:

- Found in 2 of 375 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Success_39 (BT),

Start 95:

- Found in 1 of 375 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RootBeer_55 (FA),

Start 96:

- Found in 203 of 375 (54.1%) of genes in pham
- Manual Annotations of this start: 187 of 355
- Called 99.0% of time when present
- Phage (with cluster) where this start called: AdaS_94 (AY), Akhila_99 (F1), AlpineSix_102 (F1), Anekin_95 (AY), Ardmore_88 (F1), Auxilium_93 (AY), BasketStar_96 (AY), Batiatus_105 (F1), BenchScraper_96 (AY), BillyTP_96 (AY), Bipolar_106 (F1), BlueCrab_109 (F1), BlueShadow_92 (AY), BobaPhett_108 (F1), BodEinwohner17_116 (F1), Bridgette_71 (FA), Brocalys_96 (F1), Bubbles123_100

(F1), Burwell21_99 (F1), ByChance_95 (F1), Byougenkin_101 (F1), Cabrinians_101 (F1), CaptainTrips_107 (F1), Che8_112 (F1), ChuckDuck_69 (FA), Chuckly_102 (F1), Clifton_96 (F1), CookieBear_95 (AY), 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_98 (AY), DoRead_108 (F1), Donkeykong_110 (F1), Eileen_64 (FA), Eish_109 (F1), EleanorGeorge_108 (F1), Emma_109 (F1), Enzomatic_117 (F1), Eradicator_95 (F1), Estave1_112 (F1), EvePickles_96 (AY), Faja_96 (AY), Fastidio_108 (F1), Filuzino_105 (F1), Florinda_117 (F1), FosterFrank_71 (FA), FreddyB_113 (F1), GUmbie_104 (F1), Galactic_109 (F1), Gandalph_104 (F1), Geralt_97 (F1), GigiOuiOui_99 (F1), Girr_103 (F1), Globfish_96 (AY), GlobiWarming_74 (FA), Gorge_103 (F1), GumGum_103 (AY), Guppsters_99 (F1), Hades_102 (F1), Hamulus_105 (F1), Henrique_72 (FA), Hillester_99 (AY), Hlubikazi_102 (F1), Hum25_86 (FQ1), IbOuu_96 (F1), Ibantik_57 (singleton), Ibhubesi_103 (F1), Inventum_102 (F1), IrishSherpFalk_105 (F1), Isolde_98 (AY), James_108 (F1), Jarcob_107 (F1), JellyBread_95 (AY), Jinglebell_111 (F1), JoeyJr_107 (F1), Judy_72 (FA), Juniper1_98 (F1), Kabloowy_97 (AY), Karhdo_100 (F1), Karkharias_66 (FA), KayMoney_68 (FA), Kenuha5_96 (F1), Kersh_107 (F1), KingMidas_105 (F1), Krakatau_97 (F1), KristaRAM_113 (F1), Kromp_95 (singleton), Lasker_96 (AY), Lawnathon_100 (AY), LeBruni_97 (AY), Leperchaun_106 (F1), Lizziana_105 (F1), Llama_111 (F1), Llij_99 (F1), LunaBlu_111 (F1), MUWow_98 (AY), MadMen_109 (F1), Mahavrat_98 (F1), Mantra_102 (F1), Mapleville_87 (AY), Maravista_102 (F1), Martik_103 (F1), MaterMagnus_96 (AY), Mattes_105 (F1), Medindi_110 (F1), Melissauren88_95 (F1), MidnightRain_102 (AY), MilanaBonita_98 (F1), MinionDave_103 (F1), Minnie_99 (F1), MisterCuddles_104 (F1), Modragons_107 (F1), Moonbeam_107 (F1), Ms6_107 (F1), MurphyJoseph_92 (AY), Mutaforma13_106 (F1), NewHope4_112 (F1), NidoQ_64 (FA), NikkiHotWheels_68 (FA), Nimbo_96 (F1), NoSwimming_59 (FO), NormanBulbieJr_102 (F1), Ochi17_110 (F1), OfUltron_111 (F1), OldBen_101 (F1), PHappiness_104 (F1), PMC_104 (F1), Pacc40_101 (F1), Peas_68 (FA), PeggyLeg03_70 (FA), Phalconet_106 (F1), Phanphagia_109 (F1), Phasih_100 (F1), Phatniss_101 (F1), PhesterPotato_109 (F1), Philus_108 (F1), Pippy_103 (F1), Polka14_108 (F1), Polo2Bam_116 (F1), Ponzi_39 (singleton), PopTart_95 (F1), Priscilla_105 (F1), RadFad_100 (AY), Radiance_103 (F1), Raphaella_96 (AY), RedBird_105 (F1), Richie_99 (AY), RitaG_103 (F1), Rita_104 (F1), Rockne_108 (F1), Royals2015_108 (F1), Ruby_100 (F1), RunningOnE_55 (UNK), Sabbb_107 (F1), Sandalphon_103 (F1), Sashimi_96 (AY), Sassafras_106 (F1), SassyB_95 (F1), Scotia_58 (FO), Scottish_105 (F1), SeaLumen_113 (F1), Seabastian_111 (F1), Seahorse_101 (AY), Shambre1_67 (singleton), Shauna1_106 (F1), ShiLan_107 (F1), ShowerHandel_107 (F1), ShroomBoi_105 (F1), SiSi_99 (F1), SonDevVon_104 (AY), Sparkdehlily_111 (F1), SpicyFrank_97 (AY), Spooks_37 (BT), Spoonbill_104 (F1), StAnnes_110 (F1), SuperGrey_103 (F1), SwagPiggett_106 (F1), TDanisky_112 (F1), Taj_110 (F1), ThayneTheZag_102 (AY), Tiff81_90 (AY), Tweety_109 (F1), VRedHorse_105 (F1), Veteran_94 (F1), Wachhund_101 (F1), Wee_109 (F1), Whatsapiecost_99 (F1), Whouxphf_108 (F1), WillSterrel_103 (F1), Windest_101 (AY), YoungHarleezy_97 (AY), Zerg_103 (F1), Zizzle_108 (F1),

Start 97:

- Found in 31 of 375 (8.3%) of genes in pham
- Manual Annotations of this start: 29 of 355
- 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), 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), Pepperoni_69 (CZ), 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 98:

- Found in 1 of 375 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CMP1_02 (singleton),

Start 100:

- Found in 6 of 375 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 355
- Called 50.0% of time when present
- Phage (with cluster) where this start called: CosmicBrownie_93 (AY), Hestia_90 (AY), Phrank15_100 (AY),

Start 102:

- Found in 92 of 375 (24.5%) of genes in pham
- Manual Annotations of this start: 89 of 355
- Called 96.7% of time when present
- Phage (with cluster) where this start called: ABCat_145 (E), Adnama_150 (E), Amao_151 (E), AmericanBeauty_149 (E), Argent26_150 (E), Asriel_144 (E), BaboJay_146 (E), BadStone_145 (E), Balomoji_146 (E), Barbarian_146 (E), Bench_149 (E), BigBubba_149 (E), Brewer_142 (E), Buck_148 (E), Budgie_149 (E), Cactus_154 (E), ChosenOne_147 (E), Command613_149 (E), Contagion_142 (E), Cookies_148 (E), DoctorDiddles_145 (E), Dumbo_149 (E), Easy2Say_148 (E), Elite2014_146 (E), Emmina_148 (E), FairyPath_147 (E), FireRed_150 (E), Flypotenuse_142 (E), Gage_137 (E), Gemini_151 (E), Glexan_150 (E), GoldenSpark_150 (E), Goldilocks_152 (E), Harella_153 (E), Highbury_141 (E), Holt_152 (E), Hoonter_148 (E), Hopey_144 (E), HufflyPuff_148 (E), IHOP_151 (E), Icee_146 (E), Inca_147 (E), JeTaime_144 (E), Kanye_142 (E), Kimchi_151 (E), Lilpickle_146 (E), MISSy_147 (E), MPhalcon_148 (E), MadamMonkfish_148 (E), Manda_149 (E), Maxxinista_148 (E), Miniwave_140 (E), Murica_149 (E), Murphy_148 (E), Myrale_146 (E), Nala_149 (E), Nimrod_145 (E), NoSleep_145 (E), NonchalantPear_146 (E), OrionPax_144 (E), Palpatine_143 (E), Paperbeatsrock_144 (E), Pat3_147 (E), Phaja_151 (E), PhatBacter_150 (E), Phaux_147 (E), Phrux_143 (E), Policronamos_145 (E), Qualification_146 (E), Rimmer_145 (E), RiverMonster_146 (E), ShamWow_145 (E), ShereKhan_145 (E), SophKB_144 (E), Sotrice96_151 (E), Stank_150 (E), Stark_143 (E), StolenFromERC_148 (E), TBrady12_151 (E), Tarkin_144 (E), Teaspoon_130 (E), Thimble_138 (E), Thresher_148 (E), Traaww1_144 (E), Tuco_150 (E), Ukulele_143 (E), Wiggin_149 (E), Willez_144 (E), Youngblood_150 (E),

Start 105:

- Found in 1 of 375 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chymera_55 (singleton),

Start 109:

- Found in 1 of 375 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Misomonster_3 (A3),

Start 115:

- Found in 15 of 375 (4.0%) of genes in pham
- Manual Annotations of this start: 15 of 355
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique_76 (CY1), Bradissa_76 (CY1), BritBrat_98 (CY2), Cashline_76 (CY6), EMsquaredA_80 (CY1), EnalisNailo_76 (CY1), Farewell_96 (AF), Floral_80 (CY1), Jablanski_82 (CY3), LonelyBoi_78 (CY7), Pollux_82 (CY1), Posh_79 (CY4), Pytheas_83 (CY3), Sparky_95 (AF), Wrigley_81 (CY4),

Start 116:

- Found in 3 of 375 (0.8%) of genes in pham
- Manual Annotations of this start: 3 of 355
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LunaStella_101 (F4), Renaud18_112 (F4), TChen_101 (F4),

Start 118:

- Found in 1 of 375 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attoomi_37 (singleton),

Start 121:

- Found in 2 of 375 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 355
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Journey_64 (N),

Summary by clusters:

There are 25 clusters represented in this pham: CZ8, Y, BL, CZ1, singleton, BT, FA, CY7, FO, AF, A3, CY3, CY2, CY1, E, CY6, CY4, N, CZ, AY, UNK, CV, F1, F4, FQ1,

Info for manual annotations of cluster A3:

- Start number 109 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster AF:

- Start number 115 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster AY:

- Start number 96 was manually annotated 32 times for cluster AY.
- Start number 100 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster BL:

- Start number 89 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster BT:

- Start number 94 was manually annotated 1 time for cluster BT.
- Start number 96 was manually annotated 1 time for cluster BT.

Info for manual annotations of cluster CV:

- Start number 80 was manually annotated 11 times for cluster CV.

Info for manual annotations of cluster CY1:

- Start number 115 was manually annotated 6 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 115 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 115 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 115 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY6:

- Start number 115 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 115 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ:

- Start number 97 was manually annotated 2 times for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 80 was manually annotated 2 times for cluster CZ1.
- Start number 97 was manually annotated 26 times for cluster CZ1.

Info for manual annotations of cluster CZ8:

- Start number 97 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster E:

- Start number 63 was manually annotated 1 time for cluster E.
- Start number 80 was manually annotated 2 times for cluster E.
- Start number 102 was manually annotated 89 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 96 was manually annotated 135 times for cluster F1.

Info for manual annotations of cluster F4:

- Start number 116 was manually annotated 3 times for cluster F4.

Info for manual annotations of cluster FA:

- Start number 95 was manually annotated 1 time for cluster FA.
- Start number 96 was manually annotated 12 times for cluster FA.

Info for manual annotations of cluster FO:

- Start number 96 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster FQ1:

- Start number 96 was manually annotated 1 time for cluster FQ1.

Info for manual annotations of cluster N:

- Start number 121 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster Y:

- Start number 80 was manually annotated 2 times for cluster Y.
- Start number 81 was manually annotated 2 times for cluster Y.
- Start number 83 was manually annotated 2 times for cluster Y.

Gene Information:

Gene: ABCat_145 Start: 75550, Stop: 75897, Start Num: 102

Candidate Starts for ABCat_145:

(Start: 80 @75493 has 17 MA's), (Start: 102 @75550 has 89 MA's),

Gene: AdaS_94 Start: 50303, Stop: 50629, Start Num: 96

Candidate Starts for AdaS_94:

(Start: 96 @50303 has 187 MA's), (146, 50483),

Gene: Adnama_150 Start: 74627, Stop: 74974, Start Num: 102

Candidate Starts for Adnama_150:

(Start: 80 @74570 has 17 MA's), (Start: 102 @74627 has 89 MA's),

Gene: Agueybana_85 Start: 52421, Stop: 52756, Start Num: 97

Candidate Starts for Agueybana_85:

(24, 52148), (Start: 97 @52421 has 29 MA's),

Gene: Agueybana_70 Start: 46757, Stop: 47176, Start Num: 80

Candidate Starts for Agueybana_70:

(79, 46754), (Start: 80 @46757 has 17 MA's), (99, 46811), (117, 46889), (130, 46964), (141, 46994), (157, 47090), (158, 47093),

Gene: Akhila_99 Start: 55783, Stop: 56109, Start Num: 96

Candidate Starts for Akhila_99:

(42, 55609), (49, 55645), (77, 55732), (Start: 96 @55783 has 187 MA's), (124, 55906), (154, 56041),

Gene: AlpineSix_102 Start: 56250, Stop: 56576, Start Num: 96

Candidate Starts for AlpineSix_102:

(Start: 96 @56250 has 187 MA's),

Gene: AlumE_82 Start: 52312, Stop: 52647, Start Num: 97

Candidate Starts for AlumE_82:

(24, 52039), (Start: 97 @52312 has 29 MA's),

Gene: Amao_151 Start: 76132, Stop: 76479, Start Num: 102

Candidate Starts for Amao_151:

(Start: 102 @76132 has 89 MA's),

Gene: AmericanBeauty_149 Start: 74669, Stop: 75016, Start Num: 102
Candidate Starts for AmericanBeauty_149:
(Start: 80 @74612 has 17 MA's), (Start: 102 @74669 has 89 MA's),

Gene: Anekin_95 Start: 52237, Stop: 52560, Start Num: 96
Candidate Starts for Anekin_95:
(Start: 96 @52237 has 187 MA's), (Start: 100 @52249 has 2 MA's), (133, 52375),

Gene: Angelique_76 Start: 50625, Stop: 50915, Start Num: 115
Candidate Starts for Angelique_76:
(8, 50097), (13, 50157), (15, 50160), (20, 50208), (28, 50289), (31, 50322), (40, 50376), (43, 50388),
(84, 50526), (Start: 115 @50625 has 15 MA's),

Gene: Antonio_78 Start: 49950, Stop: 50285, Start Num: 97
Candidate Starts for Antonio_78:
(24, 49677), (Start: 97 @49950 has 29 MA's),

Gene: Ardmore_88 Start: 51672, Stop: 51998, Start Num: 96
Candidate Starts for Ardmore_88:
(42, 51498), (49, 51534), (77, 51621), (Start: 96 @51672 has 187 MA's), (124, 51795), (154, 51930),

Gene: Argent26_150 Start: 74551, Stop: 74898, Start Num: 102
Candidate Starts for Argent26_150:
(Start: 80 @74494 has 17 MA's), (Start: 102 @74551 has 89 MA's),

Gene: Asriel_144 Start: 74013, Stop: 74360, Start Num: 102
Candidate Starts for Asriel_144:
(Start: 102 @74013 has 89 MA's),

Gene: Attoomi_37 Start: 30445, Stop: 30765, Start Num: 118
Candidate Starts for Attoomi_37:
(Start: 118 @30445 has 1 MA's), (128, 30517), (153, 30622), (156, 30652), (159, 30664), (160, 30667),

Gene: AuntGwenStacy_78 Start: 51888, Stop: 52352, Start Num: 81
Candidate Starts for AuntGwenStacy_78:
(Start: 80 @51885 has 17 MA's), (Start: 81 @51888 has 2 MA's), (107, 51957), (119, 52026), (130, 52095), (141, 52125), (148, 52146), (149, 52152), (162, 52296), (165, 52341),

Gene: Auxilium_93 Start: 49043, Stop: 49363, Start Num: 96
Candidate Starts for Auxilium_93:
(Start: 96 @49043 has 187 MA's), (146, 49223),

Gene: Azula_73 Start: 46202, Stop: 46618, Start Num: 80
Candidate Starts for Azula_73:
(53, 46133), (55, 46139), (60, 46154), (Start: 80 @46202 has 17 MA's), (117, 46337), (130, 46412),
(141, 46442), (157, 46538), (158, 46541),

Gene: BaboJay_146 Start: 75796, Stop: 76143, Start Num: 102
Candidate Starts for BaboJay_146:
(Start: 63 @75700 has 1 MA's), (Start: 80 @75739 has 17 MA's), (Start: 102 @75796 has 89 MA's),

Gene: BadStone_145 Start: 75098, Stop: 75445, Start Num: 102

Candidate Starts for BadStone_145:
(Start: 80 @75041 has 17 MA's), (Start: 102 @75098 has 89 MA's),

Gene: Balomoji_146 Start: 75838, Stop: 76185, Start Num: 102
Candidate Starts for Balomoji_146:
(Start: 102 @75838 has 89 MA's),

Gene: Barbarian_146 Start: 74013, Stop: 74360, Start Num: 102
Candidate Starts for Barbarian_146:
(Start: 102 @74013 has 89 MA's),

Gene: BasketStar_96 Start: 52523, Stop: 52843, Start Num: 96
Candidate Starts for BasketStar_96:
(Start: 96 @52523 has 187 MA's), (146, 52703),

Gene: BatStarr_83 Start: 53046, Stop: 53381, Start Num: 97
Candidate Starts for BatStarr_83:
(24, 52773), (Start: 97 @53046 has 29 MA's), (145, 53232),

Gene: Batiatus_105 Start: 57269, Stop: 57595, Start Num: 96
Candidate Starts for Batiatus_105:
(42, 57095), (49, 57131), (77, 57218), (Start: 96 @57269 has 187 MA's), (124, 57392), (154, 57527),

Gene: Bench_149 Start: 75511, Stop: 75858, Start Num: 102
Candidate Starts for Bench_149:
(Start: 80 @75454 has 17 MA's), (Start: 102 @75511 has 89 MA's),

Gene: BenchScraper_96 Start: 50794, Stop: 51114, Start Num: 96
Candidate Starts for BenchScraper_96:
(Start: 96 @50794 has 187 MA's), (146, 50974),

Gene: Bialota_79 Start: 51706, Stop: 52038, Start Num: 97
Candidate Starts for Bialota_79:
(24, 51433), (Start: 97 @51706 has 29 MA's),

Gene: BigBubba_149 Start: 74425, Stop: 74772, Start Num: 102
Candidate Starts for BigBubba_149:
(Start: 80 @74368 has 17 MA's), (Start: 102 @74425 has 89 MA's),

Gene: BillyTP_96 Start: 52593, Stop: 52919, Start Num: 96
Candidate Starts for BillyTP_96:
(Start: 96 @52593 has 187 MA's), (146, 52773),

Gene: Bipolar_106 Start: 58515, Stop: 58841, Start Num: 96
Candidate Starts for Bipolar_106:
(42, 58341), (49, 58377), (77, 58464), (Start: 96 @58515 has 187 MA's), (124, 58638), (154, 58773),

Gene: Bipper_82 Start: 53819, Stop: 54274, Start Num: 83
Candidate Starts for Bipper_82:
(Start: 83 @53819 has 2 MA's), (88, 53834), (141, 54047), (150, 54080), (165, 54263),

Gene: BlueCrab_109 Start: 58669, Stop: 58995, Start Num: 96
Candidate Starts for BlueCrab_109:

(Start: 96 @58669 has 187 MA's), (124, 58792),

Gene: BlueShadow_92 Start: 52029, Stop: 52349, Start Num: 96

Candidate Starts for BlueShadow_92:

(Start: 96 @52029 has 187 MA's), (146, 52209),

Gene: Blueberry_72 Start: 46202, Stop: 46618, Start Num: 80

Candidate Starts for Blueberry_72:

(53, 46133), (55, 46139), (60, 46154), (Start: 80 @46202 has 17 MA's), (117, 46337), (130, 46412), (141, 46442), (157, 46538), (158, 46541),

Gene: BobaPhett_108 Start: 59318, Stop: 59644, Start Num: 96

Candidate Starts for BobaPhett_108:

(Start: 96 @59318 has 187 MA's),

Gene: BodEinwohner17_116 Start: 59725, Stop: 60051, Start Num: 96

Candidate Starts for BodEinwohner17_116:

(Start: 96 @59725 has 187 MA's),

Gene: Bosnia_82 Start: 54160, Stop: 54495, Start Num: 97

Candidate Starts for Bosnia_82:

(24, 53887), (Start: 97 @54160 has 29 MA's), (145, 54346),

Gene: BoyNamedSue_82 Start: 52312, Stop: 52647, Start Num: 97

Candidate Starts for BoyNamedSue_82:

(24, 52039), (Start: 97 @52312 has 29 MA's),

Gene: Bradissa_76 Start: 51528, Stop: 51818, Start Num: 115

Candidate Starts for Bradissa_76:

(Start: 115 @51528 has 15 MA's),

Gene: Brewer_142 Start: 73364, Stop: 73711, Start Num: 102

Candidate Starts for Brewer_142:

(Start: 80 @73307 has 17 MA's), (Start: 102 @73364 has 89 MA's),

Gene: Bridgette_71 Start: 42699, Stop: 43043, Start Num: 96

Candidate Starts for Bridgette_71:

(Start: 96 @42699 has 187 MA's),

Gene: BritBrat_98 Start: 55168, Stop: 55455, Start Num: 115

Candidate Starts for BritBrat_98:

(74, 55045), (104, 55111), (106, 55117), (Start: 115 @55168 has 15 MA's),

Gene: Brocalys_96 Start: 54283, Stop: 54609, Start Num: 96

Candidate Starts for Brocalys_96:

(42, 54109), (49, 54145), (77, 54232), (Start: 96 @54283 has 187 MA's), (124, 54406), (154, 54541),

Gene: Bubbles123_100 Start: 56967, Stop: 57311, Start Num: 96

Candidate Starts for Bubbles123_100:

(42, 56793), (49, 56829), (77, 56916), (Start: 96 @56967 has 187 MA's), (126, 57111), (136, 57135),

Gene: Buck_148 Start: 76107, Stop: 76454, Start Num: 102

Candidate Starts for Buck_148:

(Start: 80 @76050 has 17 MA's), (Start: 102 @76107 has 89 MA's),

Gene: Budgie_149 Start: 75438, Stop: 75785, Start Num: 102

Candidate Starts for Budgie_149:

(Start: 102 @75438 has 89 MA's),

Gene: Bunnybear_78 Start: 50882, Stop: 51217, Start Num: 97

Candidate Starts for Bunnybear_78:

(24, 50609), (Start: 97 @50882 has 29 MA's),

Gene: Burwell21_99 Start: 56858, Stop: 57202, Start Num: 96

Candidate Starts for Burwell21_99:

(42, 56684), (49, 56720), (77, 56807), (Start: 96 @56858 has 187 MA's), (126, 57002), (136, 57026),

Gene: ByChance_95 Start: 52655, Stop: 52981, Start Num: 96

Candidate Starts for ByChance_95:

(Start: 96 @52655 has 187 MA's),

Gene: Byougenkin_101 Start: 54217, Stop: 54543, Start Num: 96

Candidate Starts for Byougenkin_101:

(Start: 96 @54217 has 187 MA's),

Gene: CMP1_02 Start: 1357, Stop: 1692, Start Num: 98

Candidate Starts for CMP1_02:

(98, 1357), (110, 1384), (112, 1393), (114, 1420), (Start: 121 @1444 has 1 MA's), (129, 1504), (142, 1537), (155, 1624),

Gene: Cabrinians_101 Start: 56202, Stop: 56528, Start Num: 96

Candidate Starts for Cabrinians_101:

(42, 56028), (49, 56064), (77, 56151), (Start: 96 @56202 has 187 MA's), (124, 56325), (154, 56460),

Gene: Cactus_154 Start: 75022, Stop: 75369, Start Num: 102

Candidate Starts for Cactus_154:

(Start: 80 @74965 has 17 MA's), (Start: 102 @75022 has 89 MA's),

Gene: CaptainTrips_107 Start: 56860, Stop: 57186, Start Num: 96

Candidate Starts for CaptainTrips_107:

(42, 56686), (49, 56722), (77, 56809), (Start: 96 @56860 has 187 MA's), (124, 56983), (154, 57118),

Gene: Cashline_76 Start: 52028, Stop: 52315, Start Num: 115

Candidate Starts for Cashline_76:

(38, 51776), (74, 51905), (104, 51971), (106, 51977), (108, 51983), (Start: 115 @52028 has 15 MA's), (123, 52058),

Gene: Che8_112 Start: 58974, Stop: 59300, Start Num: 96

Candidate Starts for Che8_112:

(Start: 96 @58974 has 187 MA's),

Gene: CheeseSpider_79 Start: 46127, Stop: 46543, Start Num: 80

Candidate Starts for CheeseSpider_79:

(53, 46055), (55, 46061), (60, 46079), (Start: 80 @46127 has 17 MA's), (117, 46262), (130, 46337), (141, 46367), (157, 46463), (158, 46466),

Gene: ChosenOne_147 Start: 74389, Stop: 74736, Start Num: 102
Candidate Starts for ChosenOne_147:
(Start: 80 @74332 has 17 MA's), (Start: 102 @74389 has 89 MA's),

Gene: ChuckDuck_69 Start: 42418, Stop: 42762, Start Num: 96
Candidate Starts for ChuckDuck_69:
(Start: 96 @42418 has 187 MA's),

Gene: Chuckly_102 Start: 53949, Stop: 54293, Start Num: 96
Candidate Starts for Chuckly_102:
(42, 53775), (49, 53811), (77, 53898), (Start: 96 @53949 has 187 MA's), (126, 54093), (136, 54117),

Gene: Chymera_55 Start: 34305, Stop: 34673, Start Num: 105
Candidate Starts for Chymera_55:
(13, 33873), (21, 33963), (50, 34143), (Start: 105 @34305 has 1 MA's), (113, 34353), (148, 34488),
(154, 34548),

Gene: Clifton_96 Start: 55258, Stop: 55584, Start Num: 96
Candidate Starts for Clifton_96:
(Start: 96 @55258 has 187 MA's),

Gene: Command613_149 Start: 75444, Stop: 75791, Start Num: 102
Candidate Starts for Command613_149:
(Start: 63 @75348 has 1 MA's), (Start: 80 @75387 has 17 MA's), (Start: 102 @75444 has 89 MA's),

Gene: Contagion_142 Start: 73952, Stop: 74299, Start Num: 102
Candidate Starts for Contagion_142:
(Start: 80 @73895 has 17 MA's), (Start: 102 @73952 has 89 MA's),

Gene: CookieBear_95 Start: 51777, Stop: 52097, Start Num: 96
Candidate Starts for CookieBear_95:
(Start: 96 @51777 has 187 MA's), (146, 51957),

Gene: Cookies_148 Start: 75759, Stop: 76106, Start Num: 102
Candidate Starts for Cookies_148:
(Start: 80 @75702 has 17 MA's), (Start: 102 @75759 has 89 MA's),

Gene: CosmicBrownie_93 Start: 50511, Stop: 50822, Start Num: 100
Candidate Starts for CosmicBrownie_93:
(Start: 100 @50511 has 2 MA's),

Gene: Cracklewink_82 Start: 52871, Stop: 53326, Start Num: 83
Candidate Starts for Cracklewink_82:
(Start: 83 @52871 has 2 MA's), (88, 52886), (141, 53099), (150, 53132), (165, 53315),

Gene: Crescenzo_95 Start: 52946, Stop: 53266, Start Num: 96
Candidate Starts for Crescenzo_95:
(57, 52847), (78, 52895), (Start: 96 @52946 has 187 MA's), (146, 53126),

Gene: Crumble_99 Start: 52956, Stop: 53282, Start Num: 96
Candidate Starts for Crumble_99:
(Start: 96 @52956 has 187 MA's),

Gene: Czyszczone1_146 Start: 74437, Stop: 74841, Start Num: 80
Candidate Starts for Czyszczone1_146:
(Start: 80 @74437 has 17 MA's), (Start: 102 @74494 has 89 MA's),

Gene: DLane_105 Start: 58431, Stop: 58757, Start Num: 96
Candidate Starts for DLane_105:
(42, 58257), (49, 58293), (77, 58380), (Start: 96 @58431 has 187 MA's), (124, 58554), (154, 58689),

Gene: DRBy19_104 Start: 57899, Stop: 58225, Start Num: 96
Candidate Starts for DRBy19_104:
(Start: 96 @57899 has 187 MA's),

Gene: DaddyRickover_106 Start: 57378, Stop: 57704, Start Num: 96
Candidate Starts for DaddyRickover_106:
(Start: 96 @57378 has 187 MA's),

Gene: Daenerys_102 Start: 57545, Stop: 57871, Start Num: 96
Candidate Starts for Daenerys_102:
(Start: 96 @57545 has 187 MA's),

Gene: Dante_104 Start: 58406, Stop: 58750, Start Num: 96
Candidate Starts for Dante_104:
(42, 58232), (49, 58268), (77, 58355), (Start: 96 @58406 has 187 MA's), (126, 58550), (136, 58574),

Gene: DarwinJr_98 Start: 53274, Stop: 53627, Start Num: 96
Candidate Starts for DarwinJr_98:
(Start: 96 @53274 has 187 MA's),

Gene: Deb65_97 Start: 55269, Stop: 55595, Start Num: 96
Candidate Starts for Deb65_97:
(Start: 96 @55269 has 187 MA's),

Gene: DillTech15_111 Start: 57330, Stop: 57656, Start Num: 96
Candidate Starts for DillTech15_111:
(42, 57156), (49, 57192), (77, 57279), (Start: 96 @57330 has 187 MA's), (124, 57453), (154, 57588),

Gene: Ding_98 Start: 52235, Stop: 52555, Start Num: 96
Candidate Starts for Ding_98:
(36, 52037), (39, 52046), (41, 52052), (61, 52142), (70, 52166), (Start: 96 @52235 has 187 MA's),

Gene: DoRead_108 Start: 55713, Stop: 56039, Start Num: 96
Candidate Starts for DoRead_108:
(Start: 96 @55713 has 187 MA's), (124, 55836), (154, 55971),

Gene: DoctorDiddles_145 Start: 74489, Stop: 74836, Start Num: 102
Candidate Starts for DoctorDiddles_145:
(Start: 80 @74432 has 17 MA's), (Start: 102 @74489 has 89 MA's),

Gene: Donkeykong_110 Start: 59010, Stop: 59336, Start Num: 96
Candidate Starts for Donkeykong_110:
(42, 58836), (49, 58872), (77, 58959), (Start: 96 @59010 has 187 MA's), (124, 59133), (154, 59268),

Gene: Dumbo_149 Start: 75155, Stop: 75502, Start Num: 102

Candidate Starts for Dumbo_149:

(Start: 80 @75098 has 17 MA's), (Start: 102 @75155 has 89 MA's),

Gene: EMSquaredA_80 Start: 50168, Stop: 50458, Start Num: 115

Candidate Starts for EMSquaredA_80:

(9, 49655), (22, 49805), (23, 49814), (27, 49841), (29, 49859), (34, 49883), (40, 49922), (43, 49934), (44, 49937), (84, 50072), (Start: 115 @50168 has 15 MA's),

Gene: Easy2Say_148 Start: 75017, Stop: 75364, Start Num: 102

Candidate Starts for Easy2Say_148:

(Start: 80 @74960 has 17 MA's), (Start: 102 @75017 has 89 MA's),

Gene: Eileen_64 Start: 40750, Stop: 41094, Start Num: 96

Candidate Starts for Eileen_64:

(36, 40555), (67, 40678), (Start: 96 @40750 has 187 MA's),

Gene: Eish_109 Start: 57682, Stop: 58008, Start Num: 96

Candidate Starts for Eish_109:

(6, 57169), (7, 57193), (12, 57256), (42, 57508), (77, 57631), (Start: 96 @57682 has 187 MA's),

Gene: EleanorGeorge_108 Start: 59015, Stop: 59341, Start Num: 96

Candidate Starts for EleanorGeorge_108:

(42, 58841), (49, 58877), (77, 58964), (Start: 96 @59015 has 187 MA's), (124, 59138), (154, 59273),

Gene: Elite2014_146 Start: 74388, Stop: 74735, Start Num: 102

Candidate Starts for Elite2014_146:

(Start: 80 @74331 has 17 MA's), (Start: 102 @74388 has 89 MA's),

Gene: Emma_109 Start: 55950, Stop: 56276, Start Num: 96

Candidate Starts for Emma_109:

(42, 55776), (49, 55812), (77, 55899), (Start: 96 @55950 has 187 MA's), (124, 56073), (154, 56208),

Gene: Emmina_148 Start: 74714, Stop: 75061, Start Num: 102

Candidate Starts for Emmina_148:

(Start: 80 @74657 has 17 MA's), (Start: 102 @74714 has 89 MA's),

Gene: EnalisNailo_76 Start: 50668, Stop: 50958, Start Num: 115

Candidate Starts for EnalisNailo_76:

(28, 50335), (40, 50422), (43, 50434), (44, 50437), (84, 50572), (Start: 115 @50668 has 15 MA's),

Gene: Enzomatic_117 Start: 56795, Stop: 57121, Start Num: 96

Candidate Starts for Enzomatic_117:

(6, 56282), (7, 56306), (12, 56369), (42, 56621), (49, 56657), (77, 56744), (Start: 96 @56795 has 187 MA's),

Gene: Eradicator_95 Start: 55231, Stop: 55557, Start Num: 96

Candidate Starts for Eradicator_95:

(Start: 96 @55231 has 187 MA's),

Gene: Estave1_112 Start: 60259, Stop: 60585, Start Num: 96

Candidate Starts for Estave1_112:

(Start: 96 @60259 has 187 MA's),

Gene: Eudoria_79 Start: 49950, Stop: 50285, Start Num: 97
Candidate Starts for Eudoria_79:
(24, 49677), (Start: 97 @49950 has 29 MA's),

Gene: EvePickles_96 Start: 52994, Stop: 53314, Start Num: 96
Candidate Starts for EvePickles_96:
(Start: 96 @52994 has 187 MA's), (146, 53174),

Gene: Eviarto_84 Start: 53021, Stop: 53356, Start Num: 97
Candidate Starts for Eviarto_84:
(24, 52748), (Start: 97 @53021 has 29 MA's), (145, 53207),

Gene: FairyPath_147 Start: 75177, Stop: 75524, Start Num: 102
Candidate Starts for FairyPath_147:
(Start: 80 @75120 has 17 MA's), (Start: 102 @75177 has 89 MA's),

Gene: Faiyaz_79 Start: 51894, Stop: 52358, Start Num: 81
Candidate Starts for Faiyaz_79:
(Start: 80 @51891 has 17 MA's), (Start: 81 @51894 has 2 MA's), (107, 51963), (119, 52032), (130, 52101), (141, 52131), (148, 52152), (149, 52158), (162, 52302), (165, 52347),

Gene: Faja_96 Start: 52066, Stop: 52386, Start Num: 96
Candidate Starts for Faja_96:
(Start: 96 @52066 has 187 MA's), (146, 52246),

Gene: Farewell_96 Start: 61361, Stop: 61663, Start Num: 115
Candidate Starts for Farewell_96:
(47, 61136), (75, 61232), (87, 61265), (104, 61301), (106, 61307), (Start: 115 @61361 has 15 MA's), (123, 61394), (164, 61652),

Gene: Fastidio_108 Start: 55371, Stop: 55697, Start Num: 96
Candidate Starts for Fastidio_108:
(42, 55197), (49, 55233), (77, 55320), (Start: 96 @55371 has 187 MA's), (124, 55494), (154, 55629),

Gene: Filuzino_105 Start: 58837, Stop: 59163, Start Num: 96
Candidate Starts for Filuzino_105:
(42, 58663), (49, 58699), (77, 58786), (Start: 96 @58837 has 187 MA's), (124, 58960), (154, 59095),

Gene: FireRed_150 Start: 75636, Stop: 75983, Start Num: 102
Candidate Starts for FireRed_150:
(Start: 63 @75540 has 1 MA's), (Start: 80 @75579 has 17 MA's), (Start: 102 @75636 has 89 MA's),

Gene: Floral_80 Start: 52125, Stop: 52415, Start Num: 115
Candidate Starts for Floral_80:
(9, 51612), (22, 51762), (23, 51771), (27, 51798), (29, 51816), (34, 51840), (40, 51879), (43, 51891), (44, 51894), (84, 52029), (Start: 115 @52125 has 15 MA's),

Gene: Florinda_117 Start: 58948, Stop: 59274, Start Num: 96
Candidate Starts for Florinda_117:
(42, 58774), (49, 58810), (77, 58897), (Start: 96 @58948 has 187 MA's), (124, 59071), (154, 59206),

Gene: Flypotenuse_142 Start: 74667, Stop: 75014, Start Num: 102
Candidate Starts for Flypotenuse_142:

(Start: 102 @74667 has 89 MA's),

Gene: FosterFrank_71 Start: 42119, Stop: 42463, Start Num: 96

Candidate Starts for FosterFrank_71:

(26, 41831), (Start: 96 @42119 has 187 MA's),

Gene: FreddyB_113 Start: 57850, Stop: 58176, Start Num: 96

Candidate Starts for FreddyB_113:

(42, 57676), (49, 57712), (77, 57799), (Start: 96 @57850 has 187 MA's), (124, 57973), (154, 58108),

Gene: Frokostdame_71 Start: 45512, Stop: 45952, Start Num: 80

Candidate Starts for Frokostdame_71:

(Start: 80 @45512 has 17 MA's), (107, 45584), (117, 45647), (130, 45722), (141, 45752), (158, 45851),

Gene: GAL1_82 Start: 49576, Stop: 49935, Start Num: 91

Candidate Starts for GAL1_82:

(91, 49576), (151, 49810),

Gene: GUmbie_104 Start: 56919, Stop: 57245, Start Num: 96

Candidate Starts for GUmbie_104:

(42, 56745), (49, 56781), (77, 56868), (Start: 96 @56919 has 187 MA's), (124, 57042), (154, 57177),

Gene: Gage_137 Start: 71069, Stop: 71416, Start Num: 102

Candidate Starts for Gage_137:

(Start: 80 @71012 has 17 MA's), (Start: 102 @71069 has 89 MA's),

Gene: Galactic_109 Start: 57393, Stop: 57719, Start Num: 96

Candidate Starts for Galactic_109:

(6, 56880), (7, 56904), (12, 56967), (42, 57219), (49, 57255), (77, 57342), (Start: 96 @57393 has 187 MA's),

Gene: Gambino_75 Start: 46202, Stop: 46618, Start Num: 80

Candidate Starts for Gambino_75:

(53, 46133), (55, 46139), (60, 46154), (Start: 80 @46202 has 17 MA's), (117, 46337), (130, 46412), (141, 46442), (157, 46538), (158, 46541),

Gene: Gandalph_104 Start: 54506, Stop: 54832, Start Num: 96

Candidate Starts for Gandalph_104:

(42, 54332), (49, 54368), (77, 54455), (Start: 96 @54506 has 187 MA's), (124, 54629), (154, 54764),

Gene: Gemini_151 Start: 75068, Stop: 75415, Start Num: 102

Candidate Starts for Gemini_151:

(Start: 80 @75011 has 17 MA's), (Start: 102 @75068 has 89 MA's),

Gene: Geralt_97 Start: 55267, Stop: 55593, Start Num: 96

Candidate Starts for Geralt_97:

(Start: 96 @55267 has 187 MA's),

Gene: GigiOuiOui_99 Start: 55921, Stop: 56247, Start Num: 96

Candidate Starts for GigiOuiOui_99:

(6, 55408), (7, 55432), (12, 55495), (42, 55747), (49, 55783), (77, 55870), (Start: 96 @55921 has 187 MA's), (124, 56044), (154, 56179),

Gene: Girr_103 Start: 57256, Stop: 57582, Start Num: 96
Candidate Starts for Girr_103:
(Start: 96 @57256 has 187 MA's),

Gene: Glexan_150 Start: 75917, Stop: 76264, Start Num: 102
Candidate Starts for Glexan_150:
(Start: 102 @75917 has 89 MA's),

Gene: Globfish_96 Start: 50972, Stop: 51292, Start Num: 96
Candidate Starts for Globfish_96:
(Start: 96 @50972 has 187 MA's), (146, 51152),

Gene: GlobiWarming_74 Start: 42547, Stop: 42891, Start Num: 96
Candidate Starts for GlobiWarming_74:
(85, 42526), (93, 42541), (Start: 96 @42547 has 187 MA's),

Gene: GoldenSpark_150 Start: 74551, Stop: 74898, Start Num: 102
Candidate Starts for GoldenSpark_150:
(Start: 80 @74494 has 17 MA's), (Start: 102 @74551 has 89 MA's),

Gene: Goldilocks_152 Start: 75147, Stop: 75494, Start Num: 102
Candidate Starts for Goldilocks_152:
(Start: 80 @75090 has 17 MA's), (Start: 102 @75147 has 89 MA's),

Gene: Gorge_103 Start: 57487, Stop: 57813, Start Num: 96
Candidate Starts for Gorge_103:
(42, 57313), (49, 57349), (77, 57436), (Start: 96 @57487 has 187 MA's), (124, 57610), (154, 57745),

Gene: Guacamole_67 Start: 43197, Stop: 43619, Start Num: 80
Candidate Starts for Guacamole_67:
(Start: 80 @43197 has 17 MA's), (86, 43218), (117, 43332), (130, 43407), (141, 43437), (157, 43533),
(158, 43536),

Gene: GumGum_103 Start: 53268, Stop: 53588, Start Num: 96
Candidate Starts for GumGum_103:
(Start: 96 @53268 has 187 MA's), (146, 53448),

Gene: Guppsters_99 Start: 54367, Stop: 54693, Start Num: 96
Candidate Starts for Guppsters_99:
(Start: 96 @54367 has 187 MA's), (124, 54490), (154, 54625),

Gene: Hades_102 Start: 54518, Stop: 54844, Start Num: 96
Candidate Starts for Hades_102:
(Start: 96 @54518 has 187 MA's),

Gene: Hamulus_105 Start: 56687, Stop: 57013, Start Num: 96
Candidate Starts for Hamulus_105:
(42, 56513), (49, 56549), (77, 56636), (Start: 96 @56687 has 187 MA's), (124, 56810), (154, 56945),

Gene: Harella_153 Start: 76278, Stop: 76625, Start Num: 102
Candidate Starts for Harella_153:
(Start: 102 @76278 has 89 MA's),

Gene: Henrique_72 Start: 42189, Stop: 42533, Start Num: 96

Candidate Starts for Henrique_72:

(59, 42093), (Start: 96 @42189 has 187 MA's),

Gene: Herod_84 Start: 53440, Stop: 53775, Start Num: 97

Candidate Starts for Herod_84:

(24, 53167), (Start: 97 @53440 has 29 MA's), (145, 53626),

Gene: Hestia_90 Start: 50238, Stop: 50558, Start Num: 100

Candidate Starts for Hestia_90:

(33, 49992), (Start: 96 @50226 has 187 MA's), (Start: 100 @50238 has 2 MA's), (135, 50367),

Gene: Highbury_141 Start: 72834, Stop: 73181, Start Num: 102

Candidate Starts for Highbury_141:

(Start: 63 @72738 has 1 MA's), (Start: 80 @72777 has 17 MA's), (Start: 102 @72834 has 89 MA's),

Gene: Hillester_99 Start: 52313, Stop: 52633, Start Num: 96

Candidate Starts for Hillester_99:

(Start: 96 @52313 has 187 MA's), (146, 52493),

Gene: Hilltopfarm_78 Start: 51591, Stop: 52058, Start Num: 80

Candidate Starts for Hilltopfarm_78:

(Start: 80 @51591 has 17 MA's), (Start: 81 @51594 has 2 MA's), (107, 51663), (119, 51732), (130, 51801), (141, 51831), (148, 51852), (149, 51858), (162, 52002), (165, 52047),

Gene: Hlubikazi_102 Start: 55002, Stop: 55328, Start Num: 96

Candidate Starts for Hlubikazi_102:

(6, 54489), (12, 54576), (42, 54828), (49, 54864), (77, 54951), (Start: 96 @55002 has 187 MA's), (124, 55125), (154, 55260),

Gene: Holt_152 Start: 75334, Stop: 75681, Start Num: 102

Candidate Starts for Holt_152:

(Start: 80 @75277 has 17 MA's), (Start: 102 @75334 has 89 MA's),

Gene: Hoonter_148 Start: 74686, Stop: 75033, Start Num: 102

Candidate Starts for Hoonter_148:

(Start: 102 @74686 has 89 MA's),

Gene: Hohey_144 Start: 75005, Stop: 75352, Start Num: 102

Candidate Starts for Hohey_144:

(Start: 63 @74909 has 1 MA's), (Start: 80 @74948 has 17 MA's), (Start: 102 @75005 has 89 MA's),

Gene: HufflyPuff_148 Start: 75742, Stop: 76089, Start Num: 102

Candidate Starts for HufflyPuff_148:

(Start: 80 @75685 has 17 MA's), (Start: 102 @75742 has 89 MA's),

Gene: Hum25_86 Start: 42285, Stop: 42626, Start Num: 96

Candidate Starts for Hum25_86:

(Start: 96 @42285 has 187 MA's), (103, 42303), (138, 42438),

Gene: Hyzer_100 Start: 60183, Stop: 60518, Start Num: 97

Candidate Starts for Hyzer_100:

(73, 60138), (Start: 97 @60183 has 29 MA's),

Gene: Hyzer_80 Start: 53106, Stop: 53528, Start Num: 80

Candidate Starts for Hyzer_80:

(Start: 80 @53106 has 17 MA's), (Start: 83 @53118 has 2 MA's), (117, 53241), (123, 53274), (130, 53316), (141, 53346), (148, 53367), (158, 53445), (163, 53508),

Gene: IHOP_151 Start: 75087, Stop: 75434, Start Num: 102

Candidate Starts for IHOP_151:

(Start: 80 @75030 has 17 MA's), (Start: 102 @75087 has 89 MA's),

Gene: lbOuu_96 Start: 54829, Stop: 55155, Start Num: 96

Candidate Starts for lbOuu_96:

(42, 54655), (49, 54691), (77, 54778), (Start: 96 @54829 has 187 MA's), (124, 54952), (154, 55087),

Gene: lbantik_57 Start: 25161, Stop: 25478, Start Num: 96

Candidate Starts for lbantik_57:

(76, 25107), (Start: 96 @25161 has 187 MA's), (101, 25176), (107, 25185), (134, 25320), (144, 25347), (152, 25392), (153, 25416),

Gene: lbhubesi_103 Start: 55132, Stop: 55458, Start Num: 96

Candidate Starts for lbhubesi_103:

(Start: 96 @55132 has 187 MA's),

Gene: lcee_146 Start: 73588, Stop: 73935, Start Num: 102

Candidate Starts for lcee_146:

(Start: 80 @73531 has 17 MA's), (Start: 102 @73588 has 89 MA's),

Gene: Inca_147 Start: 73489, Stop: 73836, Start Num: 102

Candidate Starts for Inca_147:

(56, 73372), (Start: 63 @73393 has 1 MA's), (Start: 80 @73432 has 17 MA's), (Start: 102 @73489 has 89 MA's),

Gene: Inventum_102 Start: 56555, Stop: 56881, Start Num: 96

Candidate Starts for Inventum_102:

(Start: 96 @56555 has 187 MA's),

Gene: IrishSherpFalk_105 Start: 57329, Stop: 57673, Start Num: 96

Candidate Starts for IrishSherpFalk_105:

(Start: 96 @57329 has 187 MA's), (126, 57473), (136, 57497),

Gene: Isolde_98 Start: 52809, Stop: 53129, Start Num: 96

Candidate Starts for Isolde_98:

(Start: 96 @52809 has 187 MA's), (146, 52989),

Gene: Jablanski_82 Start: 53171, Stop: 53461, Start Num: 115

Candidate Starts for Jablanski_82:

(104, 53114), (106, 53120), (Start: 115 @53171 has 15 MA's),

Gene: James_108 Start: 59148, Stop: 59474, Start Num: 96

Candidate Starts for James_108:

(42, 58974), (49, 59010), (77, 59097), (Start: 96 @59148 has 187 MA's), (124, 59271), (154, 59406),

Gene: Jarcob_107 Start: 58468, Stop: 58794, Start Num: 96

Candidate Starts for Jacob_107:
(Start: 96 @58468 has 187 MA's),

Gene: JasperJr_67 Start: 43197, Stop: 43619, Start Num: 80
Candidate Starts for JasperJr_67:
(Start: 80 @43197 has 17 MA's), (86, 43218), (117, 43332), (130, 43407), (141, 43437), (157, 43533),
(158, 43536),

Gene: JeTaime_144 Start: 74518, Stop: 74865, Start Num: 102
Candidate Starts for JeTaime_144:
(Start: 80 @74461 has 17 MA's), (Start: 102 @74518 has 89 MA's),

Gene: JellyBread_95 Start: 53015, Stop: 53341, Start Num: 96
Candidate Starts for JellyBread_95:
(Start: 96 @53015 has 187 MA's), (146, 53195),

Gene: Jinglebell_111 Start: 58360, Stop: 58686, Start Num: 96
Candidate Starts for Jinglebell_111:
(Start: 96 @58360 has 187 MA's),

Gene: JoeyJr_107 Start: 58463, Stop: 58789, Start Num: 96
Candidate Starts for JoeyJr_107:
(Start: 96 @58463 has 187 MA's),

Gene: Journey_64 Start: 41500, Stop: 41799, Start Num: 121
Candidate Starts for Journey_64:
(Start: 121 @41500 has 1 MA's),

Gene: JuJu_77 Start: 47933, Stop: 48355, Start Num: 80
Candidate Starts for JuJu_77:
(Start: 80 @47933 has 17 MA's), (117, 48068), (130, 48143), (141, 48173), (157, 48269), (158, 48272),

Gene: Judy_72 Start: 43025, Stop: 43369, Start Num: 96
Candidate Starts for Judy_72:
(Start: 96 @43025 has 187 MA's),

Gene: Juicebox_59 Start: 41044, Stop: 41346, Start Num: 71
Candidate Starts for Juicebox_59:
(68, 41038), (Start: 71 @41044 has 1 MA's), (123, 41221),

Gene: Juniper1_98 Start: 56030, Stop: 56374, Start Num: 96
Candidate Starts for Juniper1_98:
(Start: 96 @56030 has 187 MA's), (126, 56174), (136, 56198),

Gene: Kabloowy_97 Start: 52731, Stop: 53084, Start Num: 96
Candidate Starts for Kabloowy_97:
(Start: 96 @52731 has 187 MA's),

Gene: Kanye_142 Start: 74872, Stop: 75219, Start Num: 102
Candidate Starts for Kanye_142:
(Start: 80 @74815 has 17 MA's), (Start: 102 @74872 has 89 MA's),

Gene: Karhdo_100 Start: 54911, Stop: 55237, Start Num: 96

Candidate Starts for Karhdo_100:
(Start: 96 @54911 has 187 MA's),

Gene: Karkharias_66 Start: 42195, Stop: 42539, Start Num: 96
Candidate Starts for Karkharias_66:
(Start: 96 @42195 has 187 MA's),

Gene: KayMoney_68 Start: 42631, Stop: 42975, Start Num: 96
Candidate Starts for KayMoney_68:
(Start: 96 @42631 has 187 MA's),

Gene: Kenuha5_96 Start: 56035, Stop: 56361, Start Num: 96
Candidate Starts for Kenuha5_96:
(42, 55861), (49, 55897), (77, 55984), (Start: 96 @56035 has 187 MA's), (124, 56158), (154, 56293),

Gene: Kersh_107 Start: 59723, Stop: 60049, Start Num: 96
Candidate Starts for Kersh_107:
(Start: 96 @59723 has 187 MA's),

Gene: Kimchi_151 Start: 75248, Stop: 75595, Start Num: 102
Candidate Starts for Kimchi_151:
(Start: 80 @75191 has 17 MA's), (Start: 102 @75248 has 89 MA's),

Gene: KingMidas_105 Start: 56917, Stop: 57243, Start Num: 96
Candidate Starts for KingMidas_105:
(42, 56743), (49, 56779), (77, 56866), (Start: 96 @56917 has 187 MA's), (124, 57040), (154, 57175),

Gene: Kita_80 Start: 49959, Stop: 50294, Start Num: 97
Candidate Starts for Kita_80:
(24, 49686), (Start: 97 @49959 has 29 MA's),

Gene: Krakatau_97 Start: 52590, Stop: 52916, Start Num: 96
Candidate Starts for Krakatau_97:
(42, 52416), (49, 52452), (77, 52539), (Start: 96 @52590 has 187 MA's), (124, 52713), (154, 52848),

Gene: KristaRAM_113 Start: 58232, Stop: 58558, Start Num: 96
Candidate Starts for KristaRAM_113:
(Start: 96 @58232 has 187 MA's),

Gene: Kromp_95 Start: 57607, Stop: 57981, Start Num: 96
Candidate Starts for Kromp_95:
(4, 56935), (10, 57178), (16, 57223), (30, 57367), (32, 57382), (45, 57454), (90, 57592), (Start: 96 @57607 has 187 MA's), (137, 57775), (140, 57784),

Gene: Lasker_96 Start: 53398, Stop: 53718, Start Num: 96
Candidate Starts for Lasker_96:
(Start: 96 @53398 has 187 MA's), (146, 53578),

Gene: Lawnathon_100 Start: 52639, Stop: 52959, Start Num: 96
Candidate Starts for Lawnathon_100:
(Start: 96 @52639 has 187 MA's), (146, 52819),

Gene: LeBruni_97 Start: 51926, Stop: 52246, Start Num: 96

Candidate Starts for LeBruni_97:
(Start: 96 @51926 has 187 MA's),

Gene: Leperchaun_106 Start: 57697, Stop: 58023, Start Num: 96
Candidate Starts for Leperchaun_106:
(Start: 96 @57697 has 187 MA's),

Gene: Lilpickle_146 Start: 74388, Stop: 74735, Start Num: 102
Candidate Starts for Lilpickle_146:
(Start: 80 @74331 has 17 MA's), (Start: 102 @74388 has 89 MA's),

Gene: Lizziana_105 Start: 57926, Stop: 58252, Start Num: 96
Candidate Starts for Lizziana_105:
(Start: 96 @57926 has 187 MA's),

Gene: Llama_111 Start: 58003, Stop: 58329, Start Num: 96
Candidate Starts for Llama_111:
(Start: 96 @58003 has 187 MA's),

Gene: Llij_99 Start: 55622, Stop: 55966, Start Num: 96
Candidate Starts for Llij_99:
(42, 55448), (49, 55484), (77, 55571), (Start: 96 @55622 has 187 MA's), (126, 55766), (136, 55790),

Gene: LonelyBoi_78 Start: 53256, Stop: 53543, Start Num: 115
Candidate Starts for LonelyBoi_78:
(5, 52596), (11, 52755), (14, 52785), (74, 53133), (104, 53199), (106, 53205), (Start: 115 @53256 has 15 MA's),

Gene: LunaBlu_111 Start: 58815, Stop: 59141, Start Num: 96
Candidate Starts for LunaBlu_111:
(6, 58302), (7, 58326), (12, 58389), (42, 58641), (49, 58677), (77, 58764), (Start: 96 @58815 has 187 MA's), (124, 58938), (154, 59073),

Gene: LunaStella_101 Start: 55262, Stop: 55549, Start Num: 116
Candidate Starts for LunaStella_101:
(16, 54791), (37, 54992), (46, 55031), (62, 55097), (64, 55100), (107, 55211), (Start: 116 @55262 has 3 MA's),

Gene: MISSy_147 Start: 75227, Stop: 75574, Start Num: 102
Candidate Starts for MISSy_147:
(Start: 63 @75131 has 1 MA's), (Start: 80 @75170 has 17 MA's), (Start: 102 @75227 has 89 MA's),

Gene: MPhalcon_148 Start: 75024, Stop: 75371, Start Num: 102
Candidate Starts for MPhalcon_148:
(Start: 63 @74928 has 1 MA's), (Start: 80 @74967 has 17 MA's), (Start: 102 @75024 has 89 MA's),

Gene: MUWow_98 Start: 53802, Stop: 54125, Start Num: 96
Candidate Starts for MUWow_98:
(Start: 96 @53802 has 187 MA's), (Start: 100 @53814 has 2 MA's), (133, 53940),

Gene: MadMen_109 Start: 57291, Stop: 57617, Start Num: 96
Candidate Starts for MadMen_109:
(Start: 96 @57291 has 187 MA's),

Gene: MadamMonkfish_148 Start: 74973, Stop: 75320, Start Num: 102
Candidate Starts for MadamMonkfish_148:
(Start: 80 @74916 has 17 MA's), (Start: 102 @74973 has 89 MA's),

Gene: Madavieve_80 Start: 51628, Stop: 51963, Start Num: 97
Candidate Starts for Madavieve_80:
(25, 51364), (35, 51433), (52, 51514), (73, 51583), (Start: 97 @51628 has 29 MA's),

Gene: Madeline_76 Start: 51284, Stop: 51616, Start Num: 97
Candidate Starts for Madeline_76:
(18, 50948), (24, 51011), (Start: 97 @51284 has 29 MA's),

Gene: Mahavrat_98 Start: 54698, Stop: 55042, Start Num: 96
Candidate Starts for Mahavrat_98:
(Start: 96 @54698 has 187 MA's), (126, 54842), (136, 54866),

Gene: Manasvini_81 Start: 49974, Stop: 50309, Start Num: 97
Candidate Starts for Manasvini_81:
(24, 49701), (Start: 97 @49974 has 29 MA's),

Gene: Manda_149 Start: 75442, Stop: 75789, Start Num: 102
Candidate Starts for Manda_149:
(Start: 63 @75346 has 1 MA's), (Start: 80 @75385 has 17 MA's), (Start: 102 @75442 has 89 MA's),

Gene: Mantra_102 Start: 56533, Stop: 56859, Start Num: 96
Candidate Starts for Mantra_102:
(6, 56020), (12, 56107), (42, 56359), (77, 56482), (Start: 96 @56533 has 187 MA's), (124, 56656),
(154, 56791),

Gene: Mapleville_87 Start: 50199, Stop: 50522, Start Num: 96
Candidate Starts for Mapleville_87:
(Start: 96 @50199 has 187 MA's), (Start: 100 @50211 has 2 MA's), (133, 50337),

Gene: Maravista_102 Start: 58887, Stop: 59231, Start Num: 96
Candidate Starts for Maravista_102:
(Start: 96 @58887 has 187 MA's), (126, 59031), (136, 59055),

Gene: Maridalia_83 Start: 51242, Stop: 51577, Start Num: 97
Candidate Starts for Maridalia_83:
(24, 50969), (Start: 97 @51242 has 29 MA's),

Gene: Marshmallow_149 Start: 76102, Stop: 76506, Start Num: 80
Candidate Starts for Marshmallow_149:
(Start: 80 @76102 has 17 MA's), (Start: 102 @76159 has 89 MA's),

Gene: Martik_103 Start: 58387, Stop: 58713, Start Num: 96
Candidate Starts for Martik_103:
(Start: 96 @58387 has 187 MA's),

Gene: MaterMagnus_96 Start: 52654, Stop: 52974, Start Num: 96
Candidate Starts for MaterMagnus_96:
(Start: 96 @52654 has 187 MA's), (146, 52834),

Gene: Mattes_105 Start: 57605, Stop: 57931, Start Num: 96

Candidate Starts for Mattes_105:

(Start: 96 @57605 has 187 MA's),

Gene: Maxxinista_148 Start: 74634, Stop: 74981, Start Num: 102

Candidate Starts for Maxxinista_148:

(Start: 80 @74577 has 17 MA's), (Start: 102 @74634 has 89 MA's),

Gene: Medindi_110 Start: 58213, Stop: 58539, Start Num: 96

Candidate Starts for Medindi_110:

(42, 58039), (49, 58075), (77, 58162), (Start: 96 @58213 has 187 MA's), (124, 58336), (154, 58471),

Gene: Melissauren88_95 Start: 53888, Stop: 54214, Start Num: 96

Candidate Starts for Melissauren88_95:

(Start: 96 @53888 has 187 MA's), (124, 54011), (154, 54146),

Gene: MidnightRain_102 Start: 53249, Stop: 53569, Start Num: 96

Candidate Starts for MidnightRain_102:

(Start: 96 @53249 has 187 MA's),

Gene: MilanaBonita_98 Start: 55783, Stop: 56109, Start Num: 96

Candidate Starts for MilanaBonita_98:

(42, 55609), (49, 55645), (77, 55732), (Start: 96 @55783 has 187 MA's), (124, 55906), (154, 56041),

Gene: MinionDave_103 Start: 57559, Stop: 57885, Start Num: 96

Candidate Starts for MinionDave_103:

(42, 57385), (49, 57421), (77, 57508), (Start: 96 @57559 has 187 MA's), (124, 57682), (154, 57817),

Gene: Miniwave_140 Start: 74380, Stop: 74727, Start Num: 102

Candidate Starts for Miniwave_140:

(Start: 80 @74323 has 17 MA's), (Start: 102 @74380 has 89 MA's),

Gene: Minnie_99 Start: 58017, Stop: 58361, Start Num: 96

Candidate Starts for Minnie_99:

(42, 57843), (49, 57879), (77, 57966), (Start: 96 @58017 has 187 MA's), (126, 58161), (136, 58185),

Gene: Misomonster_3 Start: 518, Stop: 838, Start Num: 109

Candidate Starts for Misomonster_3:

(Start: 109 @518 has 1 MA's), (111, 527), (122, 593),

Gene: MissRona_73 Start: 46203, Stop: 46619, Start Num: 80

Candidate Starts for MissRona_73:

(53, 46134), (55, 46140), (60, 46155), (Start: 80 @46203 has 17 MA's), (117, 46338), (130, 46413), (141, 46443), (157, 46539), (158, 46542),

Gene: MisterCuddles_104 Start: 57256, Stop: 57582, Start Num: 96

Candidate Starts for MisterCuddles_104:

(Start: 96 @57256 has 187 MA's),

Gene: Modragons_107 Start: 57991, Stop: 58317, Start Num: 96

Candidate Starts for Modragons_107:

(Start: 96 @57991 has 187 MA's),

Gene: Moonbeam_107 Start: 57515, Stop: 57841, Start Num: 96
Candidate Starts for Moonbeam_107:
(42, 57341), (49, 57377), (77, 57464), (Start: 96 @57515 has 187 MA's), (124, 57638), (154, 57773),

Gene: Ms6_107 Start: 53778, Stop: 54104, Start Num: 96
Candidate Starts for Ms6_107:
(42, 53604), (49, 53640), (77, 53727), (Start: 96 @53778 has 187 MA's), (124, 53901), (154, 54036),

Gene: Murica_149 Start: 76472, Stop: 76819, Start Num: 102
Candidate Starts for Murica_149:
(Start: 63 @76376 has 1 MA's), (Start: 80 @76415 has 17 MA's), (Start: 102 @76472 has 89 MA's),

Gene: Murphy_148 Start: 75598, Stop: 75945, Start Num: 102
Candidate Starts for Murphy_148:
(Start: 80 @75541 has 17 MA's), (Start: 102 @75598 has 89 MA's),

Gene: MurphyJoseph_92 Start: 50348, Stop: 50668, Start Num: 96
Candidate Starts for MurphyJoseph_92:
(Start: 96 @50348 has 187 MA's), (146, 50528),

Gene: Mutaforma13_106 Start: 57233, Stop: 57559, Start Num: 96
Candidate Starts for Mutaforma13_106:
(42, 57059), (49, 57095), (77, 57182), (Start: 96 @57233 has 187 MA's), (124, 57356), (154, 57491),

Gene: Myrale_146 Start: 75838, Stop: 76185, Start Num: 102
Candidate Starts for Myrale_146:
(Start: 80 @75781 has 17 MA's), (Start: 102 @75838 has 89 MA's),

Gene: Nala_149 Start: 75313, Stop: 75660, Start Num: 102
Candidate Starts for Nala_149:
(Start: 63 @75217 has 1 MA's), (Start: 80 @75256 has 17 MA's), (Start: 102 @75313 has 89 MA's),

Gene: Neobush_81 Start: 50518, Stop: 50853, Start Num: 97
Candidate Starts for Neobush_81:
(24, 50245), (Start: 97 @50518 has 29 MA's),

Gene: NewHope4_112 Start: 56941, Stop: 57267, Start Num: 96
Candidate Starts for NewHope4_112:
(6, 56428), (7, 56452), (12, 56515), (42, 56767), (49, 56803), (77, 56890), (Start: 96 @56941 has 187 MA's),

Gene: NidoQ_64 Start: 42149, Stop: 42493, Start Num: 96
Candidate Starts for NidoQ_64:
(Start: 96 @42149 has 187 MA's),

Gene: NikkiHotWheels_68 Start: 41859, Stop: 42203, Start Num: 96
Candidate Starts for NikkiHotWheels_68:
(Start: 96 @41859 has 187 MA's), (152, 42075),

Gene: Nimbo_96 Start: 55269, Stop: 55595, Start Num: 96
Candidate Starts for Nimbo_96:
(Start: 96 @55269 has 187 MA's),

Gene: Nimrod_145 Start: 75854, Stop: 76201, Start Num: 102
Candidate Starts for Nimrod_145:
(Start: 80 @75797 has 17 MA's), (Start: 102 @75854 has 89 MA's),

Gene: NoSleep_145 Start: 74074, Stop: 74421, Start Num: 102
Candidate Starts for NoSleep_145:
(Start: 80 @74017 has 17 MA's), (Start: 102 @74074 has 89 MA's),

Gene: NoSwimming_59 Start: 40976, Stop: 41329, Start Num: 96
Candidate Starts for NoSwimming_59:
(Start: 96 @40976 has 187 MA's), (120, 41072), (154, 41240), (161, 41285),

Gene: NonchalantPear_146 Start: 73641, Stop: 73988, Start Num: 102
Candidate Starts for NonchalantPear_146:
(Start: 80 @73584 has 17 MA's), (Start: 102 @73641 has 89 MA's),

Gene: NormanBulbieJr_102 Start: 57635, Stop: 57961, Start Num: 96
Candidate Starts for NormanBulbieJr_102:
(42, 57461), (49, 57497), (77, 57584), (Start: 96 @57635 has 187 MA's), (124, 57758), (154, 57893),

Gene: Nymphadora_84 Start: 53045, Stop: 53380, Start Num: 97
Candidate Starts for Nymphadora_84:
(24, 52772), (Start: 97 @53045 has 29 MA's), (145, 53231),

Gene: Ochi17_110 Start: 57598, Stop: 57924, Start Num: 96
Candidate Starts for Ochi17_110:
(Start: 96 @57598 has 187 MA's),

Gene: OfUltron_111 Start: 58147, Stop: 58473, Start Num: 96
Candidate Starts for OfUltron_111:
(Start: 96 @58147 has 187 MA's),

Gene: OldBen_101 Start: 56661, Stop: 56987, Start Num: 96
Candidate Starts for OldBen_101:
(Start: 96 @56661 has 187 MA's),

Gene: OrionPax_144 Start: 74532, Stop: 74879, Start Num: 102
Candidate Starts for OrionPax_144:
(Start: 80 @74475 has 17 MA's), (Start: 102 @74532 has 89 MA's),

Gene: PHappiness_104 Start: 57490, Stop: 57816, Start Num: 96
Candidate Starts for PHappiness_104:
(Start: 96 @57490 has 187 MA's),

Gene: PMC_104 Start: 56224, Stop: 56550, Start Num: 96
Candidate Starts for PMC_104:
(1, 55117), (2, 55408), (3, 55471), (6, 55711), (12, 55798), (42, 56050), (49, 56086), (77, 56173),
(Start: 96 @56224 has 187 MA's), (124, 56347), (154, 56482),

Gene: Pacc40_101 Start: 58086, Stop: 58412, Start Num: 96
Candidate Starts for Pacc40_101:
(42, 57912), (49, 57948), (77, 58035), (Start: 96 @58086 has 187 MA's),

Gene: Palpatine_143 Start: 75228, Stop: 75575, Start Num: 102
Candidate Starts for Palpatine_143:
(Start: 63 @75132 has 1 MA's), (Start: 80 @75171 has 17 MA's), (Start: 102 @75228 has 89 MA's),

Gene: Paperbeatsrock_144 Start: 75058, Stop: 75405, Start Num: 102
Candidate Starts for Paperbeatsrock_144:
(Start: 80 @75001 has 17 MA's), (Start: 102 @75058 has 89 MA's),

Gene: Pat3_147 Start: 75094, Stop: 75441, Start Num: 102
Candidate Starts for Pat3_147:
(Start: 102 @75094 has 89 MA's),

Gene: Peas_68 Start: 43688, Stop: 44032, Start Num: 96
Candidate Starts for Peas_68:
(51, 43556), (74, 43634), (Start: 96 @43688 has 187 MA's),

Gene: PeggyLeg03_70 Start: 42854, Stop: 43198, Start Num: 96
Candidate Starts for PeggyLeg03_70:
(Start: 96 @42854 has 187 MA's),

Gene: Pepperoni_69 Start: 41030, Stop: 41365, Start Num: 97
Candidate Starts for Pepperoni_69:
(Start: 97 @41030 has 29 MA's),

Gene: Petra_72 Start: 44355, Stop: 44771, Start Num: 80
Candidate Starts for Petra_72:
(53, 44283), (55, 44289), (60, 44307), (Start: 80 @44355 has 17 MA's), (117, 44490), (130, 44565),
(141, 44595), (157, 44691), (158, 44694),

Gene: Phaja_151 Start: 75104, Stop: 75451, Start Num: 102
Candidate Starts for Phaja_151:
(Start: 80 @75047 has 17 MA's), (Start: 102 @75104 has 89 MA's),

Gene: Phalconet_106 Start: 57180, Stop: 57506, Start Num: 96
Candidate Starts for Phalconet_106:
(42, 57006), (49, 57042), (77, 57129), (Start: 96 @57180 has 187 MA's), (124, 57303), (154, 57438),

Gene: Phanphagia_109 Start: 58459, Stop: 58803, Start Num: 96
Candidate Starts for Phanphagia_109:
(Start: 96 @58459 has 187 MA's), (126, 58603), (136, 58627),

Gene: Phasih_100 Start: 55657, Stop: 55983, Start Num: 96
Candidate Starts for Phasih_100:
(Start: 96 @55657 has 187 MA's),

Gene: PhatBacter_150 Start: 75636, Stop: 75983, Start Num: 102
Candidate Starts for PhatBacter_150:
(Start: 63 @75540 has 1 MA's), (Start: 80 @75579 has 17 MA's), (Start: 102 @75636 has 89 MA's),

Gene: Phatniss_101 Start: 56036, Stop: 56380, Start Num: 96
Candidate Starts for Phatniss_101:
(42, 55862), (49, 55898), (77, 55985), (Start: 96 @56036 has 187 MA's), (126, 56180), (136, 56204),

Gene: Phaux_147 Start: 75898, Stop: 76245, Start Num: 102
Candidate Starts for Phaux_147:
(Start: 80 @75841 has 17 MA's), (Start: 102 @75898 has 89 MA's),

Gene: PhesterPhotato_109 Start: 57154, Stop: 57480, Start Num: 96
Candidate Starts for PhesterPhotato_109:
(42, 56980), (49, 57016), (77, 57103), (Start: 96 @57154 has 187 MA's), (124, 57277), (154, 57412),

Gene: Philus_108 Start: 58766, Stop: 59092, Start Num: 96
Candidate Starts for Philus_108:
(42, 58592), (49, 58628), (77, 58715), (Start: 96 @58766 has 187 MA's), (124, 58889), (154, 59024),

Gene: Phrank15_100 Start: 52150, Stop: 52461, Start Num: 100
Candidate Starts for Phrank15_100:
(17, 51760), (19, 51793), (36, 51952), (48, 52009), (69, 52078), (Start: 100 @52150 has 2 MA's), (133, 52276), (143, 52303),

Gene: PhrostedPhlake_74 Start: 44603, Stop: 45019, Start Num: 80
Candidate Starts for PhrostedPhlake_74:
(53, 44531), (54, 44534), (55, 44537), (60, 44555), (Start: 80 @44603 has 17 MA's), (117, 44738),
(130, 44813), (141, 44843), (158, 44942),

Gene: Phrux_143 Start: 74130, Stop: 74477, Start Num: 102
Candidate Starts for Phrux_143:
(Start: 80 @74073 has 17 MA's), (Start: 102 @74130 has 89 MA's),

Gene: Pippy_103 Start: 56195, Stop: 56521, Start Num: 96
Candidate Starts for Pippy_103:
(42, 56021), (49, 56057), (77, 56144), (Start: 96 @56195 has 187 MA's), (124, 56318), (154, 56453),

Gene: Policronamos_145 Start: 75313, Stop: 75660, Start Num: 102
Candidate Starts for Policronamos_145:
(Start: 63 @75217 has 1 MA's), (Start: 80 @75256 has 17 MA's), (Start: 102 @75313 has 89 MA's),

Gene: Polka14_108 Start: 58259, Stop: 58585, Start Num: 96
Candidate Starts for Polka14_108:
(Start: 96 @58259 has 187 MA's),

Gene: Pollux_82 Start: 52125, Stop: 52415, Start Num: 115
Candidate Starts for Pollux_82:
(9, 51612), (22, 51762), (23, 51771), (27, 51798), (29, 51816), (34, 51840), (40, 51879), (43, 51891),
(44, 51894), (84, 52029), (Start: 115 @52125 has 15 MA's),

Gene: Polly_76 Start: 49393, Stop: 49728, Start Num: 97
Candidate Starts for Polly_76:
(24, 49120), (Start: 97 @49393 has 29 MA's),

Gene: Polo2Bam_116 Start: 56795, Stop: 57121, Start Num: 96
Candidate Starts for Polo2Bam_116:
(6, 56282), (7, 56306), (12, 56369), (42, 56621), (49, 56657), (77, 56744), (Start: 96 @56795 has 187 MA's),

Gene: Ponzi_39 Start: 21753, Stop: 22079, Start Num: 96

Candidate Starts for Ponzi_39:

(Start: 96 @21753 has 187 MA's), (152, 21984),

Gene: PopTart_95 Start: 54627, Stop: 54953, Start Num: 96

Candidate Starts for PopTart_95:

(6, 54114), (12, 54201), (42, 54453), (49, 54489), (77, 54576), (Start: 96 @54627 has 187 MA's), (124, 54750), (154, 54885),

Gene: Posh_79 Start: 51944, Stop: 52234, Start Num: 115

Candidate Starts for Posh_79:

(104, 51887), (106, 51893), (Start: 115 @51944 has 15 MA's),

Gene: Priscilla_105 Start: 57733, Stop: 58059, Start Num: 96

Candidate Starts for Priscilla_105:

(Start: 96 @57733 has 187 MA's),

Gene: Pytheas_83 Start: 53170, Stop: 53460, Start Num: 115

Candidate Starts for Pytheas_83:

(104, 53113), (106, 53119), (Start: 115 @53170 has 15 MA's),

Gene: Quallification_146 Start: 75327, Stop: 75674, Start Num: 102

Candidate Starts for Quallification_146:

(Start: 80 @75270 has 17 MA's), (Start: 102 @75327 has 89 MA's),

Gene: RadFad_100 Start: 52313, Stop: 52633, Start Num: 96

Candidate Starts for RadFad_100:

(Start: 96 @52313 has 187 MA's), (146, 52493),

Gene: Radiance_103 Start: 56827, Stop: 57153, Start Num: 96

Candidate Starts for Radiance_103:

(6, 56314), (7, 56338), (12, 56401), (42, 56653), (49, 56689), (77, 56776), (Start: 96 @56827 has 187 MA's),

Gene: Raphaella_96 Start: 51282, Stop: 51608, Start Num: 96

Candidate Starts for Raphaella_96:

(Start: 96 @51282 has 187 MA's), (146, 51462),

Gene: RavenCo17_74 Start: 49279, Stop: 49611, Start Num: 97

Candidate Starts for RavenCo17_74:

(Start: 97 @49279 has 29 MA's), (125, 49411),

Gene: RedBird_105 Start: 58237, Stop: 58563, Start Num: 96

Candidate Starts for RedBird_105:

(Start: 96 @58237 has 187 MA's),

Gene: Renaud18_112 Start: 57550, Stop: 57837, Start Num: 116

Candidate Starts for Renaud18_112:

(16, 57079), (37, 57280), (46, 57319), (62, 57385), (64, 57388), (107, 57499), (Start: 116 @57550 has 3 MA's),

Gene: Richie_99 Start: 53442, Stop: 53762, Start Num: 96

Candidate Starts for Richie_99:

(46, 53286), (57, 53343), (Start: 96 @53442 has 187 MA's), (146, 53622),

Gene: Rimmer_145 Start: 75079, Stop: 75426, Start Num: 102

Candidate Starts for Rimmer_145:

(Start: 80 @75022 has 17 MA's), (Start: 102 @75079 has 89 MA's),

Gene: Rita_104 Start: 58303, Stop: 58629, Start Num: 96

Candidate Starts for Rita_104:

(42, 58129), (49, 58165), (77, 58252), (Start: 96 @58303 has 187 MA's), (124, 58426), (154, 58561),

Gene: RitaG_103 Start: 57292, Stop: 57618, Start Num: 96

Candidate Starts for RitaG_103:

(Start: 96 @57292 has 187 MA's),

Gene: RiverMonster_146 Start: 74984, Stop: 75331, Start Num: 102

Candidate Starts for RiverMonster_146:

(Start: 80 @74927 has 17 MA's), (Start: 102 @74984 has 89 MA's),

Gene: Rockne_108 Start: 56236, Stop: 56562, Start Num: 96

Candidate Starts for Rockne_108:

(1, 55129), (2, 55420), (3, 55483), (6, 55723), (12, 55810), (42, 56062), (49, 56098), (77, 56185),
(Start: 96 @56236 has 187 MA's), (124, 56359), (154, 56494),

Gene: RootBeer_55 Start: 38956, Stop: 39309, Start Num: 95

Candidate Starts for RootBeer_55:

(65, 38890), (Start: 95 @38956 has 1 MA's), (131, 39118), (139, 39139),

Gene: Rowa_68 Start: 42116, Stop: 42472, Start Num: 89

Candidate Starts for Rowa_68:

(72, 42074), (Start: 89 @42116 has 1 MA's), (147, 42302), (152, 42326),

Gene: Royals2015_108 Start: 56107, Stop: 56451, Start Num: 96

Candidate Starts for Royals2015_108:

(42, 55933), (49, 55969), (77, 56056), (Start: 96 @56107 has 187 MA's), (126, 56251), (136, 56275),

Gene: Ruby_100 Start: 57258, Stop: 57584, Start Num: 96

Candidate Starts for Ruby_100:

(Start: 96 @57258 has 187 MA's),

Gene: RunningOnE_55 Start: 25257, Stop: 25574, Start Num: 96

Candidate Starts for RunningOnE_55:

(58, 25158), (66, 25173), (Start: 96 @25257 has 187 MA's), (132, 25413), (144, 25443), (152, 25488),

Gene: Sabbb_107 Start: 55263, Stop: 55589, Start Num: 96

Candidate Starts for Sabbb_107:

(42, 55089), (49, 55125), (77, 55212), (Start: 96 @55263 has 187 MA's),

Gene: Saints25_141 Start: 72738, Stop: 73181, Start Num: 63

Candidate Starts for Saints25_141:

(Start: 63 @72738 has 1 MA's), (Start: 80 @72777 has 17 MA's), (Start: 102 @72834 has 89 MA's),

Gene: Sandalphon_103 Start: 58290, Stop: 58634, Start Num: 96

Candidate Starts for Sandalphon_103:

(42, 58116), (49, 58152), (77, 58239), (Start: 96 @58290 has 187 MA's), (126, 58434), (136, 58458),

Gene: Sashimi_96 Start: 51797, Stop: 52117, Start Num: 96

Candidate Starts for Sashimi_96:

(Start: 96 @51797 has 187 MA's), (146, 51977),

Gene: Sassafras_106 Start: 56554, Stop: 56880, Start Num: 96

Candidate Starts for Sassafras_106:

(Start: 96 @56554 has 187 MA's),

Gene: SassyB_95 Start: 54627, Stop: 54953, Start Num: 96

Candidate Starts for SassyB_95:

(6, 54114), (12, 54201), (42, 54453), (49, 54489), (77, 54576), (Start: 96 @54627 has 187 MA's), (124, 54750), (154, 54885),

Gene: Scotia_58 Start: 39984, Stop: 40337, Start Num: 96

Candidate Starts for Scotia_58:

(Start: 96 @39984 has 187 MA's), (120, 40080), (154, 40248), (161, 40293),

Gene: Scottish_105 Start: 56356, Stop: 56682, Start Num: 96

Candidate Starts for Scottish_105:

(42, 56182), (49, 56218), (77, 56305), (Start: 96 @56356 has 187 MA's), (124, 56479), (154, 56614),

Gene: SeaLumen_113 Start: 56795, Stop: 57121, Start Num: 96

Candidate Starts for SeaLumen_113:

(6, 56282), (7, 56306), (12, 56369), (42, 56621), (49, 56657), (77, 56744), (Start: 96 @56795 has 187 MA's),

Gene: Seabastian_111 Start: 58148, Stop: 58474, Start Num: 96

Candidate Starts for Seabastian_111:

(Start: 96 @58148 has 187 MA's),

Gene: Seahorse_101 Start: 56066, Stop: 56386, Start Num: 96

Candidate Starts for Seahorse_101:

(Start: 96 @56066 has 187 MA's), (146, 56246),

Gene: ShamWow_145 Start: 75352, Stop: 75699, Start Num: 102

Candidate Starts for ShamWow_145:

(Start: 80 @75295 has 17 MA's), (Start: 102 @75352 has 89 MA's),

Gene: Shambre1_67 Start: 41812, Stop: 42165, Start Num: 96

Candidate Starts for Shambre1_67:

(Start: 96 @41812 has 187 MA's), (139, 41995),

Gene: Shauna1_106 Start: 58075, Stop: 58419, Start Num: 96

Candidate Starts for Shauna1_106:

(Start: 96 @58075 has 187 MA's), (126, 58219), (136, 58243),

Gene: ShereKhan_145 Start: 75552, Stop: 75899, Start Num: 102

Candidate Starts for ShereKhan_145:

(Start: 80 @75495 has 17 MA's), (Start: 102 @75552 has 89 MA's),

Gene: ShiLan_107 Start: 59324, Stop: 59650, Start Num: 96

Candidate Starts for ShiLan_107:
(Start: 96 @59324 has 187 MA's),

Gene: ShowerHandel_107 Start: 57093, Stop: 57419, Start Num: 96
Candidate Starts for ShowerHandel_107:
(42, 56919), (49, 56955), (77, 57042), (Start: 96 @57093 has 187 MA's), (124, 57216), (154, 57351),

Gene: ShroomBoi_105 Start: 57753, Stop: 58079, Start Num: 96
Candidate Starts for ShroomBoi_105:
(6, 57240), (12, 57327), (42, 57579), (77, 57702), (Start: 96 @57753 has 187 MA's), (124, 57876),

Gene: SiSi_99 Start: 55811, Stop: 56137, Start Num: 96
Candidate Starts for SiSi_99:
(42, 55637), (49, 55673), (77, 55760), (Start: 96 @55811 has 187 MA's), (124, 55934), (154, 56069),

Gene: SonDevVon_104 Start: 52766, Stop: 53086, Start Num: 96
Candidate Starts for SonDevVon_104:
(Start: 96 @52766 has 187 MA's), (146, 52946),

Gene: SophKB_144 Start: 75004, Stop: 75351, Start Num: 102
Candidate Starts for SophKB_144:
(Start: 80 @74947 has 17 MA's), (Start: 102 @75004 has 89 MA's),

Gene: Sotrice96_151 Start: 75718, Stop: 76065, Start Num: 102
Candidate Starts for Sotrice96_151:
(Start: 80 @75661 has 17 MA's), (Start: 102 @75718 has 89 MA's),

Gene: Sparkdehlily_111 Start: 55806, Stop: 56132, Start Num: 96
Candidate Starts for Sparkdehlily_111:
(Start: 96 @55806 has 187 MA's),

Gene: Sparky_95 Start: 62955, Stop: 63257, Start Num: 115
Candidate Starts for Sparky_95:
(47, 62730), (75, 62826), (82, 62841), (87, 62859), (104, 62895), (106, 62901), (Start: 115 @62955 has 15 MA's), (123, 62988), (164, 63246),

Gene: SpicyFrank_97 Start: 51851, Stop: 52171, Start Num: 96
Candidate Starts for SpicyFrank_97:
(Start: 96 @51851 has 187 MA's), (146, 52031),

Gene: Spooks_37 Start: 24524, Stop: 24868, Start Num: 96
Candidate Starts for Spooks_37:
(92, 24515), (Start: 94 @24518 has 1 MA's), (Start: 96 @24524 has 187 MA's),

Gene: Spoonbill_104 Start: 55237, Stop: 55563, Start Num: 96
Candidate Starts for Spoonbill_104:
(Start: 96 @55237 has 187 MA's),

Gene: StAnnes_110 Start: 58889, Stop: 59215, Start Num: 96
Candidate Starts for StAnnes_110:
(42, 58715), (49, 58751), (77, 58838), (Start: 96 @58889 has 187 MA's), (124, 59012), (154, 59147),

Gene: Stank_150 Start: 75344, Stop: 75691, Start Num: 102

Candidate Starts for Stank_150:
(Start: 80 @75287 has 17 MA's), (Start: 102 @75344 has 89 MA's),

Gene: Stark_143 Start: 74150, Stop: 74497, Start Num: 102
Candidate Starts for Stark_143:
(Start: 80 @74093 has 17 MA's), (Start: 102 @74150 has 89 MA's),

Gene: StolenFromERC_148 Start: 74689, Stop: 75036, Start Num: 102
Candidate Starts for StolenFromERC_148:
(Start: 80 @74632 has 17 MA's), (Start: 102 @74689 has 89 MA's),

Gene: Success_39 Start: 23746, Stop: 24093, Start Num: 94
Candidate Starts for Success_39:
(92, 23743), (Start: 94 @23746 has 1 MA's), (Start: 96 @23752 has 187 MA's), (127, 23911),

Gene: SuperGrey_103 Start: 58875, Stop: 59201, Start Num: 96
Candidate Starts for SuperGrey_103:
(42, 58701), (49, 58737), (77, 58824), (Start: 96 @58875 has 187 MA's), (124, 58998), (154, 59133),

Gene: Suscepit_79 Start: 49951, Stop: 50286, Start Num: 97
Candidate Starts for Suscepit_79:
(24, 49678), (Start: 97 @49951 has 29 MA's),

Gene: SushiChef_82 Start: 52422, Stop: 52757, Start Num: 97
Candidate Starts for SushiChef_82:
(24, 52149), (Start: 97 @52422 has 29 MA's),

Gene: SwagPigglett_106 Start: 58433, Stop: 58759, Start Num: 96
Candidate Starts for SwagPigglett_106:
(Start: 96 @58433 has 187 MA's),

Gene: TBrady12_151 Start: 74778, Stop: 75125, Start Num: 102
Candidate Starts for TBrady12_151:
(Start: 80 @74721 has 17 MA's), (Start: 102 @74778 has 89 MA's),

Gene: TChen_101 Start: 57213, Stop: 57500, Start Num: 116
Candidate Starts for TChen_101:
(16, 56742), (37, 56943), (46, 56982), (62, 57048), (64, 57051), (107, 57162), (Start: 116 @57213 has 3 MA's),

Gene: TDanisky_112 Start: 55806, Stop: 56132, Start Num: 96
Candidate Starts for TDanisky_112:
(Start: 96 @55806 has 187 MA's),

Gene: Taj_110 Start: 58080, Stop: 58430, Start Num: 96
Candidate Starts for Taj_110:
(42, 57906), (49, 57942), (77, 58029), (Start: 96 @58080 has 187 MA's), (124, 58203), (154, 58338),

Gene: Tarkin_144 Start: 75417, Stop: 75764, Start Num: 102
Candidate Starts for Tarkin_144:
(Start: 80 @75360 has 17 MA's), (Start: 102 @75417 has 89 MA's),

Gene: Tayonia_79 Start: 49950, Stop: 50285, Start Num: 97

Candidate Starts for Tayonia_79:
(24, 49677), (Start: 97 @49950 has 29 MA's),

Gene: Teaspoon_130 Start: 70361, Stop: 70708, Start Num: 102
Candidate Starts for Teaspoon_130:
(Start: 80 @70304 has 17 MA's), (Start: 102 @70361 has 89 MA's),

Gene: ThankyouJordi_83 Start: 53067, Stop: 53414, Start Num: 97
Candidate Starts for ThankyouJordi_83:
(24, 52794), (Start: 97 @53067 has 29 MA's),

Gene: ThayneTheZag_102 Start: 53366, Stop: 53686, Start Num: 96
Candidate Starts for ThayneTheZag_102:
(36, 53168), (Start: 96 @53366 has 187 MA's), (146, 53546),

Gene: Thimble_138 Start: 70885, Stop: 71232, Start Num: 102
Candidate Starts for Thimble_138:
(Start: 80 @70828 has 17 MA's), (Start: 102 @70885 has 89 MA's),

Gene: Thresher_148 Start: 75611, Stop: 75958, Start Num: 102
Candidate Starts for Thresher_148:
(Start: 63 @75515 has 1 MA's), (Start: 80 @75554 has 17 MA's), (Start: 102 @75611 has 89 MA's),

Gene: Tiff81_90 Start: 50115, Stop: 50435, Start Num: 96
Candidate Starts for Tiff81_90:
(Start: 96 @50115 has 187 MA's), (146, 50295),

Gene: TimTam_84 Start: 53045, Stop: 53380, Start Num: 97
Candidate Starts for TimTam_84:
(24, 52772), (Start: 97 @53045 has 29 MA's), (145, 53231),

Gene: Traaww1_144 Start: 74842, Stop: 75189, Start Num: 102
Candidate Starts for Traaww1_144:
(Start: 102 @74842 has 89 MA's),

Gene: Trumpet_79 Start: 49951, Stop: 50286, Start Num: 97
Candidate Starts for Trumpet_79:
(24, 49678), (Start: 97 @49951 has 29 MA's),

Gene: Tuco_150 Start: 76363, Stop: 76710, Start Num: 102
Candidate Starts for Tuco_150:
(Start: 80 @76306 has 17 MA's), (Start: 102 @76363 has 89 MA's),

Gene: Tweety_109 Start: 58225, Stop: 58551, Start Num: 96
Candidate Starts for Tweety_109:
(42, 58051), (49, 58087), (77, 58174), (Start: 96 @58225 has 187 MA's), (124, 58348), (154, 58483),

Gene: Typha_77 Start: 51885, Stop: 52352, Start Num: 80
Candidate Starts for Typha_77:
(Start: 80 @51885 has 17 MA's), (Start: 81 @51888 has 2 MA's), (107, 51957), (119, 52026), (130, 52095), (141, 52125), (148, 52146), (149, 52152), (162, 52296), (165, 52341),

Gene: Ukulele_143 Start: 74533, Stop: 74880, Start Num: 102

Candidate Starts for Ukulele_143:
(Start: 63 @74437 has 1 MA's), (Start: 80 @74476 has 17 MA's), (Start: 102 @74533 has 89 MA's),

Gene: VRedHorse_105 Start: 54331, Stop: 54657, Start Num: 96
Candidate Starts for VRedHorse_105:
(Start: 96 @54331 has 187 MA's),

Gene: Veteran_94 Start: 55679, Stop: 56005, Start Num: 96
Candidate Starts for Veteran_94:
(42, 55505), (49, 55541), (77, 55628), (Start: 96 @55679 has 187 MA's), (124, 55802), (154, 55937),

Gene: Wachhund_101 Start: 54046, Stop: 54372, Start Num: 96
Candidate Starts for Wachhund_101:
(Start: 96 @54046 has 187 MA's),

Gene: Wee_109 Start: 58763, Stop: 59089, Start Num: 96
Candidate Starts for Wee_109:
(42, 58589), (49, 58625), (77, 58712), (Start: 96 @58763 has 187 MA's), (124, 58886), (154, 59021),

Gene: WelcomeAyanna_83 Start: 53214, Stop: 53561, Start Num: 97
Candidate Starts for WelcomeAyanna_83:
(24, 52941), (Start: 97 @53214 has 29 MA's),

Gene: Whatsapiecost_99 Start: 52358, Stop: 52702, Start Num: 96
Candidate Starts for Whatsapiecost_99:
(42, 52184), (49, 52220), (77, 52307), (Start: 96 @52358 has 187 MA's), (126, 52502), (136, 52526),

Gene: Whouxphf_108 Start: 58625, Stop: 58951, Start Num: 96
Candidate Starts for Whouxphf_108:
(42, 58451), (49, 58487), (77, 58574), (Start: 96 @58625 has 187 MA's), (124, 58748), (154, 58883),

Gene: Wiggin_149 Start: 74322, Stop: 74669, Start Num: 102
Candidate Starts for Wiggin_149:
(Start: 80 @74265 has 17 MA's), (Start: 102 @74322 has 89 MA's),

Gene: WillSterrel_103 Start: 57362, Stop: 57706, Start Num: 96
Candidate Starts for WillSterrel_103:
(Start: 96 @57362 has 187 MA's), (126, 57506), (136, 57530),

Gene: Willez_144 Start: 73995, Stop: 74342, Start Num: 102
Candidate Starts for Willez_144:
(Start: 80 @73938 has 17 MA's), (Start: 102 @73995 has 89 MA's),

Gene: Windest_101 Start: 51370, Stop: 51690, Start Num: 96
Candidate Starts for Windest_101:
(Start: 96 @51370 has 187 MA's), (146, 51550),

Gene: Wrigley_81 Start: 51527, Stop: 51817, Start Num: 115
Candidate Starts for Wrigley_81:
(104, 51470), (106, 51476), (Start: 115 @51527 has 15 MA's),

Gene: YoungHarleezy_97 Start: 52603, Stop: 52923, Start Num: 96
Candidate Starts for YoungHarleezy_97:

(Start: 96 @52603 has 187 MA's), (146, 52783),

Gene: Youngblood_150 Start: 75315, Stop: 75662, Start Num: 102

Candidate Starts for Youngblood_150:

(Start: 80 @75258 has 17 MA's), (Start: 102 @75315 has 89 MA's),

Gene: Zameen_79 Start: 49950, Stop: 50285, Start Num: 97

Candidate Starts for Zameen_79:

(24, 49677), (Start: 97 @49950 has 29 MA's),

Gene: Zarbodnamra_71 Start: 43296, Stop: 43712, Start Num: 80

Candidate Starts for Zarbodnamra_71:

(53, 43224), (55, 43230), (60, 43248), (Start: 80 @43296 has 17 MA's), (117, 43431), (130, 43506), (141, 43536), (157, 43632), (158, 43635),

Gene: Zerg_103 Start: 56837, Stop: 57181, Start Num: 96

Candidate Starts for Zerg_103:

(42, 56663), (49, 56699), (77, 56786), (Start: 96 @56837 has 187 MA's), (126, 56981), (136, 57005),

Gene: Zirinka_79 Start: 51694, Stop: 52026, Start Num: 97

Candidate Starts for Zirinka_79:

(24, 51421), (Start: 97 @51694 has 29 MA's),

Gene: Zizzle_108 Start: 58913, Stop: 59239, Start Num: 96

Candidate Starts for Zizzle_108:

(Start: 96 @58913 has 187 MA's), (124, 59036), (154, 59171),