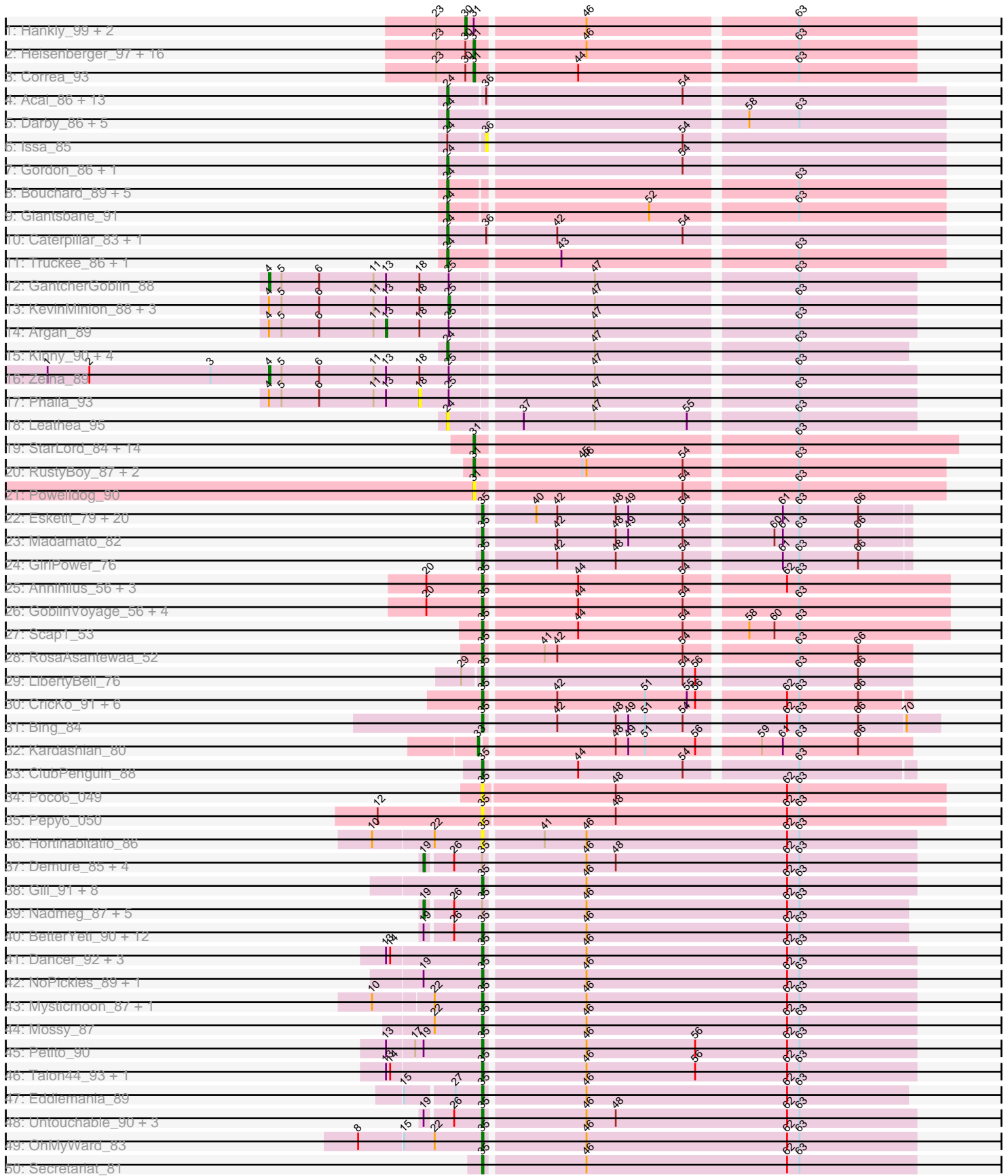
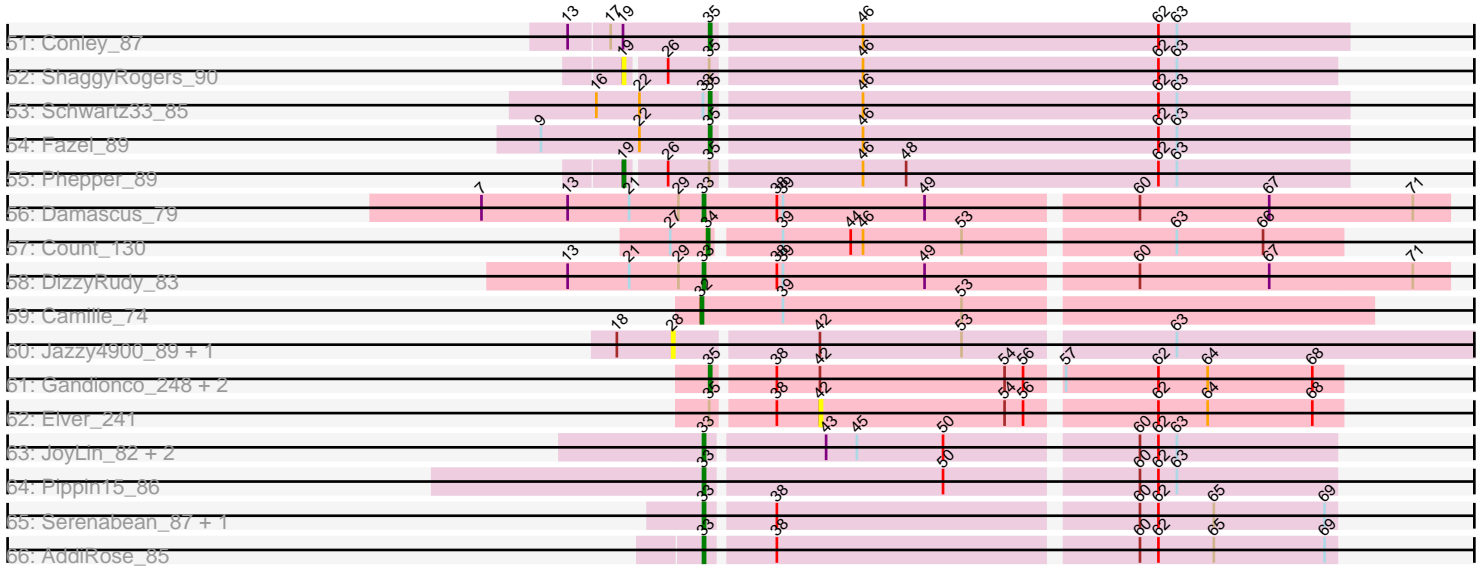


Pham 202680



Pham 202680



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 202680 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202680 has 210 members, 46 are drafts.

Phages represented in each track:

- Track 1 : Hankly_99, Circum_96, NapoleonB_97
- Track 2 : Heisenberger_97, Elsa_94, Arcadia_94, Mudcat_92, Nason_94, Kardesai_97, GoCrazy_92, KeaneyLin_92, Dynamite_96, Bowling_96, Xenomorph_92, Mooshroom_98, JEGGS_97, Benllo_97, Tribby_99, Cheesy_98, BenitoAntonio_96
- Track 3 : Correa_93
- Track 4 : Acai_86, ScienceWizSam_93, Nightmare_89, LucySwiss_90, Tenno_89, Teacup_85, Brunswick_93, Inked_92, CapnMurica_85, Niktson_90, DevitoJr_89, MiniBagel_90, Zippen_92, ElephantMan_90
- Track 5 : Darby_86, CastorTray_90, Ingrid_92, Trustiboi_87, Loretta_88, AreFloNak_97
- Track 6 : Issa_85
- Track 7 : Gordon_86, Synopsis_81
- Track 8 : Bouchard_89, LilHuddy_89, Phaby_89, Tokki_95, Chlochlo_90, Shepard_89
- Track 9 : Giantsbane_91
- Track 10 : Caterpillar_83, MediumFry_82
- Track 11 : Truckee_86, Makai_89
- Track 12 : GantcherGoblin_88
- Track 13 : KevinMinion_88, Uzumaki_89, Navi1117_94, Tenney120_92
- Track 14 : Argan_89
- Track 15 : Kinny_90, Biscute_88, Lewando_86, BarbieDoll_89, Renaldo_90
- Track 16 : Zeina_89
- Track 17 : Phaila_93
- Track 18 : Leathea_95
- Track 19 : StarLord_84, Shiba_83, Linda_84, DoctorPepper_83, Sloopyjoe_84, MrAaronian_84, Stayer_84, Djungelskog_83, Michelle_84, ProfFrink_84, BronxBay_84, Boog_88, Egad_85, Salk_84, Raunak_85
- Track 20 : RustyBoy_87, Natasha_87, Sporto_81
- Track 21 : Powelldog_90
- Track 22 : Esketit_79, OlympicHelado_85, FidgetOrca_85, HazuAndZazu_80, Spectropatronm_82, DrGrey_79, Rima_84, TonyStarch_82, Soshi_82, TieDye_79, FrodoSwaggins_81, Jaylociraptor_83, Meibysrarus_81, TaidaOne_83, IceWarrior_83, Indigenous_85, Hoshi_84, Maya_83, Namu_85, CherryBlossom_83, Popy_81
- Track 23 : Madamato_82
- Track 24 : GirlPower_76
- Track 25 : Annihilus_56, HotFries_54, Moozy_55, SheRa_56

- Track 26 : GoblinVoyage_56, RavenPuff_56, Bilo_55, PherryCruz_55, Doxi13_57
- Track 27 : Scap1_53
- Track 28 : RosaAsantewaa_52
- Track 29 : LibertyBell_76
- Track 30 : CricKo_91, Rainydai_88, Regigigas_91, FromIndy_89, SendItCS_83, Miek_85, Thiqqums_91
- Track 31 : Bing_84
- Track 32 : Kardashian_80
- Track 33 : ClubPenguin_88
- Track 34 : Poco6_049
- Track 35 : Pepy6_050
- Track 36 : Hortihabitatio_86
- Track 37 : Demure_85, Zeph_91, Arataki_86, Nithya_88, Hydrus_88
- Track 38 : Gill_91, Kerry_90, Magel_92, Tanis_90, Capybara_88, Odesza_89, Avazak_90, Gravy_90, Roney_89
- Track 39 : Nadmeg_87, Figliar_87, Crocheter_88, Runhaar_86, Burley_87, AlainaMarie_89
- Track 40 : BetterYeti_90, Vardy_87, MajinBuu_91, Jodelie19_88, Duffington_89, Rickmore_89, BluerMoon_92, Citrus_89, TenaciousP_90, EndAve_90, Gusicorn_91, Aflac_89, OlgasClover_90
- Track 41 : Dancer_92, JulesRay_90, Artorias_89, FortCran_89
- Track 42 : NoPickles_89, Captrips_88
- Track 43 : Mysticmoon_87, Pherobrine_86
- Track 44 : Mossy_87
- Track 45 : Petite_90
- Track 46 : Talon44_93, Perkunas_91
- Track 47 : Eddiemania_89
- Track 48 : Untouchable_90, Kenosha_87, Chikenjars_89, Madvan_87
- Track 49 : OhMyWard_83
- Track 50 : Secretariat_81
- Track 51 : Conley_87
- Track 52 : ShaggyRogers_90
- Track 53 : Schwartz33_85
- Track 54 : Fazel_89
- Track 55 : Phepper_89
- Track 56 : Damascus_79
- Track 57 : Count_130
- Track 58 : DizzyRudy_83
- Track 59 : Camille_74
- Track 60 : Jazzy4900_89, Sunny4976_88
- Track 61 : Gandionco_248, Paella_245, Qui_244
- Track 62 : Elver_241
- Track 63 : JoyLin_82, Yotsuba_82, Eevee_81
- Track 64 : Pippin15_86
- Track 65 : Serenabean_87, Daddyjeff_87
- Track 66 : AddiRose_85

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

The start number called the most often in the published annotations is 35, it was called in 77 of the 164 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac_89, Annihilus_56, Artorias_89, Avazak_90, BetterYeti_90, Bilo_55, Bing_84, BluerMoon_92, Captrips_88, Capybara_88, CherryBlossom_83, Chikenjars_89, Citrus_89, ClubPenguin_88, Conley_87, CricKo_91, Dancer_92, Doxi13_57, DrGrey_79, Duffington_89, Eddiemania_89, EndAve_90, Esketit_79, Fazel_89, FidgetOrca_85, FortCran_89, FrodoSwaggins_81, FromIndy_89, Gandionco_248, Gill_91, GirlPower_76, GoblinVoyage_56, Gravy_90, Gusicorn_91, HazuAndZazu_80, Hortihabitatio_86, Hoshi_84, HotFries_54, IceWarrior_83, Indigenous_85, Jaylociraptor_83, Jodelie19_88, JulesRay_90, Kenosha_87, Kerry_90, LibertyBell_76, Madamato_82, Madvan_87, Magel_92, MajinBuu_91, Maya_83, Meibysrarus_81, Miek_85, Moozy_55, Mossy_87, Mysticmoon_87, Namu_85, NoPickles_89, Odesza_89, OhMyWard_83, OlgasClover_90, OlympicHelado_85, Paella_245, Pepy6_050, Perkunas_91, Petit_90, Pherobrine_86, PherryCruz_55, Poco6_049, Popy_81, Qui_244, Rainydai_88, RavenPuff_56, Regigigas_91, Rickmore_89, Rima_84, Roney_89, RosaAsantewaa_52, Scap1_53, Schwartz33_85, Secretariat_81, SendItCS_83, SheRa_56, Soshi_82, Spectropatronm_82, TaidaOne_83, Talon44_93, Tanis_90, TenaciousP_90, Thiqqums_91, TieDye_79, TonyStarch_82, Untouchable_90, Vardy_87,

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

- AlainaMarie_89, Arataki_86, Burley_87, Crocheter_88, Demure_85, Elver_241, Figliar_87, Hydrus_88, Nadmeg_87, Nithya_88, Phepper_89, Runhaar_86, ShaggyRogers_90, Zeph_91,

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

- Acai_86, AddiRose_85, Arcadia_94, AreFloNak_97, Argan_89, BarbieDoll_89, BenitoAntonio_96, Benllo_97, Biscute_88, Boog_88, Bouchard_89, Bowling_96, BronxBay_84, Brunswick_93, Camille_74, CapnMurica_85, CastorTray_90, Caterpillar_83, Cheesy_98, Chlochlo_90, Circum_96, Correa_93, Count_130, Daddyjeff_87, Damascus_79, Darby_86, DevitoJr_89, DizzyRudy_83, Djungelskog_83, DoctorPepper_83, Dynamite_96, Eevee_81, Egad_85, ElephantMan_90, Elsa_94, GantcherGoblin_88, Giantsbane_91, GoCrazy_92, Gordon_86, Hankly_99, Heisenberger_97, Ingrid_92, Inked_92, Issa_85, JEGGS_97, Jazzy4900_89, JoyLin_82, Kardashian_80, Kardesai_97, KeaneyLin_92, KevinMinion_88, Kinny_90, Leathea_95, Lewando_86, LilHuddy_89, Linda_84, Loretta_88, LucySwiss_90, Makai_89, MediumFry_82, Michelle_84, MiniBagel_90, Mooshroom_98, MrAaronian_84, Mudcat_92, NapoleonB_97, Nason_94, Natasha_87, Navi1117_94, Nightmare_89, Niktson_90, Phaby_89, Phaila_93, Pippin15_86, Powelldog_90, ProfFrink_84, Raunak_85, Renaldo_90, RustyBoy_87, Salk_84, ScienceWizSam_93, Serenabean_87, Shepard_89, Shiba_83, Sloopyjoe_84, Sporto_81, StarLord_84, Stayer_84, Sunny4976_88, Synopsis_81, Teacup_85, Tenney120_92, Tenno_89, Tokki_95, Tribby_99, Truckee_86, Trustiboi_87, Uzumaki_89, Xenomorph_92, Yotsuba_82, Zeina_89, Zippen_92,

Summary by start number:

Start 4:

- Found in 8 of 210 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 164

- Called 25.0% of time when present
- Phage (with cluster) where this start called: GantcherGoblin_88 (AU6), Zeina_89 (AU6),

Start 13:

- Found in 18 of 210 (8.6%) of genes in pham
- Manual Annotations of this start: 1 of 164
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Argan_89 (AU6),

Start 18:

- Found in 10 of 210 (4.8%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Phaila_93 (AU6),

Start 19:

- Found in 34 of 210 (16.2%) of genes in pham
- Manual Annotations of this start: 10 of 164
- Called 38.2% of time when present
- Phage (with cluster) where this start called: AlainaMarie_89 (DJ), Arataki_86 (DJ), Burley_87 (DJ), Crocheter_88 (DJ), Demure_85 (DJ), Figliar_87 (DJ), Hydrus_88 (DJ), Nadmeg_87 (DJ), Nithya_88 (DJ), Phepper_89 (DJ), Runhaar_86 (DJ), ShaggyRogers_90 (DJ), Zeph_91 (DJ),

Start 24:

- Found in 40 of 210 (19.0%) of genes in pham
- Manual Annotations of this start: 28 of 164
- Called 97.5% of time when present
- Phage (with cluster) where this start called: Acai_86 (AU1), AreFloNak_97 (AU1), BarbieDoll_89 (AU6), Biscute_88 (AU6), Bouchard_89 (AU2), Brunswick_93 (AU1), CapnMurica_85 (AU1), CastorTray_90 (AU1), Caterpillar_83 (AU4), Chlochlo_90 (AU2), Darby_86 (AU1), DevitoJr_89 (AU1), ElephantMan_90 (AU1), Giantsbane_91 (AU2), Gordon_86 (AU1), Ingrid_92 (AU3), Inked_92 (AU), Kinny_90 (AU6), Leathea_95 (AU6), Lewando_86 (AU6), LilHuddy_89 (AU2), Loretta_88 (AU3), LucySwiss_90 (AU1), Makai_89 (AU5), MediumFry_82 (AU4), MiniBagel_90 (AU1), Nightmare_89 (AU1), Niktson_90 (AU1), Phaby_89 (AU2), Renaldo_90 (AU6), ScienceWizSam_93 (AU1), Shepard_89 (AU2), Synopsis_81 (AU1), Teacup_85 (AU1), Tenno_89 (AU1), Tokki_95 (AU2), Truckee_86 (AU5), Trustiboi_87 (AU1), Zippen_92 (AU3),

Start 25:

- Found in 8 of 210 (3.8%) of genes in pham
- Manual Annotations of this start: 1 of 164
- Called 50.0% of time when present
- Phage (with cluster) where this start called: KevinMinion_88 (AU6), Navi1117_94 (AU6), Tenney120_92 (AU6), Uzumaki_89 (AU6),

Start 28:

- Found in 2 of 210 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jazzy4900_89 (FI), Sunny4976_88 (FI),

Start 30:

- Found in 21 of 210 (10.0%) of genes in pham
- Manual Annotations of this start: 3 of 164
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Circum_96 (AM), Hankly_99 (AM), NapoleonB_97 (AM),

Start 31:

- Found in 40 of 210 (19.0%) of genes in pham
- Manual Annotations of this start: 30 of 164
- Called 92.5% of time when present
- Phage (with cluster) where this start called: Arcadia_94 (AM), BenitoAntonio_96 (AM), Benllo_97 (AM), Boog_88 (AW), Bowling_96 (AM), BronxBay_84 (AW), Cheesy_98 (AM), Correa_93 (AM), Djungelskog_83 (AW), DoctorPepper_83 (AW), Dynamite_96 (AM), Egad_85 (AW), Elsa_94 (AM), GoCrazy_92 (AM), Heisenberger_97 (AM), JEGGS_97 (AM), Kardesai_97 (AM), KeaneyLin_92 (AM), Linda_84 (AW), Michelle_84 (AW), Mooshroom_98 (AM), MrAaronian_84 (AW), Mudcat_92 (AM), Nason_94 (AM), Natasha_87 (AW), PowellDog_90 (AW), ProfFrink_84 (AW), Raunak_85 (AW), RustyBoy_87 (AW), Salk_84 (AW), Shiba_83 (AW), Sloopyjoe_84 (AW), Sporto_81 (AW), StarLord_84 (AW), Stayer_84 (AW), Tribby_99 (AM), Xenomorph_92 (AM),

Start 32:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 164
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Camille_74 (EL),

Start 33:

- Found in 11 of 210 (5.2%) of genes in pham
- Manual Annotations of this start: 10 of 164
- Called 90.9% of time when present
- Phage (with cluster) where this start called: AddiRose_85 (JA), Daddyjeff_87 (JA), Damascus_79 (EL), DizzyRudy_83 (EL), Eevee_81 (JA), JoyLin_82 (JA), Kardashian_80 (BI6), Pippin15_86 (JA), Serenabean_87 (JA), Yotsuba_82 (JA),

Start 34:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 164
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Count_130 (EL),

Start 35:

- Found in 108 of 210 (51.4%) of genes in pham
- Manual Annotations of this start: 77 of 164
- Called 87.0% of time when present
- Phage (with cluster) where this start called: Aflac_89 (DJ), Annihilus_56 (BI2), Artorias_89 (DJ), Avazak_90 (DJ), BetterYeti_90 (DJ), Bilo_55 (BI2), Bing_84 (BI5), BluerMoon_92 (DJ), Captrips_88 (DJ), Copybara_88 (DJ), CherryBlossom_83 (BI1), Chickenjars_89 (DJ), Citrus_89 (DJ), ClubPenguin_88 (BI7), Conley_87 (DJ), CricKo_91 (BI4), Dancer_92 (DJ), Doxi13_57 (BI2), DrGrey_79 (BI1), Duffington_89 (DJ), Eddiemania_89 (DJ), EndAve_90 (DJ), Esketit_79 (BI1), Fazel_89 (DJ),

FidgetOrca_85 (BI1), FortCran_89 (DJ), FrodoSwaggins_81 (BI1), FromIndy_89 (BI4), Gandionco_248 (FK), Gill_91 (DJ), GirlPower_76 (BI1), GoblinVoyage_56 (BI2), Gravy_90 (DJ), Gusicorn_91 (DJ), HazuAndZazu_80 (BI1), Hortihabitatio_86 (DJ), Hoshi_84 (BI1), HotFries_54 (BI2), IceWarrior_83 (BI1), Indigenous_85 (BI1), Jaylociraptor_83 (BI1), Jodelie19_88 (DJ), JulesRay_90 (DJ), Kenosha_87 (DJ), Kerry_90 (DJ), LibertyBell_76 (BI3), Madamato_82 (BI1), Madvan_87 (DJ), Magel_92 (DJ), MajinBuu_91 (DJ), Maya_83 (BI1), Meibysrarus_81 (BI1), Miek_85 (BI4), Moozy_55 (BI2), Mossy_87 (DJ), Mysticmoon_87 (DJ), Namu_85 (BI1), NoPickles_89 (DJ), Odesza_89 (DJ), OhMyWard_83 (DJ), OlgasClover_90 (DJ), OlympicHelado_85 (BI1), Paella_245 (FK), Pepy6_050 (CC), Perkunas_91 (DJ), Petite_90 (DJ), Pherobrine_86 (DJ), PherryCruz_55 (BI2), Poco6_049 (CC), Popy_81 (BI1), Qui_244 (FK), Rainydai_88 (BI4), RavenPuff_56 (BI2), Regigigas_91 (BI4), Rickmore_89 (DJ), Rima_84 (BI1), Roney_89 (DJ), RosaAsantewaa_52 (BI2), Scap1_53 (BI2), Schwartz33_85 (DJ), Secretariat_81 (DJ), SendItCS_83 (BI4), SheRa_56 (BI2), Soshi_82 (BI1), Spectropatronm_82 (BI1), TaidaOne_83 (BI1), Talon44_93 (DJ), Tanis_90 (DJ), TenaciousP_90 (DJ), Thiqqums_91 (BI4), TieDye_79 (BI1), TonyStarch_82 (BI1), Untouchable_90 (DJ), Vardy_87 (DJ),

Start 36:

- Found in 17 of 210 (8.1%) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Issa_85 (AU1),

Start 42:

- Found in 40 of 210 (19.0%) of genes in pham
- No Manual Annotations of this start.
- Called 2.5% of time when present
- Phage (with cluster) where this start called: Elver_241 (FK),

Summary by clusters:

There are 22 clusters represented in this pham: DJ, FI, FK, JA, AU1, AU3, AU2, AU5, AU4, AU6, EL, CC, AM, AU, AW, BI6, BI7, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster AM:

- Start number 30 was manually annotated 3 times for cluster AM.
- Start number 31 was manually annotated 16 times for cluster AM.

Info for manual annotations of cluster AU:

- Start number 24 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 24 was manually annotated 15 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 24 was manually annotated 5 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 24 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 24 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 24 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 4 was manually annotated 2 times for cluster AU6.
- Start number 13 was manually annotated 1 time for cluster AU6.
- Start number 24 was manually annotated 1 time for cluster AU6.
- Start number 25 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 31 was manually annotated 14 times for cluster AW.

Info for manual annotations of cluster BI1:

- Start number 35 was manually annotated 22 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 35 was manually annotated 11 times for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 35 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 35 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 35 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 33 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 35 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster DJ:

- Start number 19 was manually annotated 10 times for cluster DJ.
- Start number 35 was manually annotated 34 times for cluster DJ.

Info for manual annotations of cluster EL:

- Start number 32 was manually annotated 1 time for cluster EL.
- Start number 33 was manually annotated 2 times for cluster EL.
- Start number 34 was manually annotated 1 time for cluster EL.

Info for manual annotations of cluster FK:

- Start number 35 was manually annotated 2 times for cluster FK.

Info for manual annotations of cluster JA:

- Start number 33 was manually annotated 7 times for cluster JA.

Gene Information:

Gene: Acai_86 Start: 53948, Stop: 54286, Start Num: 24

Candidate Starts for Acai_86:

(Start: 24 @53948 has 28 MA's), (36, 53972), (54, 54107),

Gene: AddiRose_85 Start: 50887, Stop: 51180, Start Num: 33

Candidate Starts for AddiRose_85:

(Start: 33 @50887 has 10 MA's), (38, 50917), (60, 51085), (62, 51094), (65, 51121), (69, 51175),

Gene: Aflac_89 Start: 57301, Stop: 57600, Start Num: 35

Candidate Starts for Aflac_89:

(Start: 19 @57265 has 10 MA's), (26, 57283), (Start: 35 @57301 has 77 MA's), (46, 57370), (62, 57514), (63, 57523),

Gene: AlainaMarie_89 Start: 57292, Stop: 57627, Start Num: 19

Candidate Starts for AlainaMarie_89:

(Start: 19 @57292 has 10 MA's), (26, 57310), (Start: 35 @57328 has 77 MA's), (46, 57397), (62, 57541), (63, 57550),

Gene: Annihilus_56 Start: 39529, Stop: 39849, Start Num: 35

Candidate Starts for Annihilus_56:

(20, 39490), (Start: 35 @39529 has 77 MA's), (44, 39592), (54, 39667), (62, 39733), (63, 39742),

Gene: Arataki_86 Start: 56409, Stop: 56750, Start Num: 19

Candidate Starts for Arataki_86:

(Start: 19 @56409 has 10 MA's), (26, 56427), (Start: 35 @56445 has 77 MA's), (46, 56514), (48, 56535), (62, 56658), (63, 56667),

Gene: Arcadia_94 Start: 54217, Stop: 54519, Start Num: 31

Candidate Starts for Arcadia_94:

(23, 54190), (Start: 30 @54211 has 3 MA's), (Start: 31 @54217 has 30 MA's), (46, 54292), (63, 54436),

Gene: AreFloNak_97 Start: 54422, Stop: 54763, Start Num: 24

Candidate Starts for AreFloNak_97:

(Start: 24 @54422 has 28 MA's), (58, 54623), (63, 54659),

Gene: Argan_89 Start: 51286, Stop: 51648, Start Num: 13

Candidate Starts for Argan_89:

(Start: 4 @51202 has 2 MA's), (5, 51211), (6, 51238), (11, 51277), (Start: 13 @51286 has 1 MA's), (18, 51310), (Start: 25 @51331 has 1 MA's), (47, 51427), (63, 51565),

Gene: Artorias_89 Start: 55853, Stop: 56158, Start Num: 35

Candidate Starts for Artorias_89:

(Start: 13 @55790 has 1 MA's), (14, 55793), (Start: 35 @55853 has 77 MA's), (46, 55922), (62, 56066), (63, 56075),

Gene: Avazak_90 Start: 56283, Stop: 56588, Start Num: 35

Candidate Starts for Avazak_90:

(Start: 35 @56283 has 77 MA's), (46, 56352), (62, 56496), (63, 56505),

Gene: BarbieDoll_89 Start: 51742, Stop: 52053, Start Num: 24

Candidate Starts for BarbieDoll_89:

(Start: 24 @51742 has 28 MA's), (47, 51838), (63, 51976),

Gene: BenitoAntonio_96 Start: 54148, Stop: 54450, Start Num: 31

Candidate Starts for BenitoAntonio_96:

(23, 54121), (Start: 30 @54142 has 3 MA's), (Start: 31 @54148 has 30 MA's), (46, 54223), (63, 54367),

Gene: Benllo_97 Start: 54986, Stop: 55288, Start Num: 31

Candidate Starts for Benllo_97:

(23, 54959), (Start: 30 @54980 has 3 MA's), (Start: 31 @54986 has 30 MA's), (46, 55061), (63, 55205),

Gene: BetterYeti_90 Start: 56457, Stop: 56756, Start Num: 35

Candidate Starts for BetterYeti_90:

(Start: 19 @56421 has 10 MA's), (26, 56439), (Start: 35 @56457 has 77 MA's), (46, 56526), (62, 56670), (63, 56679),

Gene: Bilo_55 Start: 39823, Stop: 40143, Start Num: 35

Candidate Starts for Bilo_55:

(20, 39784), (Start: 35 @39823 has 77 MA's), (44, 39886), (54, 39961), (63, 40036),

Gene: Bing_84 Start: 52233, Stop: 52544, Start Num: 35

Candidate Starts for Bing_84:

(Start: 35 @52233 has 77 MA's), (42, 52281), (48, 52323), (49, 52332), (51, 52344), (54, 52371), (62, 52437), (63, 52446), (66, 52488), (70, 52521),

Gene: Biscute_88 Start: 51587, Stop: 51898, Start Num: 24

Candidate Starts for Biscute_88:

(Start: 24 @51587 has 28 MA's), (47, 51683), (63, 51821),

Gene: BluerMoon_92 Start: 57131, Stop: 57430, Start Num: 35

Candidate Starts for BluerMoon_92:

(Start: 19 @57095 has 10 MA's), (26, 57113), (Start: 35 @57131 has 77 MA's), (46, 57200), (62, 57344), (63, 57353),

Gene: Boog_88 Start: 50318, Stop: 50650, Start Num: 31

Candidate Starts for Boog_88:

(Start: 31 @50318 has 30 MA's), (63, 50537),

Gene: Bouchard_89 Start: 53388, Stop: 53726, Start Num: 24

Candidate Starts for Bouchard_89:

(Start: 24 @53388 has 28 MA's), (63, 53622),

Gene: Bowling_96 Start: 55036, Stop: 55338, Start Num: 31

Candidate Starts for Bowling_96:

(23, 55009), (Start: 30 @55030 has 3 MA's), (Start: 31 @55036 has 30 MA's), (46, 55111), (63, 55255),

Gene: BronxBay_84 Start: 50569, Stop: 50901, Start Num: 31

Candidate Starts for BronxBay_84:

(Start: 31 @50569 has 30 MA's), (63, 50788),

Gene: Brunswick_93 Start: 54283, Stop: 54621, Start Num: 24

Candidate Starts for Brunswick_93:

(Start: 24 @54283 has 28 MA's), (36, 54307), (54, 54442),

Gene: Burley_87 Start: 56095, Stop: 56430, Start Num: 19

Candidate Starts for Burley_87:

(Start: 19 @56095 has 10 MA's), (26, 56113), (Start: 35 @56131 has 77 MA's), (46, 56200), (62, 56344), (63, 56353),

Gene: Camille_74 Start: 49086, Stop: 49403, Start Num: 32

Candidate Starts for Camille_74:

(Start: 32 @49086 has 1 MA's), (39, 49125), (53, 49212),

Gene: CapnMurica_85 Start: 54229, Stop: 54567, Start Num: 24

Candidate Starts for CapnMurica_85:

(Start: 24 @54229 has 28 MA's), (36, 54253), (54, 54388),

Gene: Captrips_88 Start: 55634, Stop: 55939, Start Num: 35

Candidate Starts for Captrips_88:

(Start: 19 @55595 has 10 MA's), (Start: 35 @55634 has 77 MA's), (46, 55703), (62, 55847), (63, 55856),

Gene: Capybara_88 Start: 55857, Stop: 56162, Start Num: 35

Candidate Starts for Capybara_88:

(Start: 35 @55857 has 77 MA's), (46, 55926), (62, 56070), (63, 56079),

Gene: CastorTray_90 Start: 54445, Stop: 54786, Start Num: 24

Candidate Starts for CastorTray_90:

(Start: 24 @54445 has 28 MA's), (58, 54646), (63, 54682),

Gene: Caterpillar_83 Start: 52687, Stop: 53028, Start Num: 24

Candidate Starts for Caterpillar_83:

(Start: 24 @52687 has 28 MA's), (36, 52714), (42, 52759), (54, 52849),

Gene: Cheesy_98 Start: 54899, Stop: 55201, Start Num: 31

Candidate Starts for Cheesy_98:

(23, 54872), (Start: 30 @54893 has 3 MA's), (Start: 31 @54899 has 30 MA's), (46, 54974), (63, 55118),

Gene: CherryBlossom_83 Start: 51474, Stop: 51764, Start Num: 35

Candidate Starts for CherryBlossom_83:

(Start: 35 @51474 has 77 MA's), (40, 51507), (42, 51522), (48, 51564), (49, 51573), (54, 51612), (61, 51675), (63, 51687), (66, 51729),

Gene: Chikenjars_89 Start: 57556, Stop: 57855, Start Num: 35

Candidate Starts for Chikenjars_89:

(Start: 19 @57520 has 10 MA's), (26, 57538), (Start: 35 @57556 has 77 MA's), (46, 57625), (48, 57646), (62, 57769), (63, 57778),

Gene: Chlochlo_90 Start: 53458, Stop: 53796, Start Num: 24

Candidate Starts for Chlochlo_90:

(Start: 24 @53458 has 28 MA's), (63, 53692),

Gene: Circum_96 Start: 54506, Stop: 54814, Start Num: 30

Candidate Starts for Circum_96:

(23, 54485), (Start: 30 @54506 has 3 MA's), (Start: 31 @54512 has 30 MA's), (46, 54587), (63, 54731),

Gene: Citrus_89 Start: 57149, Stop: 57448, Start Num: 35

Candidate Starts for Citrus_89:

(Start: 19 @57113 has 10 MA's), (26, 57131), (Start: 35 @57149 has 77 MA's), (46, 57218), (62, 57362), (63, 57371),

Gene: ClubPenguin_88 Start: 52169, Stop: 52462, Start Num: 35

Candidate Starts for ClubPenguin_88:

(Start: 35 @52169 has 77 MA's), (44, 52232), (54, 52307), (63, 52382),

Gene: Conley_87 Start: 56148, Stop: 56453, Start Num: 35

Candidate Starts for Conley_87:

(Start: 13 @56085 has 1 MA's), (17, 56103), (Start: 19 @56109 has 10 MA's), (Start: 35 @56148 has 77 MA's), (46, 56217), (62, 56361), (63, 56370),

Gene: Correa_93 Start: 53560, Stop: 53862, Start Num: 31

Candidate Starts for Correa_93:

(23, 53533), (Start: 30 @53554 has 3 MA's), (Start: 31 @53560 has 30 MA's), (44, 53629), (63, 53779),

Gene: Count_130 Start: 74858, Stop: 75151, Start Num: 34

Candidate Starts for Count_130:

(27, 74840), (Start: 34 @74858 has 1 MA's), (39, 74888), (44, 74921), (46, 74927), (53, 74975), (63, 75071), (66, 75113),

Gene: CricKo_91 Start: 53655, Stop: 53945, Start Num: 35

Candidate Starts for CricKo_91:

(Start: 35 @53655 has 77 MA's), (42, 53703), (51, 53766), (55, 53796), (56, 53802), (62, 53859), (63, 53868), (66, 53910),

Gene: Crocheter_88 Start: 56515, Stop: 56850, Start Num: 19

Candidate Starts for Crocheter_88:

(Start: 19 @56515 has 10 MA's), (26, 56533), (Start: 35 @56551 has 77 MA's), (46, 56620), (62, 56764), (63, 56773),

Gene: Daddyjeff_87 Start: 51237, Stop: 51530, Start Num: 33

Candidate Starts for Daddyjeff_87:

(Start: 33 @51237 has 10 MA's), (38, 51267), (60, 51435), (62, 51444), (65, 51471), (69, 51525),

Gene: Damascus_79 Start: 52477, Stop: 52830, Start Num: 33

Candidate Starts for Damascus_79:

(7, 52369), (Start: 13 @52411 has 1 MA's), (21, 52441), (29, 52465), (Start: 33 @52477 has 10 MA's), (38, 52513), (39, 52516), (49, 52585), (60, 52681), (67, 52744), (71, 52813),

Gene: Dancer_92 Start: 55590, Stop: 55895, Start Num: 35

Candidate Starts for Dancer_92:

(Start: 13 @55527 has 1 MA's), (14, 55530), (Start: 35 @55590 has 77 MA's), (46, 55659), (62, 55803), (63, 55812),

Gene: Darby_86 Start: 53826, Stop: 54167, Start Num: 24

Candidate Starts for Darby_86:

(Start: 24 @53826 has 28 MA's), (58, 54027), (63, 54063),

Gene: Demure_85 Start: 56543, Stop: 56884, Start Num: 19

Candidate Starts for Demure_85:

(Start: 19 @56543 has 10 MA's), (26, 56561), (Start: 35 @56579 has 77 MA's), (46, 56648), (48, 56669), (62, 56792), (63, 56801),

Gene: DevitoJr_89 Start: 54115, Stop: 54453, Start Num: 24
Candidate Starts for DevitoJr_89:
(Start: 24 @54115 has 28 MA's), (36, 54139), (54, 54274),

Gene: DizzyRudy_83 Start: 51813, Stop: 52166, Start Num: 33
Candidate Starts for DizzyRudy_83:
(Start: 13 @51747 has 1 MA's), (21, 51777), (29, 51801), (Start: 33 @51813 has 10 MA's), (38, 51849), (39, 51852), (49, 51921), (60, 52017), (67, 52080), (71, 52149),

Gene: Djungelskog_83 Start: 50571, Stop: 50903, Start Num: 31
Candidate Starts for Djungelskog_83:
(Start: 31 @50571 has 30 MA's), (63, 50790),

Gene: DoctorPepper_83 Start: 50302, Stop: 50634, Start Num: 31
Candidate Starts for DoctorPepper_83:
(Start: 31 @50302 has 30 MA's), (63, 50521),

Gene: Doxi13_57 Start: 39659, Stop: 39979, Start Num: 35
Candidate Starts for Doxi13_57:
(20, 39620), (Start: 35 @39659 has 77 MA's), (44, 39722), (54, 39797), (63, 39872),

Gene: DrGrey_79 Start: 51987, Stop: 52277, Start Num: 35
Candidate Starts for DrGrey_79:
(Start: 35 @51987 has 77 MA's), (40, 52020), (42, 52035), (48, 52077), (49, 52086), (54, 52125), (61, 52188), (63, 52200), (66, 52242),

Gene: Duffington_89 Start: 57356, Stop: 57655, Start Num: 35
Candidate Starts for Duffington_89:
(Start: 19 @57320 has 10 MA's), (26, 57338), (Start: 35 @57356 has 77 MA's), (46, 57425), (62, 57569), (63, 57578),

Gene: Dynamite_96 Start: 54004, Stop: 54306, Start Num: 31
Candidate Starts for Dynamite_96:
(23, 53977), (Start: 30 @53998 has 3 MA's), (Start: 31 @54004 has 30 MA's), (46, 54079), (63, 54223),

Gene: Eddiemania_89 Start: 57446, Stop: 57745, Start Num: 35
Candidate Starts for Eddiemania_89:
(15, 57395), (27, 57428), (Start: 35 @57446 has 77 MA's), (46, 57515), (62, 57659), (63, 57668),

Gene: Eevee_81 Start: 52573, Stop: 52866, Start Num: 33
Candidate Starts for Eevee_81:
(Start: 33 @52573 has 10 MA's), (43, 52627), (45, 52642), (50, 52684), (60, 52771), (62, 52780), (63, 52789),

Gene: Egad_85 Start: 50576, Stop: 50908, Start Num: 31
Candidate Starts for Egad_85:
(Start: 31 @50576 has 30 MA's), (63, 50795),

Gene: ElephantMan_90 Start: 54476, Stop: 54814, Start Num: 24
Candidate Starts for ElephantMan_90:

(Start: 24 @54476 has 28 MA's), (36, 54500), (54, 54635),

Gene: Elsa_94 Start: 54217, Stop: 54519, Start Num: 31

Candidate Starts for Elsa_94:

(23, 54190), (Start: 30 @54211 has 3 MA's), (Start: 31 @54217 has 30 MA's), (46, 54292), (63, 54436),

Gene: Elver_241 Start: 109130, Stop: 109375, Start Num: 42

Candidate Starts for Elver_241:

(Start: 35 @109082 has 77 MA's), (38, 109109), (42, 109130), (54, 109220), (56, 109229), (62, 109286), (64, 109310), (68, 109361),

Gene: EndAve_90 Start: 57266, Stop: 57565, Start Num: 35

Candidate Starts for EndAve_90:

(Start: 19 @57230 has 10 MA's), (26, 57248), (Start: 35 @57266 has 77 MA's), (46, 57335), (62, 57479), (63, 57488),

Gene: Esketit_79 Start: 50575, Stop: 50865, Start Num: 35

Candidate Starts for Esketit_79:

(Start: 35 @50575 has 77 MA's), (40, 50608), (42, 50623), (48, 50665), (49, 50674), (54, 50713), (61, 50776), (63, 50788), (66, 50830),

Gene: Fazel_89 Start: 56115, Stop: 56420, Start Num: 35

Candidate Starts for Fazel_89:

(9, 56034), (22, 56082), (Start: 35 @56115 has 77 MA's), (46, 56184), (62, 56328), (63, 56337),

Gene: FidgetOrca_85 Start: 52025, Stop: 52315, Start Num: 35

Candidate Starts for FidgetOrca_85:

(Start: 35 @52025 has 77 MA's), (40, 52058), (42, 52073), (48, 52115), (49, 52124), (54, 52163), (61, 52226), (63, 52238), (66, 52280),

Gene: Figliar_87 Start: 57124, Stop: 57459, Start Num: 19

Candidate Starts for Figliar_87:

(Start: 19 @57124 has 10 MA's), (26, 57142), (Start: 35 @57160 has 77 MA's), (46, 57229), (62, 57373), (63, 57382),

Gene: FortCran_89 Start: 55854, Stop: 56159, Start Num: 35

Candidate Starts for FortCran_89:

(Start: 13 @55791 has 1 MA's), (14, 55794), (Start: 35 @55854 has 77 MA's), (46, 55923), (62, 56067), (63, 56076),

Gene: FrodoSwaggins_81 Start: 52382, Stop: 52672, Start Num: 35

Candidate Starts for FrodoSwaggins_81:

(Start: 35 @52382 has 77 MA's), (40, 52415), (42, 52430), (48, 52472), (49, 52481), (54, 52520), (61, 52583), (63, 52595), (66, 52637),

Gene: FromIndy_89 Start: 52855, Stop: 53145, Start Num: 35

Candidate Starts for FromIndy_89:

(Start: 35 @52855 has 77 MA's), (42, 52903), (51, 52966), (55, 52996), (56, 53002), (62, 53059), (63, 53068), (66, 53110),

Gene: Gandionco_248 Start: 109877, Stop: 110170, Start Num: 35

Candidate Starts for Gandionco_248:

(Start: 35 @109877 has 77 MA's), (38, 109904), (42, 109925), (54, 110015), (56, 110024), (57, 110036), (62, 110081), (64, 110105), (68, 110156),

Gene: GantcherGoblin_88 Start: 51349, Stop: 51795, Start Num: 4
Candidate Starts for GantcherGoblin_88:

(Start: 4 @51349 has 2 MA's), (5, 51358), (6, 51385), (11, 51424), (Start: 13 @51433 has 1 MA's), (18, 51457), (Start: 25 @51478 has 1 MA's), (47, 51574), (63, 51712),

Gene: Giantsbane_91 Start: 52822, Stop: 53160, Start Num: 24
Candidate Starts for Giantsbane_91:

(Start: 24 @52822 has 28 MA's), (52, 52957), (63, 53056),

Gene: Gill_91 Start: 55884, Stop: 56189, Start Num: 35
Candidate Starts for Gill_91:

(Start: 35 @55884 has 77 MA's), (46, 55953), (62, 56097), (63, 56106),

Gene: GirlPower_76 Start: 51444, Stop: 51734, Start Num: 35
Candidate Starts for GirlPower_76:

(Start: 35 @51444 has 77 MA's), (42, 51492), (48, 51534), (54, 51582), (61, 51645), (63, 51657), (66, 51699),

Gene: GoCrazy_92 Start: 52968, Stop: 53270, Start Num: 31
Candidate Starts for GoCrazy_92:

(23, 52941), (Start: 30 @52962 has 3 MA's), (Start: 31 @52968 has 30 MA's), (46, 53043), (63, 53187),

Gene: GoblinVoyage_56 Start: 39503, Stop: 39823, Start Num: 35
Candidate Starts for GoblinVoyage_56:

(20, 39464), (Start: 35 @39503 has 77 MA's), (44, 39566), (54, 39641), (63, 39716),

Gene: Gordon_86 Start: 54346, Stop: 54687, Start Num: 24
Candidate Starts for Gordon_86:

(Start: 24 @54346 has 28 MA's), (54, 54508),

Gene: Gravy_90 Start: 55547, Stop: 55852, Start Num: 35
Candidate Starts for Gravy_90:

(Start: 35 @55547 has 77 MA's), (46, 55616), (62, 55760), (63, 55769),

Gene: Gusicorn_91 Start: 56458, Stop: 56757, Start Num: 35
Candidate Starts for Gusicorn_91:

(Start: 19 @56422 has 10 MA's), (26, 56440), (Start: 35 @56458 has 77 MA's), (46, 56527), (62, 56671), (63, 56680),

Gene: Hankly_99 Start: 54591, Stop: 54899, Start Num: 30
Candidate Starts for Hankly_99:

(23, 54570), (Start: 30 @54591 has 3 MA's), (Start: 31 @54597 has 30 MA's), (46, 54672), (63, 54816),

Gene: HazuAndZazu_80 Start: 51734, Stop: 52024, Start Num: 35
Candidate Starts for HazuAndZazu_80:

(Start: 35 @51734 has 77 MA's), (40, 51767), (42, 51782), (48, 51824), (49, 51833), (54, 51872), (61, 51935), (63, 51947), (66, 51989),

Gene: Heisenberger_97 Start: 54367, Stop: 54669, Start Num: 31
Candidate Starts for Heisenberger_97:

(23, 54340), (Start: 30 @54361 has 3 MA's), (Start: 31 @54367 has 30 MA's), (46, 54442), (63, 54586),

Gene: Hortihabitatio_86 Start: 55884, Stop: 56189, Start Num: 35

Candidate Starts for Hortihabitatio_86:

(10, 55809), (22, 55851), (Start: 35 @55884 has 77 MA's), (41, 55923), (46, 55953), (62, 56097), (63, 56106),

Gene: Hoshi_84 Start: 51639, Stop: 51929, Start Num: 35

Candidate Starts for Hoshi_84:

(Start: 35 @51639 has 77 MA's), (40, 51672), (42, 51687), (48, 51729), (49, 51738), (54, 51777), (61, 51840), (63, 51852), (66, 51894),

Gene: HotFries_54 Start: 39686, Stop: 40006, Start Num: 35

Candidate Starts for HotFries_54:

(20, 39647), (Start: 35 @39686 has 77 MA's), (44, 39749), (54, 39824), (62, 39890), (63, 39899),

Gene: Hydrus_88 Start: 56826, Stop: 57167, Start Num: 19

Candidate Starts for Hydrus_88:

(Start: 19 @56826 has 10 MA's), (26, 56844), (Start: 35 @56862 has 77 MA's), (46, 56931), (48, 56952), (62, 57075), (63, 57084),

Gene: IceWarrior_83 Start: 51444, Stop: 51734, Start Num: 35

Candidate Starts for IceWarrior_83:

(Start: 35 @51444 has 77 MA's), (40, 51477), (42, 51492), (48, 51534), (49, 51543), (54, 51582), (61, 51645), (63, 51657), (66, 51699),

Gene: Indigenous_85 Start: 52030, Stop: 52320, Start Num: 35

Candidate Starts for Indigenous_85:

(Start: 35 @52030 has 77 MA's), (40, 52063), (42, 52078), (48, 52120), (49, 52129), (54, 52168), (61, 52231), (63, 52243), (66, 52285),

Gene: Ingrid_92 Start: 53005, Stop: 53346, Start Num: 24

Candidate Starts for Ingrid_92:

(Start: 24 @53005 has 28 MA's), (58, 53206), (63, 53242),

Gene: Inked_92 Start: 53930, Stop: 54268, Start Num: 24

Candidate Starts for Inked_92:

(Start: 24 @53930 has 28 MA's), (36, 53954), (54, 54089),

Gene: Issa_85 Start: 53558, Stop: 53872, Start Num: 36

Candidate Starts for Issa_85:

(Start: 24 @53534 has 28 MA's), (36, 53558), (54, 53693),

Gene: JEGGS_97 Start: 54446, Stop: 54748, Start Num: 31

Candidate Starts for JEGGS_97:

(23, 54419), (Start: 30 @54440 has 3 MA's), (Start: 31 @54446 has 30 MA's), (46, 54521), (63, 54665),

Gene: Jaylociraptor_83 Start: 51610, Stop: 51900, Start Num: 35

Candidate Starts for Jaylociraptor_83:

(Start: 35 @51610 has 77 MA's), (40, 51643), (42, 51658), (48, 51700), (49, 51709), (54, 51748), (61, 51811), (63, 51823), (66, 51865),

Gene: Jazzy4900_89 Start: 54541, Stop: 54918, Start Num: 28

Candidate Starts for Jazzy4900_89:
(18, 54514), (28, 54541), (42, 54607), (53, 54676), (63, 54772),

Gene: Jodelie19_88 Start: 58344, Stop: 58643, Start Num: 35
Candidate Starts for Jodelie19_88:
(Start: 19 @58308 has 10 MA's), (26, 58326), (Start: 35 @58344 has 77 MA's), (46, 58413), (62, 58557), (63, 58566),

Gene: JoyLin_82 Start: 53326, Stop: 53619, Start Num: 33
Candidate Starts for JoyLin_82:
(Start: 33 @53326 has 10 MA's), (43, 53380), (45, 53395), (50, 53437), (60, 53524), (62, 53533), (63, 53542),

Gene: JulesRay_90 Start: 55949, Stop: 56254, Start Num: 35
Candidate Starts for JulesRay_90:
(Start: 13 @55886 has 1 MA's), (14, 55889), (Start: 35 @55949 has 77 MA's), (46, 56018), (62, 56162), (63, 56171),

Gene: Kardashian_80 Start: 51975, Stop: 52268, Start Num: 33
Candidate Starts for Kardashian_80:
(Start: 33 @51975 has 10 MA's), (48, 52065), (49, 52074), (51, 52086), (56, 52122), (59, 52161), (61, 52176), (63, 52188), (66, 52230),

Gene: Kardesai_97 Start: 54025, Stop: 54327, Start Num: 31
Candidate Starts for Kardesai_97:
(23, 53998), (Start: 30 @54019 has 3 MA's), (Start: 31 @54025 has 30 MA's), (46, 54100), (63, 54244),

Gene: KeaneyLin_92 Start: 54006, Stop: 54308, Start Num: 31
Candidate Starts for KeaneyLin_92:
(23, 53979), (Start: 30 @54000 has 3 MA's), (Start: 31 @54006 has 30 MA's), (46, 54081), (63, 54225),

Gene: Kenosha_87 Start: 56919, Stop: 57224, Start Num: 35
Candidate Starts for Kenosha_87:
(Start: 19 @56883 has 10 MA's), (26, 56901), (Start: 35 @56919 has 77 MA's), (46, 56988), (48, 57009), (62, 57132), (63, 57141),

Gene: Kerry_90 Start: 55610, Stop: 55915, Start Num: 35
Candidate Starts for Kerry_90:
(Start: 35 @55610 has 77 MA's), (46, 55679), (62, 55823), (63, 55832),

Gene: KevinMinion_88 Start: 52323, Stop: 52640, Start Num: 25
Candidate Starts for KevinMinion_88:
(Start: 4 @52194 has 2 MA's), (5, 52203), (6, 52230), (11, 52269), (Start: 13 @52278 has 1 MA's), (18, 52302), (Start: 25 @52323 has 1 MA's), (47, 52419), (63, 52557),

Gene: Kinny_90 Start: 52518, Stop: 52829, Start Num: 24
Candidate Starts for Kinny_90:
(Start: 24 @52518 has 28 MA's), (47, 52614), (63, 52752),

Gene: Leathea_95 Start: 51147, Stop: 51464, Start Num: 24
Candidate Starts for Leathea_95:
(Start: 24 @51147 has 28 MA's), (37, 51192), (47, 51243), (55, 51309), (63, 51381),

Gene: Lewando_86 Start: 51174, Stop: 51485, Start Num: 24
Candidate Starts for Lewando_86:
(Start: 24 @51174 has 28 MA's), (47, 51270), (63, 51408),

Gene: LibertyBell_76 Start: 48692, Stop: 48985, Start Num: 35
Candidate Starts for LibertyBell_76:
(29, 48680), (Start: 35 @48692 has 77 MA's), (54, 48830), (56, 48839), (63, 48905), (66, 48947),

Gene: LilHuddy_89 Start: 53435, Stop: 53773, Start Num: 24
Candidate Starts for LilHuddy_89:
(Start: 24 @53435 has 28 MA's), (63, 53669),

Gene: Linda_84 Start: 50589, Stop: 50921, Start Num: 31
Candidate Starts for Linda_84:
(Start: 31 @50589 has 30 MA's), (63, 50808),

Gene: Loretta_88 Start: 53005, Stop: 53346, Start Num: 24
Candidate Starts for Loretta_88:
(Start: 24 @53005 has 28 MA's), (58, 53206), (63, 53242),

Gene: LucySwiss_90 Start: 54380, Stop: 54715, Start Num: 24
Candidate Starts for LucySwiss_90:
(Start: 24 @54380 has 28 MA's), (36, 54401), (54, 54536),

Gene: Madamoto_82 Start: 51285, Stop: 51575, Start Num: 35
Candidate Starts for Madamoto_82:
(Start: 35 @51285 has 77 MA's), (42, 51333), (48, 51375), (49, 51384), (54, 51423), (60, 51480), (61, 51486), (63, 51498), (66, 51540),

Gene: Madvan_87 Start: 56174, Stop: 56479, Start Num: 35
Candidate Starts for Madvan_87:
(Start: 19 @56138 has 10 MA's), (26, 56156), (Start: 35 @56174 has 77 MA's), (46, 56243), (48, 56264), (62, 56387), (63, 56396),

Gene: Magel_92 Start: 55799, Stop: 56104, Start Num: 35
Candidate Starts for Magel_92:
(Start: 35 @55799 has 77 MA's), (46, 55868), (62, 56012), (63, 56021),

Gene: MajinBuu_91 Start: 57538, Stop: 57837, Start Num: 35
Candidate Starts for MajinBuu_91:
(Start: 19 @57502 has 10 MA's), (26, 57520), (Start: 35 @57538 has 77 MA's), (46, 57607), (62, 57751), (63, 57760),

Gene: Makai_89 Start: 54043, Stop: 54384, Start Num: 24
Candidate Starts for Makai_89:
(Start: 24 @54043 has 28 MA's), (43, 54118), (63, 54280),

Gene: Maya_83 Start: 51624, Stop: 51914, Start Num: 35
Candidate Starts for Maya_83:
(Start: 35 @51624 has 77 MA's), (40, 51657), (42, 51672), (48, 51714), (49, 51723), (54, 51762), (61, 51825), (63, 51837), (66, 51879),

Gene: MediumFry_82 Start: 53043, Stop: 53384, Start Num: 24

Candidate Starts for MediumFry_82:
(Start: 24 @53043 has 28 MA's), (36, 53070), (42, 53115), (54, 53205),

Gene: Meibysrarus_81 Start: 51008, Stop: 51298, Start Num: 35
Candidate Starts for Meibysrarus_81:
(Start: 35 @51008 has 77 MA's), (40, 51041), (42, 51056), (48, 51098), (49, 51107), (54, 51146), (61, 51209), (63, 51221), (66, 51263),

Gene: Michelle_84 Start: 50568, Stop: 50900, Start Num: 31
Candidate Starts for Michelle_84:
(Start: 31 @50568 has 30 MA's), (63, 50787),

Gene: Miek_85 Start: 52037, Stop: 52327, Start Num: 35
Candidate Starts for Miek_85:
(Start: 35 @52037 has 77 MA's), (42, 52085), (51, 52148), (55, 52178), (56, 52184), (62, 52241), (63, 52250), (66, 52292),

Gene: MiniBagel_90 Start: 54346, Stop: 54684, Start Num: 24
Candidate Starts for MiniBagel_90:
(Start: 24 @54346 has 28 MA's), (36, 54370), (54, 54505),

Gene: Mooshroom_98 Start: 54025, Stop: 54327, Start Num: 31
Candidate Starts for Mooshroom_98:
(23, 53998), (Start: 30 @54019 has 3 MA's), (Start: 31 @54025 has 30 MA's), (46, 54100), (63, 54244),

Gene: Moozy_55 Start: 39513, Stop: 39833, Start Num: 35
Candidate Starts for Moozy_55:
(20, 39474), (Start: 35 @39513 has 77 MA's), (44, 39576), (54, 39651), (62, 39717), (63, 39726),

Gene: Mossy_87 Start: 57201, Stop: 57506, Start Num: 35
Candidate Starts for Mossy_87:
(22, 57168), (Start: 35 @57201 has 77 MA's), (46, 57270), (62, 57414), (63, 57423),

Gene: MrAaronian_84 Start: 50568, Stop: 50900, Start Num: 31
Candidate Starts for MrAaronian_84:
(Start: 31 @50568 has 30 MA's), (63, 50787),

Gene: Mudcat_92 Start: 55602, Stop: 55904, Start Num: 31
Candidate Starts for Mudcat_92:
(23, 55575), (Start: 30 @55596 has 3 MA's), (Start: 31 @55602 has 30 MA's), (46, 55677), (63, 55821),

Gene: Mysticmoon_87 Start: 56297, Stop: 56602, Start Num: 35
Candidate Starts for Mysticmoon_87:
(10, 56225), (22, 56264), (Start: 35 @56297 has 77 MA's), (46, 56366), (62, 56510), (63, 56519),

Gene: Nadmeg_87 Start: 57121, Stop: 57456, Start Num: 19
Candidate Starts for Nadmeg_87:
(Start: 19 @57121 has 10 MA's), (26, 57139), (Start: 35 @57157 has 77 MA's), (46, 57226), (62, 57370), (63, 57379),

Gene: Namo_85 Start: 52079, Stop: 52369, Start Num: 35
Candidate Starts for Namo_85:

(Start: 35 @52079 has 77 MA's), (40, 52112), (42, 52127), (48, 52169), (49, 52178), (54, 52217), (61, 52280), (63, 52292), (66, 52334),

Gene: NapoleonB_97 Start: 53998, Stop: 54306, Start Num: 30

Candidate Starts for NapoleonB_97:

(23, 53977), (Start: 30 @53998 has 3 MA's), (Start: 31 @54004 has 30 MA's), (46, 54079), (63, 54223),

Gene: Nason_94 Start: 54217, Stop: 54519, Start Num: 31

Candidate Starts for Nason_94:

(23, 54190), (Start: 30 @54211 has 3 MA's), (Start: 31 @54217 has 30 MA's), (46, 54292), (63, 54436),

Gene: Natasha_87 Start: 50502, Stop: 50825, Start Num: 31

Candidate Starts for Natasha_87:

(Start: 31 @50502 has 30 MA's), (45, 50574), (46, 50577), (54, 50646), (63, 50721),

Gene: Navi1117_94 Start: 52818, Stop: 53135, Start Num: 25

Candidate Starts for Navi1117_94:

(Start: 4 @52689 has 2 MA's), (5, 52698), (6, 52725), (11, 52764), (Start: 13 @52773 has 1 MA's), (18, 52797), (Start: 25 @52818 has 1 MA's), (47, 52914), (63, 53052),

Gene: Nightmare_89 Start: 54909, Stop: 55247, Start Num: 24

Candidate Starts for Nightmare_89:

(Start: 24 @54909 has 28 MA's), (36, 54933), (54, 55068),

Gene: Niktson_90 Start: 54476, Stop: 54814, Start Num: 24

Candidate Starts for Niktson_90:

(Start: 24 @54476 has 28 MA's), (36, 54500), (54, 54635),

Gene: Nithya_88 Start: 57069, Stop: 57404, Start Num: 19

Candidate Starts for Nithya_88:

(Start: 19 @57069 has 10 MA's), (26, 57087), (Start: 35 @57105 has 77 MA's), (46, 57174), (48, 57195), (62, 57318), (63, 57327),

Gene: NoPickles_89 Start: 55706, Stop: 56011, Start Num: 35

Candidate Starts for NoPickles_89:

(Start: 19 @55667 has 10 MA's), (Start: 35 @55706 has 77 MA's), (46, 55775), (62, 55919), (63, 55928),

Gene: Odesza_89 Start: 55746, Stop: 56051, Start Num: 35

Candidate Starts for Odesza_89:

(Start: 35 @55746 has 77 MA's), (46, 55815), (62, 55959), (63, 55968),

Gene: OhMyWard_83 Start: 56996, Stop: 57301, Start Num: 35

Candidate Starts for OhMyWard_83:

(8, 56912), (15, 56942), (22, 56963), (Start: 35 @56996 has 77 MA's), (46, 57065), (62, 57209), (63, 57218),

Gene: OlgasClover_90 Start: 57939, Stop: 58238, Start Num: 35

Candidate Starts for OlgasClover_90:

(Start: 19 @57903 has 10 MA's), (26, 57921), (Start: 35 @57939 has 77 MA's), (46, 58008), (62, 58152), (63, 58161),

Gene: OlympicHelado_85 Start: 52100, Stop: 52390, Start Num: 35

Candidate Starts for OlympicHelado_85:

(Start: 35 @52100 has 77 MA's), (40, 52133), (42, 52148), (48, 52190), (49, 52199), (54, 52238), (61, 52301), (63, 52313), (66, 52355),

Gene: Paella_245 Start: 109816, Stop: 110109, Start Num: 35

Candidate Starts for Paella_245:

(Start: 35 @109816 has 77 MA's), (38, 109843), (42, 109864), (54, 109954), (56, 109963), (57, 109975), (62, 110020), (64, 110044), (68, 110095),

Gene: Pepy6_050 Start: 72684, Stop: 73013, Start Num: 35

Candidate Starts for Pepy6_050:

(12, 72609), (Start: 35 @72684 has 77 MA's), (48, 72777), (62, 72900), (63, 72909),

Gene: Perkunas_91 Start: 55643, Stop: 55948, Start Num: 35

Candidate Starts for Perkunas_91:

(Start: 13 @55580 has 1 MA's), (14, 55583), (Start: 35 @55643 has 77 MA's), (46, 55712), (56, 55790), (62, 55856), (63, 55865),

Gene: Petito_90 Start: 56517, Stop: 56822, Start Num: 35

Candidate Starts for Petito_90:

(Start: 13 @56454 has 1 MA's), (17, 56472), (Start: 19 @56478 has 10 MA's), (Start: 35 @56517 has 77 MA's), (46, 56586), (56, 56664), (62, 56730), (63, 56739),

Gene: Phaby_89 Start: 53367, Stop: 53705, Start Num: 24

Candidate Starts for Phaby_89:

(Start: 24 @53367 has 28 MA's), (63, 53601),

Gene: Phaila_93 Start: 51735, Stop: 52073, Start Num: 18

Candidate Starts for Phaila_93:

(Start: 4 @51627 has 2 MA's), (5, 51636), (6, 51663), (11, 51702), (Start: 13 @51711 has 1 MA's), (18, 51735), (Start: 25 @51756 has 1 MA's), (47, 51852), (63, 51990),

Gene: Phepper_89 Start: 56610, Stop: 56951, Start Num: 19

Candidate Starts for Phepper_89:

(Start: 19 @56610 has 10 MA's), (26, 56628), (Start: 35 @56646 has 77 MA's), (46, 56715), (48, 56736), (62, 56859), (63, 56868),

Gene: Pherobrine_86 Start: 56340, Stop: 56645, Start Num: 35

Candidate Starts for Pherobrine_86:

(10, 56268), (22, 56307), (Start: 35 @56340 has 77 MA's), (46, 56409), (62, 56553), (63, 56562),

Gene: PherryCruz_55 Start: 39702, Stop: 40022, Start Num: 35

Candidate Starts for PherryCruz_55:

(20, 39663), (Start: 35 @39702 has 77 MA's), (44, 39765), (54, 39840), (63, 39915),

Gene: Pippin15_86 Start: 50675, Stop: 50968, Start Num: 33

Candidate Starts for Pippin15_86:

(Start: 33 @50675 has 10 MA's), (50, 50786), (60, 50873), (62, 50882), (63, 50891),

Gene: Poco6_049 Start: 73946, Stop: 74275, Start Num: 35

Candidate Starts for Poco6_049:

(Start: 35 @73946 has 77 MA's), (48, 74039), (62, 74162), (63, 74171),

Gene: Popy_81 Start: 52381, Stop: 52671, Start Num: 35
Candidate Starts for Popy_81:
(Start: 35 @52381 has 77 MA's), (40, 52414), (42, 52429), (48, 52471), (49, 52480), (54, 52519), (61, 52582), (63, 52594), (66, 52636),

Gene: Powelldog_90 Start: 51614, Stop: 51937, Start Num: 31
Candidate Starts for Powelldog_90:
(Start: 31 @51614 has 30 MA's), (54, 51758), (63, 51833),

Gene: ProfFrink_84 Start: 50537, Stop: 50869, Start Num: 31
Candidate Starts for ProfFrink_84:
(Start: 31 @50537 has 30 MA's), (63, 50756),

Gene: Qui_244 Start: 109804, Stop: 110097, Start Num: 35
Candidate Starts for Qui_244:
(Start: 35 @109804 has 77 MA's), (38, 109831), (42, 109852), (54, 109942), (56, 109951), (57, 109963), (62, 110008), (64, 110032), (68, 110083),

Gene: Rainydai_88 Start: 53655, Stop: 53945, Start Num: 35
Candidate Starts for Rainydai_88:
(Start: 35 @53655 has 77 MA's), (42, 53703), (51, 53766), (55, 53796), (56, 53802), (62, 53859), (63, 53868), (66, 53910),

Gene: Raunak_85 Start: 50247, Stop: 50579, Start Num: 31
Candidate Starts for Raunak_85:
(Start: 31 @50247 has 30 MA's), (63, 50466),

Gene: RavenPuff_56 Start: 39672, Stop: 39992, Start Num: 35
Candidate Starts for RavenPuff_56:
(20, 39633), (Start: 35 @39672 has 77 MA's), (44, 39735), (54, 39810), (63, 39885),

Gene: Regigigas_91 Start: 53267, Stop: 53557, Start Num: 35
Candidate Starts for Regigigas_91:
(Start: 35 @53267 has 77 MA's), (42, 53315), (51, 53378), (55, 53408), (56, 53414), (62, 53471), (63, 53480), (66, 53522),

Gene: Renaldo_90 Start: 51279, Stop: 51590, Start Num: 24
Candidate Starts for Renaldo_90:
(Start: 24 @51279 has 28 MA's), (47, 51375), (63, 51513),

Gene: Rickmore_89 Start: 56232, Stop: 56531, Start Num: 35
Candidate Starts for Rickmore_89:
(Start: 19 @56196 has 10 MA's), (26, 56214), (Start: 35 @56232 has 77 MA's), (46, 56301), (62, 56445), (63, 56454),

Gene: Rima_84 Start: 52079, Stop: 52369, Start Num: 35
Candidate Starts for Rima_84:
(Start: 35 @52079 has 77 MA's), (40, 52112), (42, 52127), (48, 52169), (49, 52178), (54, 52217), (61, 52280), (63, 52292), (66, 52334),

Gene: Roney_89 Start: 55909, Stop: 56214, Start Num: 35
Candidate Starts for Roney_89:
(Start: 35 @55909 has 77 MA's), (46, 55978), (62, 56122), (63, 56131),

Gene: RosaAsantewaa_52 Start: 38783, Stop: 39076, Start Num: 35
Candidate Starts for RosaAsantewaa_52:
(Start: 35 @38783 has 77 MA's), (41, 38822), (42, 38831), (54, 38921), (63, 38996), (66, 39038),

Gene: Runhaar_86 Start: 56213, Stop: 56548, Start Num: 19
Candidate Starts for Runhaar_86:
(Start: 19 @56213 has 10 MA's), (26, 56231), (Start: 35 @56249 has 77 MA's), (46, 56318), (62, 56462), (63, 56471),

Gene: RustyBoy_87 Start: 50701, Stop: 51024, Start Num: 31
Candidate Starts for RustyBoy_87:
(Start: 31 @50701 has 30 MA's), (45, 50773), (46, 50776), (54, 50845), (63, 50920),

Gene: Salk_84 Start: 50551, Stop: 50883, Start Num: 31
Candidate Starts for Salk_84:
(Start: 31 @50551 has 30 MA's), (63, 50770),

Gene: Scap1_53 Start: 39048, Stop: 39368, Start Num: 35
Candidate Starts for Scap1_53:
(Start: 35 @39048 has 77 MA's), (44, 39111), (54, 39186), (58, 39225), (60, 39243), (63, 39261),

Gene: Schwartz33_85 Start: 55529, Stop: 55834, Start Num: 35
Candidate Starts for Schwartz33_85:
(16, 55475), (22, 55496), (Start: 33 @55526 has 10 MA's), (Start: 35 @55529 has 77 MA's), (46, 55598), (62, 55742), (63, 55751),

Gene: ScienceWizSam_93 Start: 54288, Stop: 54626, Start Num: 24
Candidate Starts for ScienceWizSam_93:
(Start: 24 @54288 has 28 MA's), (36, 54312), (54, 54447),

Gene: Secretariat_81 Start: 53797, Stop: 54102, Start Num: 35
Candidate Starts for Secretariat_81:
(Start: 35 @53797 has 77 MA's), (46, 53866), (62, 54010), (63, 54019),

Gene: SendItCS_83 Start: 52025, Stop: 52315, Start Num: 35
Candidate Starts for SendItCS_83:
(Start: 35 @52025 has 77 MA's), (42, 52073), (51, 52136), (55, 52166), (56, 52172), (62, 52229), (63, 52238), (66, 52280),

Gene: Serenabean_87 Start: 51398, Stop: 51691, Start Num: 33
Candidate Starts for Serenabean_87:
(Start: 33 @51398 has 10 MA's), (38, 51428), (60, 51596), (62, 51605), (65, 51632), (69, 51686),

Gene: ShaggyRogers_90 Start: 56181, Stop: 56516, Start Num: 19
Candidate Starts for ShaggyRogers_90:
(Start: 19 @56181 has 10 MA's), (26, 56199), (Start: 35 @56217 has 77 MA's), (46, 56286), (62, 56430), (63, 56439),

Gene: SheRa_56 Start: 39582, Stop: 39902, Start Num: 35
Candidate Starts for SheRa_56:
(20, 39543), (Start: 35 @39582 has 77 MA's), (44, 39645), (54, 39720), (62, 39786), (63, 39795),

Gene: Shepard_89 Start: 53355, Stop: 53693, Start Num: 24
Candidate Starts for Shepard_89:
(Start: 24 @53355 has 28 MA's), (63, 53589),

Gene: Shiba_83 Start: 50263, Stop: 50595, Start Num: 31
Candidate Starts for Shiba_83:
(Start: 31 @50263 has 30 MA's), (63, 50482),

Gene: Sloopyjoe_84 Start: 50570, Stop: 50902, Start Num: 31
Candidate Starts for Sloopyjoe_84:
(Start: 31 @50570 has 30 MA's), (63, 50789),

Gene: Soshi_82 Start: 52222, Stop: 52512, Start Num: 35
Candidate Starts for Soshi_82:
(Start: 35 @52222 has 77 MA's), (40, 52255), (42, 52270), (48, 52312), (49, 52321), (54, 52360), (61, 52423), (63, 52435), (66, 52477),

Gene: Spectropatronm_82 Start: 51618, Stop: 51908, Start Num: 35
Candidate Starts for Spectropatronm_82:
(Start: 35 @51618 has 77 MA's), (40, 51651), (42, 51666), (48, 51708), (49, 51717), (54, 51756), (61, 51819), (63, 51831), (66, 51873),

Gene: Sporto_81 Start: 50849, Stop: 51172, Start Num: 31
Candidate Starts for Sporto_81:
(Start: 31 @50849 has 30 MA's), (45, 50921), (46, 50924), (54, 50993), (63, 51068),

Gene: StarLord_84 Start: 50563, Stop: 50895, Start Num: 31
Candidate Starts for StarLord_84:
(Start: 31 @50563 has 30 MA's), (63, 50782),

Gene: Stayer_84 Start: 50566, Stop: 50898, Start Num: 31
Candidate Starts for Stayer_84:
(Start: 31 @50566 has 30 MA's), (63, 50785),

Gene: Sunny4976_88 Start: 54541, Stop: 54918, Start Num: 28
Candidate Starts for Sunny4976_88:
(18, 54514), (28, 54541), (42, 54607), (53, 54676), (63, 54772),

Gene: Synopsis_81 Start: 53610, Stop: 53951, Start Num: 24
Candidate Starts for Synopsis_81:
(Start: 24 @53610 has 28 MA's), (54, 53772),

Gene: TaidaOne_83 Start: 52094, Stop: 52384, Start Num: 35
Candidate Starts for TaidaOne_83:
(Start: 35 @52094 has 77 MA's), (40, 52127), (42, 52142), (48, 52184), (49, 52193), (54, 52232), (61, 52295), (63, 52307), (66, 52349),

Gene: Talon44_93 Start: 56253, Stop: 56558, Start Num: 35
Candidate Starts for Talon44_93:
(Start: 13 @56190 has 1 MA's), (14, 56193), (Start: 35 @56253 has 77 MA's), (46, 56322), (56, 56400), (62, 56466), (63, 56475),

Gene: Tanis_90 Start: 55729, Stop: 56034, Start Num: 35

Candidate Starts for Tanis_90:
(Start: 35 @55729 has 77 MA's), (46, 55798), (62, 55942), (63, 55951),

Gene: Teacup_85 Start: 54308, Stop: 54646, Start Num: 24
Candidate Starts for Teacup_85:
(Start: 24 @54308 has 28 MA's), (36, 54332), (54, 54467),

Gene: TenaciousP_90 Start: 58307, Stop: 58606, Start Num: 35
Candidate Starts for TenaciousP_90:
(Start: 19 @58271 has 10 MA's), (26, 58289), (Start: 35 @58307 has 77 MA's), (46, 58376), (62, 58520), (63, 58529),

Gene: Tenney120_92 Start: 52029, Stop: 52346, Start Num: 25
Candidate Starts for Tenney120_92:
(Start: 4 @51900 has 2 MA's), (5, 51909), (6, 51936), (11, 51975), (Start: 13 @51984 has 1 MA's), (18, 52008), (Start: 25 @52029 has 1 MA's), (47, 52125), (63, 52263),

Gene: Tenno_89 Start: 54263, Stop: 54601, Start Num: 24
Candidate Starts for Tenno_89:
(Start: 24 @54263 has 28 MA's), (36, 54287), (54, 54422),

Gene: Thiqqums_91 Start: 53655, Stop: 53945, Start Num: 35
Candidate Starts for Thiqqums_91:
(Start: 35 @53655 has 77 MA's), (42, 53703), (51, 53766), (55, 53796), (56, 53802), (62, 53859), (63, 53868), (66, 53910),

Gene: TieDye_79 Start: 50942, Stop: 51232, Start Num: 35
Candidate Starts for TieDye_79:
(Start: 35 @50942 has 77 MA's), (40, 50975), (42, 50990), (48, 51032), (49, 51041), (54, 51080), (61, 51143), (63, 51155), (66, 51197),

Gene: Tokki_95 Start: 53736, Stop: 54074, Start Num: 24
Candidate Starts for Tokki_95:
(Start: 24 @53736 has 28 MA's), (63, 53970),

Gene: TonyStarch_82 Start: 51380, Stop: 51670, Start Num: 35
Candidate Starts for TonyStarch_82:
(Start: 35 @51380 has 77 MA's), (40, 51413), (42, 51428), (48, 51470), (49, 51479), (54, 51518), (61, 51581), (63, 51593), (66, 51635),

Gene: Tribby_99 Start: 55243, Stop: 55545, Start Num: 31
Candidate Starts for Tribby_99:
(23, 55216), (Start: 30 @55237 has 3 MA's), (Start: 31 @55243 has 30 MA's), (46, 55318), (63, 55462),

Gene: Truckee_86 Start: 53795, Stop: 54136, Start Num: 24
Candidate Starts for Truckee_86:
(Start: 24 @53795 has 28 MA's), (43, 53870), (63, 54032),

Gene: Trustiboi_87 Start: 54309, Stop: 54650, Start Num: 24
Candidate Starts for Trustiboi_87:
(Start: 24 @54309 has 28 MA's), (58, 54510), (63, 54546),

Gene: Untouchable_90 Start: 57643, Stop: 57948, Start Num: 35

Candidate Starts for Untouchable_90:

(Start: 19 @57607 has 10 MA's), (26, 57625), (Start: 35 @57643 has 77 MA's), (46, 57712), (48, 57733), (62, 57856), (63, 57865),

Gene: Uzumaki_89 Start: 51465, Stop: 51782, Start Num: 25

Candidate Starts for Uzumaki_89:

(Start: 4 @51336 has 2 MA's), (5, 51345), (6, 51372), (11, 51411), (Start: 13 @51420 has 1 MA's), (18, 51444), (Start: 25 @51465 has 1 MA's), (47, 51561), (63, 51699),

Gene: Vardy_87 Start: 56164, Stop: 56463, Start Num: 35

Candidate Starts for Vardy_87:

(Start: 19 @56128 has 10 MA's), (26, 56146), (Start: 35 @56164 has 77 MA's), (46, 56233), (62, 56377), (63, 56386),

Gene: Xenomorph_92 Start: 54848, Stop: 55150, Start Num: 31

Candidate Starts for Xenomorph_92:

(23, 54821), (Start: 30 @54842 has 3 MA's), (Start: 31 @54848 has 30 MA's), (46, 54923), (63, 55067),

Gene: Yotsuba_82 Start: 53343, Stop: 53636, Start Num: 33

Candidate Starts for Yotsuba_82:

(Start: 33 @53343 has 10 MA's), (43, 53397), (45, 53412), (50, 53454), (60, 53541), (62, 53550), (63, 53559),

Gene: Zeina_89 Start: 50998, Stop: 51444, Start Num: 4

Candidate Starts for Zeina_89:

(1, 50839), (2, 50869), (3, 50956), (Start: 4 @50998 has 2 MA's), (5, 51007), (6, 51034), (11, 51073), (Start: 13 @51082 has 1 MA's), (18, 51106), (Start: 25 @51127 has 1 MA's), (47, 51223), (63, 51361),

Gene: Zeph_91 Start: 57411, Stop: 57752, Start Num: 19

Candidate Starts for Zeph_91:

(Start: 19 @57411 has 10 MA's), (26, 57429), (Start: 35 @57447 has 77 MA's), (46, 57516), (48, 57537), (62, 57660), (63, 57669),

Gene: Zippen_92 Start: 54182, Stop: 54523, Start Num: 24

Candidate Starts for Zippen_92:

(Start: 24 @54182 has 28 MA's), (36, 54209), (54, 54344),