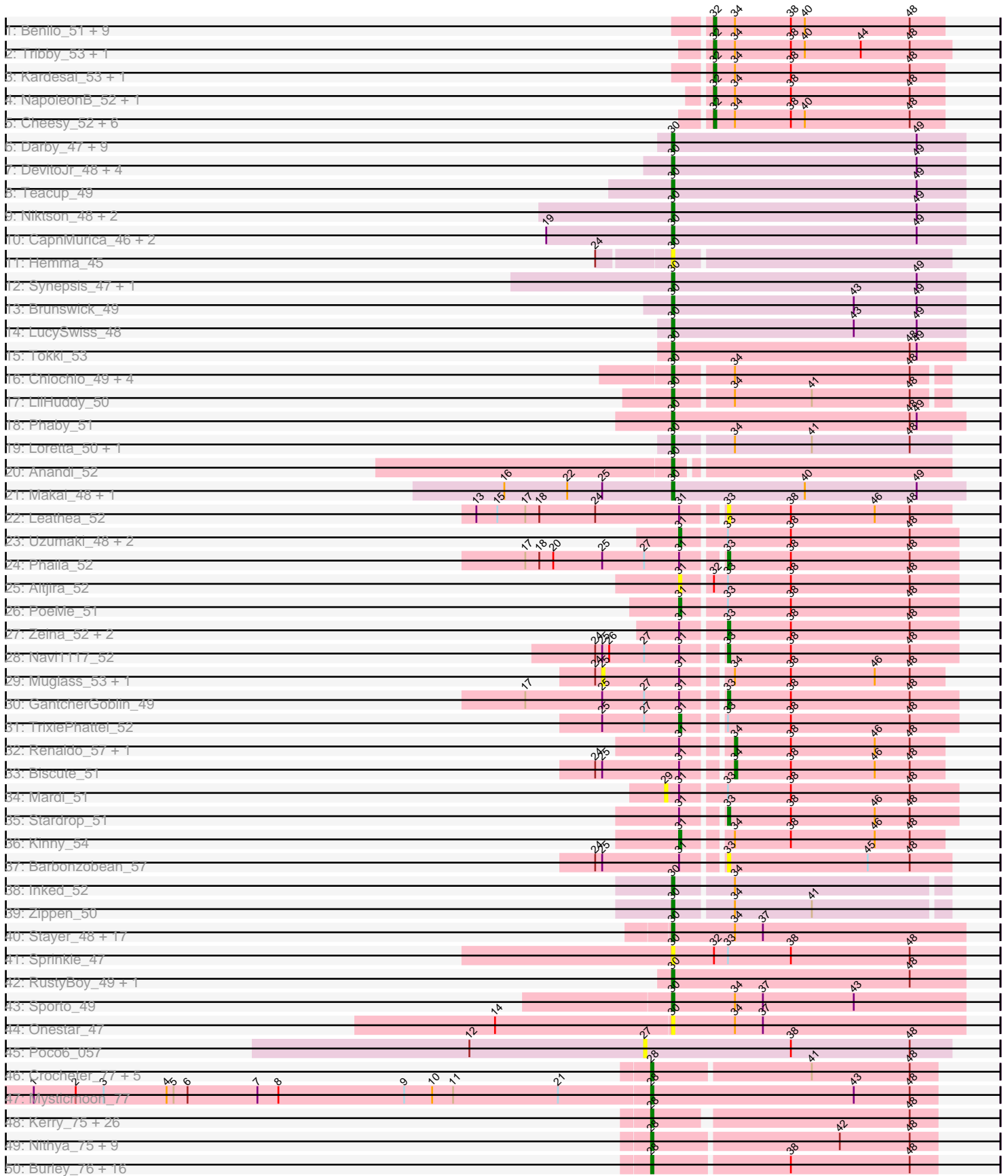
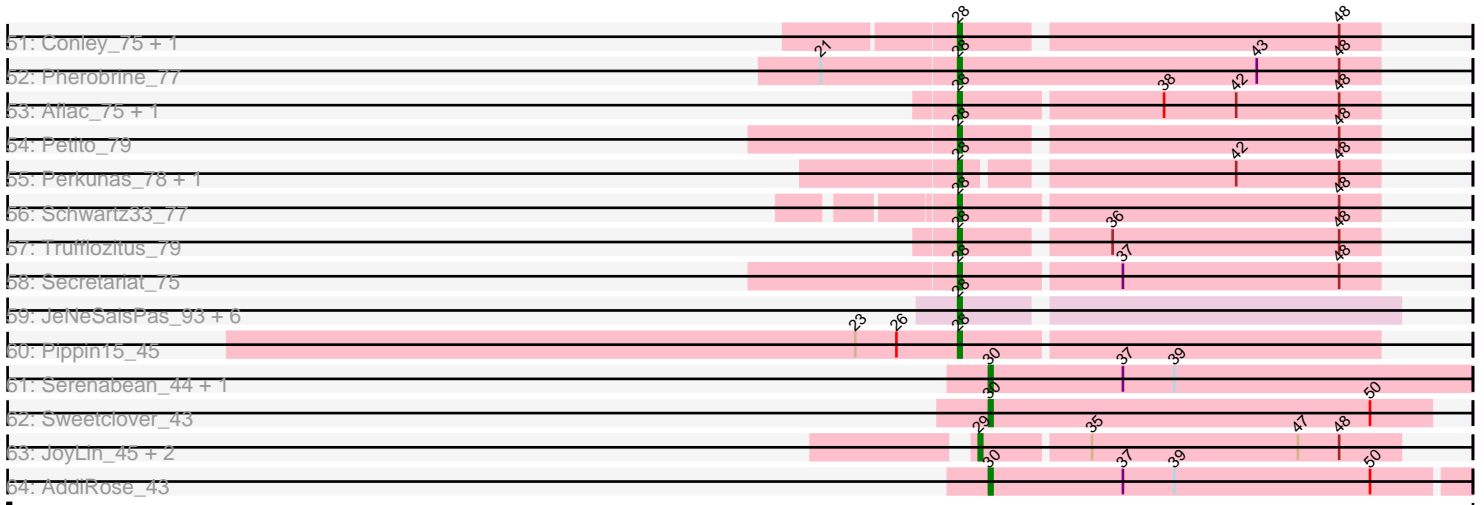


Pham 311247



Pham 311247



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 311247 Report

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

Pham number 311247 has 198 members, 40 are drafts.

Phages represented in each track:

- Track 1 : Benllo_51, Heisenberger_51, JEGGS_51, Stardom_49, GoCrazy_51, Hankly_51, KeaneyLin_51, Mudcat_49, Circum_54, Mooshroom_54
- Track 2 : Tribby_53, Xenomorph_49
- Track 3 : Kardesai_53, BenitoAntonio_52
- Track 4 : NapoleonB_52, Dynamite_52
- Track 5 : Cheesy_52, YoshiYama_52, Elsa_52, Correa_50, Arcadia_52, Bowling_52, Nason_52
- Track 6 : Darby_47, Tenno_49, Trustiboi_48, Acai_49, Westerlin_47, Gordon_46, Caterpillar_45, Issa_47, Breylor17_48, CastorTray_51
- Track 7 : DevitoJr_48, Nivinsha_50, Tatanka_46, ScienceWizSam_49, AreFloNak_51
- Track 8 : Teacup_49
- Track 9 : Niktson_48, ElephantMan_48, Nightmare_50
- Track 10 : CapnMurica_46, Dinallo_48, MiniBagel_48
- Track 11 : Hemma_45
- Track 12 : Synopsis_47, MediumFry_46
- Track 13 : Brunswick_49
- Track 14 : LucySwiss_48
- Track 15 : Tokki_53
- Track 16 : Chlochlo_49, Bouchard_48, Shepard_51, Tipton_51, Giantsbane_49
- Track 17 : LilHuddy_50
- Track 18 : Phaby_51
- Track 19 : Loretta_50, Ingrid_50
- Track 20 : Anandi_52
- Track 21 : Makai_48, Truckee_46
- Track 22 : Leathea_52
- Track 23 : Uzumaki_48, BlackHoleSun_52, Tenney120_52
- Track 24 : Phaila_52
- Track 25 : Altjira_52
- Track 26 : PoeMe_51
- Track 27 : Zeina_52, Argan_49, KevinMinion_50
- Track 28 : Navi1117_52
- Track 29 : Muglass_53, BarbieDoll_55
- Track 30 : GantcherGoblin_49
- Track 31 : TrixiePhattel_52
- Track 32 : Renaldo_57, Lewando_54
- Track 33 : Biscute_51

- Track 34 : Mardi_51
- Track 35 : Stardrop_51
- Track 36 : Kinny_54
- Track 37 : Barbonzobean_57
- Track 38 : Inked_52
- Track 39 : Zippen_50
- Track 40 : Stayer_48, ProfFrink_48, Sloopyjoe_48, Linda_48, Michelle_48, Djungelskog_48, Egad_48, Boog_47, BronxBay_48, Raunak_51, Salk_48, Jeremy4pt0_47, StarLord_48, HerbBucket_49, Spain_51, Shiba_47, MrAaronian_48, DoctorPepper_47
- Track 41 : Sprinkle_47
- Track 42 : RustyBoy_49, Natasha_49
- Track 43 : Sporto_49
- Track 44 : Onestar_47
- Track 45 : POCO6_057
- Track 46 : Crocheter_77, Gusicorn_78, BetterYeti_76, Aloe25_80, ShaggyRogers_76, PestoPenguin_81
- Track 47 : Mysticmoon_77
- Track 48 : Kerry_75, Gravy_75, Talon44_80, Avazak_79, Hortihabitatio_79, Artorias_78, Magel_77, Mossy_77, Roney_75, Bugg_82, Captrips_77, NoPickles_77, Football_81, JulesRay_78, Blanky_74, AlainaMarie_75, Kenosha_75, Odesza_75, Dancer_78, Tairn4Wing_81, Hydrus_76, Tanis_76, Capybara_76, ChickyNuggy_81, OhMyWard_73, Gill_76, FortCran_78
- Track 49 : Nithya_75, Dialga_78, Untouchable_78, Runhaar_75, ArtetaBall_76, Madvan_76, OlgasClover_77, Nadmeg_76, Duffington_76, CWormy_75
- Track 50 : Burley_76, Jodelie19_74, BluerMoon_74, Eddiemania_77, Luthien_76, Glintora_77, Arataki_75, Figliar_74, Zeph_78, Vardy_75, MajinBuu_76, Rickmore_74, Chikenjars_75, TenaciousP_76, EndAve_77, Citrus_75, Phepper_77
- Track 51 : Conley_75, Fazel_80
- Track 52 : Pherobrine_77
- Track 53 : Aflac_75, Tonaltzin_79
- Track 54 : Petite_79
- Track 55 : Perkunas_78, SweetCrkHerbs_79
- Track 56 : Schwartz33_77
- Track 57 : Trufflozitus_79
- Track 58 : Secretariat_75
- Track 59 : JeNeSaisPas_93, Gandionco_95, Elver_98, Kureo_97, Paella_99, Qui_99, Marianna39_96
- Track 60 : Pippin15_45
- Track 61 : Serenabean_44, Daddyjeff_44
- Track 62 : Sweetclover_43
- Track 63 : JoyLin_45, Eevee_45, Yotsuba_45
- Track 64 : AddiRose_43

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

The start number called the most often in the published annotations is 28, it was called in 62 of the 158 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac_75, AlainaMarie_75, Aloe25_80, Arataki_75, ArtetaBall_76, Artorias_78, Avazak_79, BetterYeti_76, Blanky_74, BluerMoon_74, Bugg_82, Burley_76, CWormy_75, Captrips_77, Cappybara_76, ChickyNuggy_81, Chikenjars_75, Citrus_75, Conley_75, Crocheter_77, Dancer_78, Dialga_78, Duffington_76, Eddiemania_77, Elver_98, EndAve_77, Fazel_80, Figliar_74, Football_81, FortCran_78, Gandionco_95, Gill_76, Glintora_77, Gravy_75, Gusicorn_78, Hortihabitatio_79, Hydrus_76, JeNeSaisPas_93, Jodelie19_74, JulesRay_78, Kenosha_75, Kerry_75, Kureo_97, Luthien_76, Madvan_76, Magel_77, MajinBuu_76, Marianna39_96, Mossy_77, Mysticmoon_77, Nadmeg_76, Nithya_75, NoPickles_77, Odesza_75, OhMyWard_73, OlgasClover_77, Paella_99, Perkunas_78, PestoPenguin_81, Petite_79, Phepper_77, Pherobrine_77, Pippin15_45, Qui_99, Rickmore_74, Roney_75, Runhaar_75, Schwartz33_77, Secretariat_75, ShaggyRogers_76, SweetCrkHerbs_79, Tairn4Wing_81, Talon44_80, Tanis_76, TenaciousP_76, Tonaltzin_79, Trufflozitus_79, Untouchable_78, Vardy_75, Zeph_78,

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

-

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

- Acai_49, AddiRose_43, Altjira_52, Anandi_52, Arcadia_52, AreFloNak_51, Argan_49, BarbieDoll_55, Barbonzobean_57, BenitoAntonio_52, Benllo_51, Biscute_51, BlackHoleSun_52, Boog_47, Bouchard_48, Bowling_52, Breylor17_48, BronxBay_48, Brunswick_49, CapnMurica_46, CastorTray_51, Caterpillar_45, Cheesy_52, Chlochlo_49, Circum_54, Correa_50, Daddyjeff_44, Darby_47, DevitoJr_48, Dinallo_48, Djungelskog_48, DoctorPepper_47, Dynamite_52, Eevee_45, Egad_48, ElephantMan_48, Elsa_52, GantcherGoblin_49, Giantsbane_49, GoCrazy_51, Gordon_46, Hankly_51, Heisenberger_51, Hemma_45, HerbBucket_49, Ingrid_50, Inked_52, Issa_47, JEGGS_51, Jeremy4pt0_47, JoyLin_45, Kardesai_53, KeaneyLin_51, KevinMinion_50, Kinny_54, Leatheia_52, Lewando_54, LilHuddy_50, Linda_48, Loretta_50, LucySwiss_48, Makai_48, Mardi_51, MediumFry_46, Michelle_48, MiniBagel_48, Mooshroom_54, MrAaronian_48, Mudcat_49, Muglass_53, NapoleonB_52, Nason_52, Natasha_49, Navi1117_52, Nightmare_50, Niktson_48, Nivinsha_50, Onestar_47, Phaby_51, Phaila_52, Poco6_057, PoeMe_51, ProfFrink_48, Raunak_51, Renaldo_57, RustyBoy_49, Salk_48, ScienceWizSam_49, Serenabean_44, Shepard_51, Shiba_47, Sloopyjoe_48, Spain_51, Sporto_49, Sprinkle_47, StarLord_48, Stardom_49, Stardrop_51, Stayer_48, Sweetclover_43, Synepsis_47, Tatanka_46, Teacup_49, Tenney120_52, Tenno_49, Tipton_51, Tokki_53, Tribby_53, TrixiePhattel_52, Truckee_46, Trustiboi_48, Uzumaki_48, Westerlin_47, Xenomorph_49, YoshiYama_52, Yotsuba_45, Zeina_52, Zippen_50,

Summary by start number:

Start 25:

- Found in 10 of 198 (5.1%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: BarbieDoll_55 (AU6), Muglass_53 (AU6),

Start 27:

- Found in 5 of 198 (2.5%) of genes in pham
- No Manual Annotations of this start.

- Called 20.0% of time when present
- Phage (with cluster) where this start called: Poco6_057 (CC),

Start 28:

- Found in 80 of 198 (40.4%) of genes in pham
- Manual Annotations of this start: 62 of 158
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aflac_75 (DJ), AlainaMarie_75 (DJ), Aloe25_80 (DJ), Arataki_75 (DJ), ArtetaBall_76 (DJ), Artorias_78 (DJ), Avazak_79 (DJ), BetterYeti_76 (DJ), Blanky_74 (DJ), BluerMoon_74 (DJ), Bugg_82 (DJ), Burley_76 (DJ), CWormy_75 (DJ), Captrips_77 (DJ), Copybara_76 (DJ), ChickyNuggy_81 (DJ), Chikenjars_75 (DJ), Citrus_75 (DJ), Conley_75 (DJ), Crocheter_77 (DJ), Dancer_78 (DJ), Dialga_78 (DJ), Duffington_76 (DJ), Eddiemania_77 (DJ), Elver_98 (FK), EndAve_77 (DJ), Fazel_80 (DJ), Figliar_74 (DJ), Football_81 (DJ), FortCran_78 (DJ), Gandionco_95 (FK), Gill_76 (DJ), Glintora_77 (DJ), Gravy_75 (DJ), Gusicorn_78 (DJ), Hortihabitatio_79 (DJ), Hydrus_76 (DJ), JeNeSaisPas_93 (FK), Jodelie19_74 (DJ), JulesRay_78 (DJ), Kenosha_75 (DJ), Kerry_75 (DJ), Kureo_97 (FK), Luthien_76 (DJ), Madvan_76 (DJ), Magel_77 (DJ), MajinBuu_76 (DJ), Marianna39_96 (FK), Mossy_77 (DJ), Mysticmoon_77 (DJ), Nadmeg_76 (DJ), Nithya_75 (DJ), NoPickles_77 (DJ), Odesza_75 (DJ), OhMyWard_73 (DJ), OlgasClover_77 (DJ), Paella_99 (FK), Perkunas_78 (DJ), PestoPenguin_81 (DJ), Petite_79 (DJ), Phepper_77 (DJ), Pherobrine_77 (DJ), Pippin15_45 (JA), Qui_99 (FK), Rickmore_74 (DJ), Roney_75 (DJ), Runhaar_75 (DJ), Schwartz33_77 (DJ), Secretariat_75 (DJ), ShaggyRogers_76 (DJ), SweetCrkHerbs_79 (DJ), Tairn4Wing_81 (DJ), Talon44_80 (DJ), Tanis_76 (DJ), TenaciousP_76 (DJ), Tonaltzin_79 (DJ), Trufflozitus_79 (DJ), Untouchable_78 (DJ), Vardy_75 (DJ), Zeph_78 (DJ),

Start 29:

- Found in 4 of 198 (2.0%) of genes in pham
- Manual Annotations of this start: 3 of 158
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Eevee_45 (JA), JoyLin_45 (JA), Mardi_51 (AU6), Yotsuba_45 (JA),

Start 30:

- Found in 69 of 198 (34.8%) of genes in pham
- Manual Annotations of this start: 58 of 158
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acai_49 (AU1), AddiRose_43 (JA), Anandi_52 (AU4), AreFloNak_51 (AU1), Boog_47 (AW), Bouchard_48 (AU2), Breylor17_48 (AU1), BronxBay_48 (AW), Brunswick_49 (AU1), CapnMurica_46 (AU1), CastorTray_51 (AU1), Caterpillar_45 (AU4), Chlochlo_49 (AU2), Daddyjeff_44 (JA), Darby_47 (AU1), DevitoJr_48 (AU1), Dinallo_48 (AU1), Djungelskog_48 (AW), DoctorPepper_47 (AW), Egad_48 (AW), ElephantMan_48 (AU1), Giantsbane_49 (AU2), Gordon_46 (AU1), Hemma_45 (AU1), HerbBucket_49 (AW), Ingrid_50 (AU3), Inked_52 (AU7), Issa_47 (AU1), Jeremy4pt0_47 (AW), LilHuddy_50 (AU2), Linda_48 (AW), Loretta_50 (AU3), LucySwiss_48 (AU1), Makai_48 (AU5), MediumFry_46 (AU4), Michelle_48 (AW), MiniBagel_48 (AU1), MrAaronian_48 (AW), Natasha_49 (AW), Nightmare_50 (AU1), Niktson_48 (AU1), Nivinsha_50 (AU1), Onestar_47 (AW), Phaby_51 (AU2), ProfFrink_48 (AW), Raunak_51 (AW), RustyBoy_49 (AW), Salk_48 (AW), ScienceWizSam_49 (AU1), Serenabean_44 (JA), Shepard_51 (AU2), Shiba_47 (AW), Sloopyjoe_48 (AW), Spain_51 (AW), Sporto_49 (AW), Sprinkle_47

(AW), StarLord_48 (AW), Stayer_48 (AW), Sweetclover_43 (JA), Synepsis_47 (AU1), Tatanka_46 (AU1), Teacup_49 (AU1), Tenno_49 (AU1), Tipton_51 (AU2), Tokki_53 (AU2), Truckee_46 (AU5), Trustiboi_48 (AU1), Westerlin_47 (AU1), Zippen_50 (AU7),

Start 31:

- Found in 22 of 198 (11.1%) of genes in pham
- Manual Annotations of this start: 5 of 158
- Called 31.8% of time when present
- Phage (with cluster) where this start called: Altjira_52 (AU6), BlackHoleSun_52 (AU6), Kinny_54 (AU6), PoeMe_51 (AU6), Tenney120_52 (AU6), TrixiePhattel_52 (AU6), Uzumaki_48 (AU6),

Start 32:

- Found in 25 of 198 (12.6%) of genes in pham
- Manual Annotations of this start: 21 of 158
- Called 92.0% of time when present
- Phage (with cluster) where this start called: Arcadia_52 (AM), BenitoAntonio_52 (AM), Benllo_51 (AM), Bowling_52 (AM), Cheesy_52 (AM), Circum_54 (AM), Correa_50 (AM), Dynamite_52 (AM), Elsa_52 (AM), GoCrazy_51 (AM), Hankly_51 (AM), Heisenberger_51 (AM), JEGGS_51 (AM), Kardesai_53 (AM), KeaneyLin_51 (AM), Mooshroom_54 (AM), Mudcat_49 (AM), NapoleonB_52 (AM), Nason_52 (AM), Stardom_49 (AM), Tribby_53 (AM), Xenomorph_49 (AM), YoshiYama_52 (AM),

Start 33:

- Found in 17 of 198 (8.6%) of genes in pham
- Manual Annotations of this start: 7 of 158
- Called 52.9% of time when present
- Phage (with cluster) where this start called: Argan_49 (AU6), Barbonzobean_57 (AU6), GantcherGoblin_49 (AU6), KevinMinion_50 (AU6), Leathea_52 (AU6), Navi1117_52 (AU6), Phaila_52 (AU6), Stardrop_51 (AU6), Zeina_52 (AU6),

Start 34:

- Found in 59 of 198 (29.8%) of genes in pham
- Manual Annotations of this start: 2 of 158
- Called 5.1% of time when present
- Phage (with cluster) where this start called: Biscute_51 (AU6), Lewando_54 (AU6), Renaldo_57 (AU6),

Summary by clusters:

There are 13 clusters represented in this pham: DJ, AU7, CC, AM, AU1, AU3, AU2, AU5, AU4, AW, AU6, FK, JA,

Info for manual annotations of cluster AM:

- Start number 32 was manually annotated 21 times for cluster AM.

Info for manual annotations of cluster AU1:

- Start number 30 was manually annotated 19 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 30 was manually annotated 8 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 30 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 30 was manually annotated 3 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 30 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 31 was manually annotated 5 times for cluster AU6.
- Start number 33 was manually annotated 7 times for cluster AU6.
- Start number 34 was manually annotated 2 times for cluster AU6.

Info for manual annotations of cluster AU7:

- Start number 30 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:

- Start number 30 was manually annotated 18 times for cluster AW.

Info for manual annotations of cluster DJ:

- Start number 28 was manually annotated 58 times for cluster DJ.

Info for manual annotations of cluster FK:

- Start number 28 was manually annotated 3 times for cluster FK.

Info for manual annotations of cluster JA:

- Start number 28 was manually annotated 1 time for cluster JA.
- Start number 29 was manually annotated 3 times for cluster JA.
- Start number 30 was manually annotated 4 times for cluster JA.

Gene Information:

Gene: Acai_49 Start: 34862, Stop: 34987, Start Num: 30

Candidate Starts for Acai_49:

(Start: 30 @34862 has 58 MA's), (49, 34967),

Gene: AddiRose_43 Start: 31154, Stop: 31291, Start Num: 30

Candidate Starts for AddiRose_43:

(Start: 30 @31154 has 58 MA's), (37, 31193), (39, 31208), (50, 31265),

Gene: Aflac_75 Start: 51259, Stop: 51378, Start Num: 28

Candidate Starts for Aflac_75:

(Start: 28 @51259 has 62 MA's), (38, 51316), (42, 51337), (48, 51367),

Gene: AlainaMarie_75 Start: 51316, Stop: 51435, Start Num: 28

Candidate Starts for AlainaMarie_75:

(Start: 28 @51316 has 62 MA's), (48, 51424),

Gene: Aloe25_80 Start: 51133, Stop: 51252, Start Num: 28

Candidate Starts for Aloe25_80:

(Start: 28 @51133 has 62 MA's), (41, 51199), (48, 51241),

Gene: Altjira_52 Start: 34529, Stop: 34645, Start Num: 31

Candidate Starts for Altjira_52:

(Start: 31 @34529 has 5 MA's), (Start: 32 @34541 has 21 MA's), (Start: 33 @34547 has 7 MA's), (38, 34574), (48, 34625),

Gene: Anandi_52 Start: 35089, Stop: 35202, Start Num: 30

Candidate Starts for Anandi_52:

(Start: 30 @35089 has 58 MA's),

Gene: Arataki_75 Start: 50746, Stop: 50865, Start Num: 28

Candidate Starts for Arataki_75:

(Start: 28 @50746 has 62 MA's), (38, 50803), (48, 50854),

Gene: Arcadia_52 Start: 33235, Stop: 33333, Start Num: 32

Candidate Starts for Arcadia_52:

(Start: 32 @33235 has 21 MA's), (Start: 34 @33244 has 2 MA's), (38, 33268), (40, 33274), (48, 33319),

Gene: AreFloNak_51 Start: 34832, Stop: 34957, Start Num: 30

Candidate Starts for AreFloNak_51:

(Start: 30 @34832 has 58 MA's), (49, 34937),

Gene: Argan_49 Start: 33254, Stop: 33352, Start Num: 33

Candidate Starts for Argan_49:

(Start: 31 @33236 has 5 MA's), (Start: 33 @33254 has 7 MA's), (38, 33281), (48, 33332),

Gene: ArtetaBall_76 Start: 51306, Stop: 51425, Start Num: 28

Candidate Starts for ArtetaBall_76:

(Start: 28 @51306 has 62 MA's), (42, 51384), (48, 51414),

Gene: Artorias_78 Start: 50947, Stop: 51063, Start Num: 28

Candidate Starts for Artorias_78:

(Start: 28 @50947 has 62 MA's), (48, 51052),

Gene: Avazak_79 Start: 51629, Stop: 51745, Start Num: 28

Candidate Starts for Avazak_79:

(Start: 28 @51629 has 62 MA's), (48, 51734),

Gene: BarbieDoll_55 Start: 34950, Stop: 35090, Start Num: 25

Candidate Starts for BarbieDoll_55:

(24, 34947), (25, 34950), (Start: 31 @34983 has 5 MA's), (Start: 34 @35001 has 2 MA's), (38, 35025), (46, 35061), (48, 35076),

Gene: Barbonzobean_57 Start: 35258, Stop: 35353, Start Num: 33

Candidate Starts for Barbonzobean_57:

(24, 35207), (25, 35210), (Start: 31 @35243 has 5 MA's), (Start: 33 @35258 has 7 MA's), (45, 35318), (48, 35336),

Gene: BenitoAntonio_52 Start: 32772, Stop: 32870, Start Num: 32

Candidate Starts for BenitoAntonio_52:

(Start: 32 @32772 has 21 MA's), (Start: 34 @32781 has 2 MA's), (38, 32805), (48, 32856),

Gene: Benllo_51 Start: 33450, Stop: 33548, Start Num: 32
Candidate Starts for Benllo_51:
(Start: 32 @33450 has 21 MA's), (Start: 34 @33459 has 2 MA's), (38, 33483), (40, 33489), (48, 33534),

Gene: BetterYeti_76 Start: 51132, Stop: 51251, Start Num: 28
Candidate Starts for BetterYeti_76:
(Start: 28 @51132 has 62 MA's), (41, 51198), (48, 51240),

Gene: Biscute_51 Start: 34653, Stop: 34742, Start Num: 34
Candidate Starts for Biscute_51:
(24, 34599), (25, 34602), (Start: 31 @34635 has 5 MA's), (Start: 34 @34653 has 2 MA's), (38, 34677),
(46, 34713), (48, 34728),

Gene: BlackHoleSun_52 Start: 33361, Stop: 33477, Start Num: 31
Candidate Starts for BlackHoleSun_52:
(Start: 31 @33361 has 5 MA's), (Start: 33 @33379 has 7 MA's), (38, 33406), (48, 33457),

Gene: Blanky_74 Start: 52228, Stop: 52347, Start Num: 28
Candidate Starts for Blanky_74:
(Start: 28 @52228 has 62 MA's), (48, 52336),

Gene: BluerMoon_74 Start: 51213, Stop: 51332, Start Num: 28
Candidate Starts for BluerMoon_74:
(Start: 28 @51213 has 62 MA's), (38, 51270), (48, 51321),

Gene: Boog_47 Start: 32283, Stop: 32408, Start Num: 30
Candidate Starts for Boog_47:
(Start: 30 @32283 has 58 MA's), (Start: 34 @32310 has 2 MA's), (37, 32322),

Gene: Bouchard_48 Start: 34781, Stop: 34894, Start Num: 30
Candidate Starts for Bouchard_48:
(Start: 30 @34781 has 58 MA's), (Start: 34 @34805 has 2 MA's), (48, 34880),

Gene: Bowling_52 Start: 32980, Stop: 33078, Start Num: 32
Candidate Starts for Bowling_52:
(Start: 32 @32980 has 21 MA's), (Start: 34 @32989 has 2 MA's), (38, 33013), (40, 33019), (48, 33064),

Gene: Breylor17_48 Start: 35423, Stop: 35548, Start Num: 30
Candidate Starts for Breylor17_48:
(Start: 30 @35423 has 58 MA's), (49, 35528),

Gene: BronxBay_48 Start: 32581, Stop: 32706, Start Num: 30
Candidate Starts for BronxBay_48:
(Start: 30 @32581 has 58 MA's), (Start: 34 @32608 has 2 MA's), (37, 32620),

Gene: Brunswick_49 Start: 34716, Stop: 34841, Start Num: 30
Candidate Starts for Brunswick_49:
(Start: 30 @34716 has 58 MA's), (43, 34794), (49, 34821),

Gene: Bugg_82 Start: 50992, Stop: 51108, Start Num: 28
Candidate Starts for Bugg_82:
(Start: 28 @50992 has 62 MA's), (48, 51097),

Gene: Burley_76 Start: 50762, Stop: 50881, Start Num: 28
Candidate Starts for Burley_76:
(Start: 28 @50762 has 62 MA's), (38, 50819), (48, 50870),

Gene: CWormy_75 Start: 50723, Stop: 50842, Start Num: 28
Candidate Starts for CWormy_75:
(Start: 28 @50723 has 62 MA's), (42, 50801), (48, 50831),

Gene: CapnMurica_46 Start: 35616, Stop: 35741, Start Num: 30
Candidate Starts for CapnMurica_46:
(19, 35562), (Start: 30 @35616 has 58 MA's), (49, 35721),

Gene: Captrips_77 Start: 50777, Stop: 50893, Start Num: 28
Candidate Starts for Captrips_77:
(Start: 28 @50777 has 62 MA's), (48, 50882),

Gene: Capybara_76 Start: 50614, Stop: 50730, Start Num: 28
Candidate Starts for Capybara_76:
(Start: 28 @50614 has 62 MA's), (48, 50719),

Gene: CastorTray_51 Start: 35487, Stop: 35612, Start Num: 30
Candidate Starts for CastorTray_51:
(Start: 30 @35487 has 58 MA's), (49, 35592),

Gene: Caterpillar_45 Start: 33882, Stop: 34007, Start Num: 30
Candidate Starts for Caterpillar_45:
(Start: 30 @33882 has 58 MA's), (49, 33987),

Gene: Cheesy_52 Start: 32956, Stop: 33054, Start Num: 32
Candidate Starts for Cheesy_52:
(Start: 32 @32956 has 21 MA's), (Start: 34 @32965 has 2 MA's), (38, 32989), (40, 32995), (48, 33040),

Gene: ChickyNuggy_81 Start: 51371, Stop: 51487, Start Num: 28
Candidate Starts for ChickyNuggy_81:
(Start: 28 @51371 has 62 MA's), (48, 51476),

Gene: Chikenjars_75 Start: 51562, Stop: 51681, Start Num: 28
Candidate Starts for Chikenjars_75:
(Start: 28 @51562 has 62 MA's), (38, 51619), (48, 51670),

Gene: Chlochlo_49 Start: 34525, Stop: 34638, Start Num: 30
Candidate Starts for Chlochlo_49:
(Start: 30 @34525 has 58 MA's), (Start: 34 @34549 has 2 MA's), (48, 34624),

Gene: Circum_54 Start: 33641, Stop: 33739, Start Num: 32
Candidate Starts for Circum_54:
(Start: 32 @33641 has 21 MA's), (Start: 34 @33650 has 2 MA's), (38, 33674), (40, 33680), (48, 33725),

Gene: Citrus_75 Start: 51612, Stop: 51731, Start Num: 28
Candidate Starts for Citrus_75:
(Start: 28 @51612 has 62 MA's), (38, 51669), (48, 51720),

Gene: Conley_75 Start: 51077, Stop: 51193, Start Num: 28

Candidate Starts for Conley_75:
(Start: 28 @51077 has 62 MA's), (48, 51182),

Gene: Correa_50 Start: 32102, Stop: 32200, Start Num: 32
Candidate Starts for Correa_50:
(Start: 32 @32102 has 21 MA's), (Start: 34 @32111 has 2 MA's), (38, 32135), (40, 32141), (48, 32186),

Gene: Crocheter_77 Start: 51226, Stop: 51345, Start Num: 28
Candidate Starts for Crocheter_77:
(Start: 28 @51226 has 62 MA's), (41, 51292), (48, 51334),

Gene: Daddyjeff_44 Start: 31430, Stop: 31570, Start Num: 30
Candidate Starts for Daddyjeff_44:
(Start: 30 @31430 has 58 MA's), (37, 31469), (39, 31484),

Gene: Dancer_78 Start: 50684, Stop: 50800, Start Num: 28
Candidate Starts for Dancer_78:
(Start: 28 @50684 has 62 MA's), (48, 50789),

Gene: Darby_47 Start: 34661, Stop: 34786, Start Num: 30
Candidate Starts for Darby_47:
(Start: 30 @34661 has 58 MA's), (49, 34766),

Gene: DevitoJr_48 Start: 35053, Stop: 35178, Start Num: 30
Candidate Starts for DevitoJr_48:
(Start: 30 @35053 has 58 MA's), (49, 35158),

Gene: Dialga_78 Start: 51325, Stop: 51444, Start Num: 28
Candidate Starts for Dialga_78:
(Start: 28 @51325 has 62 MA's), (42, 51403), (48, 51433),

Gene: Dinallo_48 Start: 35925, Stop: 36050, Start Num: 30
Candidate Starts for Dinallo_48:
(19, 35871), (Start: 30 @35925 has 58 MA's), (49, 36030),

Gene: Djungelskog_48 Start: 32580, Stop: 32705, Start Num: 30
Candidate Starts for Djungelskog_48:
(Start: 30 @32580 has 58 MA's), (Start: 34 @32607 has 2 MA's), (37, 32619),

Gene: DoctorPepper_47 Start: 32285, Stop: 32410, Start Num: 30
Candidate Starts for DoctorPepper_47:
(Start: 30 @32285 has 58 MA's), (Start: 34 @32312 has 2 MA's), (37, 32324),

Gene: Duffington_76 Start: 51530, Stop: 51649, Start Num: 28
Candidate Starts for Duffington_76:
(Start: 28 @51530 has 62 MA's), (42, 51608), (48, 51638),

Gene: Dynamite_52 Start: 33165, Stop: 33263, Start Num: 32
Candidate Starts for Dynamite_52:
(Start: 32 @33165 has 21 MA's), (Start: 34 @33174 has 2 MA's), (38, 33198), (48, 33249),

Gene: Eddiemania_77 Start: 51804, Stop: 51923, Start Num: 28
Candidate Starts for Eddiemania_77:

(Start: 28 @51804 has 62 MA's), (38, 51861), (48, 51912),

Gene: Eevee_45 Start: 34471, Stop: 34590, Start Num: 29

Candidate Starts for Eevee_45:

(Start: 29 @34471 has 3 MA's), (35, 34501), (47, 34561), (48, 34573),

Gene: Egad_48 Start: 32582, Stop: 32707, Start Num: 30

Candidate Starts for Egad_48:

(Start: 30 @32582 has 58 MA's), (Start: 34 @32609 has 2 MA's), (37, 32621),

Gene: ElephantMan_48 Start: 35339, Stop: 35464, Start Num: 30

Candidate Starts for ElephantMan_48:

(Start: 30 @35339 has 58 MA's), (49, 35444),

Gene: Elsa_52 Start: 33235, Stop: 33333, Start Num: 32

Candidate Starts for Elsa_52:

(Start: 32 @33235 has 21 MA's), (Start: 34 @33244 has 2 MA's), (38, 33268), (40, 33274), (48, 33319),

Gene: Elver_98 Start: 54542, Stop: 54664, Start Num: 28

Candidate Starts for Elver_98:

(Start: 28 @54542 has 62 MA's),

Gene: EndAve_77 Start: 51506, Stop: 51625, Start Num: 28

Candidate Starts for EndAve_77:

(Start: 28 @51506 has 62 MA's), (38, 51563), (48, 51614),

Gene: Fazel_80 Start: 51692, Stop: 51811, Start Num: 28

Candidate Starts for Fazel_80:

(Start: 28 @51692 has 62 MA's), (48, 51800),

Gene: Figliar_74 Start: 51330, Stop: 51449, Start Num: 28

Candidate Starts for Figliar_74:

(Start: 28 @51330 has 62 MA's), (38, 51387), (48, 51438),

Gene: Football_81 Start: 50574, Stop: 50690, Start Num: 28

Candidate Starts for Football_81:

(Start: 28 @50574 has 62 MA's), (48, 50679),

Gene: FortCran_78 Start: 50947, Stop: 51063, Start Num: 28

Candidate Starts for FortCran_78:

(Start: 28 @50947 has 62 MA's), (48, 51052),

Gene: Gandionco_95 Start: 53398, Stop: 53520, Start Num: 28

Candidate Starts for Gandionco_95:

(Start: 28 @53398 has 62 MA's),

Gene: GantcherGoblin_49 Start: 33332, Stop: 33430, Start Num: 33

Candidate Starts for GantcherGoblin_49:

(17, 33251), (25, 33284), (27, 33302), (Start: 31 @33317 has 5 MA's), (Start: 33 @33332 has 7 MA's), (38, 33359), (48, 33410),

Gene: Giantsbane_49 Start: 33708, Stop: 33821, Start Num: 30

Candidate Starts for Giantsbane_49:

(Start: 30 @33708 has 58 MA's), (Start: 34 @33732 has 2 MA's), (48, 33807),

Gene: Gill_76 Start: 50642, Stop: 50758, Start Num: 28

Candidate Starts for Gill_76:

(Start: 28 @50642 has 62 MA's), (48, 50747),

Gene: Glintora_77 Start: 51707, Stop: 51826, Start Num: 28

Candidate Starts for Glintora_77:

(Start: 28 @51707 has 62 MA's), (38, 51764), (48, 51815),

Gene: GoCrazy_51 Start: 33106, Stop: 33204, Start Num: 32

Candidate Starts for GoCrazy_51:

(Start: 32 @33106 has 21 MA's), (Start: 34 @33115 has 2 MA's), (38, 33139), (40, 33145), (48, 33190),

Gene: Gordon_46 Start: 35478, Stop: 35603, Start Num: 30

Candidate Starts for Gordon_46:

(Start: 30 @35478 has 58 MA's), (49, 35583),

Gene: Gravy_75 Start: 50304, Stop: 50420, Start Num: 28

Candidate Starts for Gravy_75:

(Start: 28 @50304 has 62 MA's), (48, 50409),

Gene: Gusicorn_78 Start: 51133, Stop: 51252, Start Num: 28

Candidate Starts for Gusicorn_78:

(Start: 28 @51133 has 62 MA's), (41, 51199), (48, 51241),

Gene: Hankly_51 Start: 32380, Stop: 32478, Start Num: 32

Candidate Starts for Hankly_51:

(Start: 32 @32380 has 21 MA's), (Start: 34 @32389 has 2 MA's), (38, 32413), (40, 32419), (48, 32464),

Gene: Heisenberger_51 Start: 32661, Stop: 32759, Start Num: 32

Candidate Starts for Heisenberger_51:

(Start: 32 @32661 has 21 MA's), (Start: 34 @32670 has 2 MA's), (38, 32694), (40, 32700), (48, 32745),

Gene: Hemma_45 Start: 31669, Stop: 31785, Start Num: 30

Candidate Starts for Hemma_45:

(24, 31639), (Start: 30 @31669 has 58 MA's),

Gene: HerbBucket_49 Start: 32280, Stop: 32405, Start Num: 30

Candidate Starts for HerbBucket_49:

(Start: 30 @32280 has 58 MA's), (Start: 34 @32307 has 2 MA's), (37, 32319),

Gene: Hortihabitatio_79 Start: 52082, Stop: 52201, Start Num: 28

Candidate Starts for Hortihabitatio_79:

(Start: 28 @52082 has 62 MA's), (48, 52190),

Gene: Hydrus_76 Start: 51523, Stop: 51642, Start Num: 28

Candidate Starts for Hydrus_76:

(Start: 28 @51523 has 62 MA's), (48, 51631),

Gene: Ingrid_50 Start: 34682, Stop: 34798, Start Num: 30

Candidate Starts for Ingrid_50:

(Start: 30 @34682 has 58 MA's), (Start: 34 @34706 has 2 MA's), (41, 34739), (48, 34781),

Gene: Inked_52 Start: 35810, Stop: 35923, Start Num: 30
Candidate Starts for Inked_52:
(Start: 30 @35810 has 58 MA's), (Start: 34 @35834 has 2 MA's),

Gene: Issa_47 Start: 34704, Stop: 34829, Start Num: 30
Candidate Starts for Issa_47:
(Start: 30 @34704 has 58 MA's), (49, 34809),

Gene: JEGGS_51 Start: 32716, Stop: 32814, Start Num: 32
Candidate Starts for JEGGS_51:
(Start: 32 @32716 has 21 MA's), (Start: 34 @32725 has 2 MA's), (38, 32749), (40, 32755), (48, 32800),

Gene: JeNeSaisPas_93 Start: 53972, Stop: 54094, Start Num: 28
Candidate Starts for JeNeSaisPas_93:
(Start: 28 @53972 has 62 MA's),

Gene: Jeremy4pt0_47 Start: 32280, Stop: 32405, Start Num: 30
Candidate Starts for Jeremy4pt0_47:
(Start: 30 @32280 has 58 MA's), (Start: 34 @32307 has 2 MA's), (37, 32319),

Gene: Jodelie19_74 Start: 52497, Stop: 52616, Start Num: 28
Candidate Starts for Jodelie19_74:
(Start: 28 @52497 has 62 MA's), (38, 52554), (48, 52605),

Gene: JoyLin_45 Start: 34591, Stop: 34710, Start Num: 29
Candidate Starts for JoyLin_45:
(Start: 29 @34591 has 3 MA's), (35, 34621), (47, 34681), (48, 34693),

Gene: JulesRay_78 Start: 51296, Stop: 51412, Start Num: 28
Candidate Starts for JulesRay_78:
(Start: 28 @51296 has 62 MA's), (48, 51401),

Gene: Kardesai_53 Start: 33350, Stop: 33448, Start Num: 32
Candidate Starts for Kardesai_53:
(Start: 32 @33350 has 21 MA's), (Start: 34 @33359 has 2 MA's), (38, 33383), (48, 33434),

Gene: KeaneyLin_51 Start: 33106, Stop: 33204, Start Num: 32
Candidate Starts for KeaneyLin_51:
(Start: 32 @33106 has 21 MA's), (Start: 34 @33115 has 2 MA's), (38, 33139), (40, 33145), (48, 33190),

Gene: Kenosha_75 Start: 51351, Stop: 51470, Start Num: 28
Candidate Starts for Kenosha_75:
(Start: 28 @51351 has 62 MA's), (48, 51459),

Gene: Kerry_75 Start: 50367, Stop: 50483, Start Num: 28
Candidate Starts for Kerry_75:
(Start: 28 @50367 has 62 MA's), (48, 50472),

Gene: KevinMinion_50 Start: 34205, Stop: 34303, Start Num: 33
Candidate Starts for KevinMinion_50:
(Start: 31 @34187 has 5 MA's), (Start: 33 @34205 has 7 MA's), (38, 34232), (48, 34283),

Gene: Kinny_54 Start: 35478, Stop: 35585, Start Num: 31
Candidate Starts for Kinny_54:
(Start: 31 @35478 has 5 MA's), (Start: 34 @35496 has 2 MA's), (38, 35520), (46, 35556), (48, 35571),

Gene: Kureo_97 Start: 53552, Stop: 53674, Start Num: 28
Candidate Starts for Kureo_97:
(Start: 28 @53552 has 62 MA's),

Gene: Leathe_52 Start: 33428, Stop: 33523, Start Num: 33
Candidate Starts for Leathe_52:
(13, 33326), (15, 33335), (17, 33347), (18, 33353), (24, 33377), (Start: 31 @33413 has 5 MA's), (Start: 33 @33428 has 7 MA's), (38, 33455), (46, 33491), (48, 33506),

Gene: Lewando_54 Start: 35003, Stop: 35092, Start Num: 34
Candidate Starts for Lewando_54:
(Start: 31 @34985 has 5 MA's), (Start: 34 @35003 has 2 MA's), (38, 35027), (46, 35063), (48, 35078),

Gene: LilHuddy_50 Start: 34898, Stop: 35011, Start Num: 30
Candidate Starts for LilHuddy_50:
(Start: 30 @34898 has 58 MA's), (Start: 34 @34922 has 2 MA's), (41, 34955), (48, 34997),

Gene: Linda_48 Start: 32578, Stop: 32703, Start Num: 30
Candidate Starts for Linda_48:
(Start: 30 @32578 has 58 MA's), (Start: 34 @32605 has 2 MA's), (37, 32617),

Gene: Loretta_50 Start: 34682, Stop: 34798, Start Num: 30
Candidate Starts for Loretta_50:
(Start: 30 @34682 has 58 MA's), (Start: 34 @34706 has 2 MA's), (41, 34739), (48, 34781),

Gene: LucySwiss_48 Start: 34506, Stop: 34631, Start Num: 30
Candidate Starts for LucySwiss_48:
(Start: 30 @34506 has 58 MA's), (43, 34584), (49, 34611),

Gene: Luthien_76 Start: 51501, Stop: 51620, Start Num: 28
Candidate Starts for Luthien_76:
(Start: 28 @51501 has 62 MA's), (38, 51558), (48, 51609),

Gene: Madvan_76 Start: 50818, Stop: 50937, Start Num: 28
Candidate Starts for Madvan_76:
(Start: 28 @50818 has 62 MA's), (42, 50896), (48, 50926),

Gene: Magel_77 Start: 50557, Stop: 50673, Start Num: 28
Candidate Starts for Magel_77:
(Start: 28 @50557 has 62 MA's), (48, 50662),

Gene: MajinBuu_76 Start: 51712, Stop: 51831, Start Num: 28
Candidate Starts for MajinBuu_76:
(Start: 28 @51712 has 62 MA's), (38, 51769), (48, 51820),

Gene: Makai_48 Start: 34863, Stop: 34988, Start Num: 30
Candidate Starts for Makai_48:
(16, 34791), (22, 34818), (25, 34833), (Start: 30 @34863 has 58 MA's), (40, 34920), (49, 34968),

Gene: Mardi_51 Start: 33756, Stop: 33878, Start Num: 29
Candidate Starts for Mardi_51:
(Start: 29 @33756 has 3 MA's), (Start: 31 @33762 has 5 MA's), (Start: 33 @33780 has 7 MA's), (38, 33807), (48, 33858),

Gene: Marianna39_96 Start: 53967, Stop: 54089, Start Num: 28
Candidate Starts for Marianna39_96:
(Start: 28 @53967 has 62 MA's),

Gene: MediumFry_46 Start: 34186, Stop: 34311, Start Num: 30
Candidate Starts for MediumFry_46:
(Start: 30 @34186 has 58 MA's), (49, 34291),

Gene: Michelle_48 Start: 32580, Stop: 32705, Start Num: 30
Candidate Starts for Michelle_48:
(Start: 30 @32580 has 58 MA's), (Start: 34 @32607 has 2 MA's), (37, 32619),

Gene: MiniBagel_48 Start: 35598, Stop: 35723, Start Num: 30
Candidate Starts for MiniBagel_48:
(19, 35544), (Start: 30 @35598 has 58 MA's), (49, 35703),

Gene: Mooshroom_54 Start: 33350, Stop: 33448, Start Num: 32
Candidate Starts for Mooshroom_54:
(Start: 32 @33350 has 21 MA's), (Start: 34 @33359 has 2 MA's), (38, 33383), (40, 33389), (48, 33434),

Gene: Mossy_77 Start: 52440, Stop: 52559, Start Num: 28
Candidate Starts for Mossy_77:
(Start: 28 @52440 has 62 MA's), (48, 52548),

Gene: MrAaronian_48 Start: 32580, Stop: 32705, Start Num: 30
Candidate Starts for MrAaronian_48:
(Start: 30 @32580 has 58 MA's), (Start: 34 @32607 has 2 MA's), (37, 32619),

Gene: Mudcat_49 Start: 34074, Stop: 34172, Start Num: 32
Candidate Starts for Mudcat_49:
(Start: 32 @34074 has 21 MA's), (Start: 34 @34083 has 2 MA's), (38, 34107), (40, 34113), (48, 34158),

Gene: Muglass_53 Start: 34506, Stop: 34646, Start Num: 25
Candidate Starts for Muglass_53:
(24, 34503), (25, 34506), (Start: 31 @34539 has 5 MA's), (Start: 34 @34557 has 2 MA's), (38, 34581), (46, 34617), (48, 34632),

Gene: Mysticmoon_77 Start: 52079, Stop: 52201, Start Num: 28
Candidate Starts for Mysticmoon_77:
(1, 51815), (2, 51833), (3, 51845), (4, 51872), (5, 51875), (6, 51881), (7, 51911), (8, 51920), (9, 51974), (10, 51986), (11, 51995), (21, 52040), (Start: 28 @52079 has 62 MA's), (43, 52166), (48, 52190),

Gene: Nadmeg_76 Start: 51821, Stop: 51940, Start Num: 28
Candidate Starts for Nadmeg_76:
(Start: 28 @51821 has 62 MA's), (42, 51899), (48, 51929),

Gene: NapoleonB_52 Start: 33165, Stop: 33263, Start Num: 32
Candidate Starts for NapoleonB_52:

(Start: 32 @33165 has 21 MA's), (Start: 34 @33174 has 2 MA's), (38, 33198), (48, 33249),

Gene: Nason_52 Start: 33235, Stop: 33333, Start Num: 32

Candidate Starts for Nason_52:

(Start: 32 @33235 has 21 MA's), (Start: 34 @33244 has 2 MA's), (38, 33268), (40, 33274), (48, 33319),

Gene: Natasha_49 Start: 32374, Stop: 32499, Start Num: 30

Candidate Starts for Natasha_49:

(Start: 30 @32374 has 58 MA's), (48, 32476),

Gene: Navi1117_52 Start: 34044, Stop: 34142, Start Num: 33

Candidate Starts for Navi1117_52:

(24, 33993), (25, 33996), (26, 33999), (27, 34014), (Start: 31 @34029 has 5 MA's), (Start: 33 @34044 has 7 MA's), (38, 34071), (48, 34122),

Gene: Nightmare_50 Start: 35895, Stop: 36020, Start Num: 30

Candidate Starts for Nightmare_50:

(Start: 30 @35895 has 58 MA's), (49, 36000),

Gene: Niktson_48 Start: 35339, Stop: 35464, Start Num: 30

Candidate Starts for Niktson_48:

(Start: 30 @35339 has 58 MA's), (49, 35444),

Gene: Nithya_75 Start: 51204, Stop: 51323, Start Num: 28

Candidate Starts for Nithya_75:

(Start: 28 @51204 has 62 MA's), (42, 51282), (48, 51312),

Gene: Nivinsha_50 Start: 34832, Stop: 34957, Start Num: 30

Candidate Starts for Nivinsha_50:

(Start: 30 @34832 has 58 MA's), (49, 34937),

Gene: NoPickles_77 Start: 50463, Stop: 50579, Start Num: 28

Candidate Starts for NoPickles_77:

(Start: 28 @50463 has 62 MA's), (48, 50568),

Gene: Odesza_75 Start: 50501, Stop: 50617, Start Num: 28

Candidate Starts for Odesza_75:

(Start: 28 @50501 has 62 MA's), (48, 50606),

Gene: OhMyWard_73 Start: 52199, Stop: 52318, Start Num: 28

Candidate Starts for OhMyWard_73:

(Start: 28 @52199 has 62 MA's), (48, 52307),

Gene: OlgasClover_77 Start: 52120, Stop: 52239, Start Num: 28

Candidate Starts for OlgasClover_77:

(Start: 28 @52120 has 62 MA's), (42, 52198), (48, 52228),

Gene: Onestar_47 Start: 32126, Stop: 32251, Start Num: 30

Candidate Starts for Onestar_47:

(14, 32051), (Start: 30 @32126 has 58 MA's), (Start: 34 @32153 has 2 MA's), (37, 32165),

Gene: Paella_99 Start: 55132, Stop: 55254, Start Num: 28

Candidate Starts for Paella_99:

(Start: 28 @55132 has 62 MA's),

Gene: Perkunas_78 Start: 50566, Stop: 50679, Start Num: 28

Candidate Starts for Perkunas_78:

(Start: 28 @50566 has 62 MA's), (42, 50638), (48, 50668),

Gene: PestoPenguin_81 Start: 51133, Stop: 51252, Start Num: 28

Candidate Starts for PestoPenguin_81:

(Start: 28 @51133 has 62 MA's), (41, 51199), (48, 51241),

Gene: Petito_79 Start: 52029, Stop: 52145, Start Num: 28

Candidate Starts for Petito_79:

(Start: 28 @52029 has 62 MA's), (48, 52134),

Gene: Phaby_51 Start: 35428, Stop: 35553, Start Num: 30

Candidate Starts for Phaby_51:

(Start: 30 @35428 has 58 MA's), (48, 35530), (49, 35533),

Gene: Phaila_52 Start: 33425, Stop: 33523, Start Num: 33

Candidate Starts for Phaila_52:

(17, 33344), (18, 33350), (20, 33356), (25, 33377), (27, 33395), (Start: 31 @33410 has 5 MA's), (Start: 33 @33425 has 7 MA's), (38, 33452), (48, 33503),

Gene: Phepper_77 Start: 51060, Stop: 51179, Start Num: 28

Candidate Starts for Phepper_77:

(Start: 28 @51060 has 62 MA's), (38, 51117), (48, 51168),

Gene: Pherobrine_77 Start: 52134, Stop: 52256, Start Num: 28

Candidate Starts for Pherobrine_77:

(21, 52095), (Start: 28 @52134 has 62 MA's), (43, 52221), (48, 52245),

Gene: Pippin15_45 Start: 31372, Stop: 31491, Start Num: 28

Candidate Starts for Pippin15_45:

(23, 31342), (26, 31354), (Start: 28 @31372 has 62 MA's),

Gene: POCO6_057 Start: 66807, Stop: 66938, Start Num: 27

Candidate Starts for POCO6_057:

(12, 66732), (27, 66807), (38, 66870), (48, 66921),

Gene: PoeMe_51 Start: 33929, Stop: 34045, Start Num: 31

Candidate Starts for PoeMe_51:

(Start: 31 @33929 has 5 MA's), (Start: 33 @33947 has 7 MA's), (38, 33974), (48, 34025),

Gene: ProfFrink_48 Start: 32581, Stop: 32706, Start Num: 30

Candidate Starts for ProfFrink_48:

(Start: 30 @32581 has 58 MA's), (Start: 34 @32608 has 2 MA's), (37, 32620),

Gene: Qui_99 Start: 55132, Stop: 55254, Start Num: 28

Candidate Starts for Qui_99:

(Start: 28 @55132 has 62 MA's),

Gene: Raunak_51 Start: 32278, Stop: 32403, Start Num: 30

Candidate Starts for Raunak_51:

(Start: 30 @32278 has 58 MA's), (Start: 34 @32305 has 2 MA's), (37, 32317),

Gene: Renaldo_57 Start: 35312, Stop: 35401, Start Num: 34

Candidate Starts for Renaldo_57:

(Start: 31 @35294 has 5 MA's), (Start: 34 @35312 has 2 MA's), (38, 35336), (46, 35372), (48, 35387),

Gene: Rickmore_74 Start: 49877, Stop: 49996, Start Num: 28

Candidate Starts for Rickmore_74:

(Start: 28 @49877 has 62 MA's), (38, 49934), (48, 49985),

Gene: Roney_75 Start: 50667, Stop: 50783, Start Num: 28

Candidate Starts for Roney_75:

(Start: 28 @50667 has 62 MA's), (48, 50772),

Gene: Runhaar_75 Start: 50869, Stop: 50988, Start Num: 28

Candidate Starts for Runhaar_75:

(Start: 28 @50869 has 62 MA's), (42, 50947), (48, 50977),

Gene: RustyBoy_49 Start: 32355, Stop: 32480, Start Num: 30

Candidate Starts for RustyBoy_49:

(Start: 30 @32355 has 58 MA's), (48, 32457),

Gene: Salk_48 Start: 32578, Stop: 32703, Start Num: 30

Candidate Starts for Salk_48:

(Start: 30 @32578 has 58 MA's), (Start: 34 @32605 has 2 MA's), (37, 32617),

Gene: Schwartz33_77 Start: 51200, Stop: 51319, Start Num: 28

Candidate Starts for Schwartz33_77:

(Start: 28 @51200 has 62 MA's), (48, 51308),

Gene: ScienceWizSam_49 Start: 34940, Stop: 35065, Start Num: 30

Candidate Starts for ScienceWizSam_49:

(Start: 30 @34940 has 58 MA's), (49, 35045),

Gene: Secretariat_75 Start: 50334, Stop: 50453, Start Num: 28

Candidate Starts for Secretariat_75:

(Start: 28 @50334 has 62 MA's), (37, 50379), (48, 50442),

Gene: Serenabean_44 Start: 31433, Stop: 31573, Start Num: 30

Candidate Starts for Serenabean_44:

(Start: 30 @31433 has 58 MA's), (37, 31472), (39, 31487),

Gene: ShaggyRogers_76 Start: 50863, Stop: 50982, Start Num: 28

Candidate Starts for ShaggyRogers_76:

(Start: 28 @50863 has 62 MA's), (41, 50929), (48, 50971),

Gene: Shepard_51 Start: 34739, Stop: 34852, Start Num: 30

Candidate Starts for Shepard_51:

(Start: 30 @34739 has 58 MA's), (Start: 34 @34763 has 2 MA's), (48, 34838),

Gene: Shiba_47 Start: 32278, Stop: 32403, Start Num: 30

Candidate Starts for Shiba_47:

(Start: 30 @32278 has 58 MA's), (Start: 34 @32305 has 2 MA's), (37, 32317),

Gene: Sloopyjoe_48 Start: 32582, Stop: 32707, Start Num: 30
Candidate Starts for Sloopyjoe_48:
(Start: 30 @32582 has 58 MA's), (Start: 34 @32609 has 2 MA's), (37, 32621),

Gene: Spain_51 Start: 32580, Stop: 32705, Start Num: 30
Candidate Starts for Spain_51:
(Start: 30 @32580 has 58 MA's), (Start: 34 @32607 has 2 MA's), (37, 32619),

Gene: Sporto_49 Start: 34042, Stop: 34167, Start Num: 30
Candidate Starts for Sporto_49:
(Start: 30 @34042 has 58 MA's), (Start: 34 @34069 has 2 MA's), (37, 34081), (43, 34120),

Gene: Sprinkle_47 Start: 33056, Stop: 33181, Start Num: 30
Candidate Starts for Sprinkle_47:
(Start: 30 @33056 has 58 MA's), (Start: 32 @33074 has 21 MA's), (Start: 33 @33080 has 7 MA's), (38, 33107), (48, 33158),

Gene: StarLord_48 Start: 32581, Stop: 32706, Start Num: 30
Candidate Starts for StarLord_48:
(Start: 30 @32581 has 58 MA's), (Start: 34 @32608 has 2 MA's), (37, 32620),

Gene: Stardom_49 Start: 31842, Stop: 31940, Start Num: 32
Candidate Starts for Stardom_49:
(Start: 32 @31842 has 21 MA's), (Start: 34 @31851 has 2 MA's), (38, 31875), (40, 31881), (48, 31926),

Gene: Stardrop_51 Start: 34049, Stop: 34147, Start Num: 33
Candidate Starts for Stardrop_51:
(Start: 31 @34034 has 5 MA's), (Start: 33 @34049 has 7 MA's), (38, 34076), (46, 34112), (48, 34127),

Gene: Stayer_48 Start: 32578, Stop: 32703, Start Num: 30
Candidate Starts for Stayer_48:
(Start: 30 @32578 has 58 MA's), (Start: 34 @32605 has 2 MA's), (37, 32617),

Gene: SweetCrkHerbs_79 Start: 50579, Stop: 50692, Start Num: 28
Candidate Starts for SweetCrkHerbs_79:
(Start: 28 @50579 has 62 MA's), (42, 50651), (48, 50681),

Gene: Sweetclover_43 Start: 30218, Stop: 30346, Start Num: 30
Candidate Starts for Sweetclover_43:
(Start: 30 @30218 has 58 MA's), (50, 30329),

Gene: Synopsis_47 Start: 35008, Stop: 35133, Start Num: 30
Candidate Starts for Synopsis_47:
(Start: 30 @35008 has 58 MA's), (49, 35113),

Gene: Tairn4Wing_81 Start: 50785, Stop: 50901, Start Num: 28
Candidate Starts for Tairn4Wing_81:
(Start: 28 @50785 has 62 MA's), (48, 50890),

Gene: Talon44_80 Start: 51415, Stop: 51531, Start Num: 28
Candidate Starts for Talon44_80:
(Start: 28 @51415 has 62 MA's), (48, 51520),

Gene: Tanis_76 Start: 50487, Stop: 50603, Start Num: 28
Candidate Starts for Tanis_76:
(Start: 28 @50487 has 62 MA's), (48, 50592),

Gene: Tatanka_46 Start: 35128, Stop: 35253, Start Num: 30
Candidate Starts for Tatanka_46:
(Start: 30 @35128 has 58 MA's), (49, 35233),

Gene: Teacup_49 Start: 35368, Stop: 35493, Start Num: 30
Candidate Starts for Teacup_49:
(Start: 30 @35368 has 58 MA's), (49, 35473),

Gene: TenaciousP_76 Start: 52459, Stop: 52578, Start Num: 28
Candidate Starts for TenaciousP_76:
(Start: 28 @52459 has 62 MA's), (38, 52516), (48, 52567),

Gene: Tenney120_52 Start: 33971, Stop: 34087, Start Num: 31
Candidate Starts for Tenney120_52:
(Start: 31 @33971 has 5 MA's), (Start: 33 @33989 has 7 MA's), (38, 34016), (48, 34067),

Gene: Tenno_49 Start: 35671, Stop: 35796, Start Num: 30
Candidate Starts for Tenno_49:
(Start: 30 @35671 has 58 MA's), (49, 35776),

Gene: Tipton_51 Start: 35184, Stop: 35297, Start Num: 30
Candidate Starts for Tipton_51:
(Start: 30 @35184 has 58 MA's), (Start: 34 @35208 has 2 MA's), (48, 35283),

Gene: Tokki_53 Start: 35062, Stop: 35187, Start Num: 30
Candidate Starts for Tokki_53:
(Start: 30 @35062 has 58 MA's), (48, 35164), (49, 35167),

Gene: Tonaltzin_79 Start: 51027, Stop: 51146, Start Num: 28
Candidate Starts for Tonaltzin_79:
(Start: 28 @51027 has 62 MA's), (38, 51084), (42, 51105), (48, 51135),

Gene: Tribby_53 Start: 33173, Stop: 33274, Start Num: 32
Candidate Starts for Tribby_53:
(Start: 32 @33173 has 21 MA's), (Start: 34 @33182 has 2 MA's), (38, 33206), (40, 33212), (44, 33236),
(48, 33257),

Gene: TrixiePhattel_52 Start: 33437, Stop: 33550, Start Num: 31
Candidate Starts for TrixiePhattel_52:
(25, 33404), (27, 33422), (Start: 31 @33437 has 5 MA's), (Start: 33 @33452 has 7 MA's), (38, 33479),
(48, 33530),

Gene: Truckee_46 Start: 34653, Stop: 34778, Start Num: 30
Candidate Starts for Truckee_46:
(16, 34581), (22, 34608), (25, 34623), (Start: 30 @34653 has 58 MA's), (40, 34710), (49, 34758),

Gene: Trufflozitus_79 Start: 51300, Stop: 51416, Start Num: 28
Candidate Starts for Trufflozitus_79:

(Start: 28 @51300 has 62 MA's), (36, 51339), (48, 51405),

Gene: Trustiboi_48 Start: 35209, Stop: 35334, Start Num: 30

Candidate Starts for Trustiboi_48:

(Start: 30 @35209 has 58 MA's), (49, 35314),

Gene: Untouchable_78 Start: 52057, Stop: 52176, Start Num: 28

Candidate Starts for Untouchable_78:

(Start: 28 @52057 has 62 MA's), (42, 52135), (48, 52165),

Gene: Uzumaki_48 Start: 33429, Stop: 33545, Start Num: 31

Candidate Starts for Uzumaki_48:

(Start: 31 @33429 has 5 MA's), (Start: 33 @33447 has 7 MA's), (38, 33474), (48, 33525),

Gene: Vardy_75 Start: 50756, Stop: 50875, Start Num: 28

Candidate Starts for Vardy_75:

(Start: 28 @50756 has 62 MA's), (38, 50813), (48, 50864),

Gene: Westerlin_47 Start: 36222, Stop: 36347, Start Num: 30

Candidate Starts for Westerlin_47:

(Start: 30 @36222 has 58 MA's), (49, 36327),

Gene: Xenomorph_49 Start: 32906, Stop: 33004, Start Num: 32

Candidate Starts for Xenomorph_49:

(Start: 32 @32906 has 21 MA's), (Start: 34 @32915 has 2 MA's), (38, 32939), (40, 32945), (44, 32969), (48, 32990),

Gene: YoshiYama_52 Start: 33230, Stop: 33328, Start Num: 32

Candidate Starts for YoshiYama_52:

(Start: 32 @33230 has 21 MA's), (Start: 34 @33239 has 2 MA's), (38, 33263), (40, 33269), (48, 33314),

Gene: Yotsuba_45 Start: 34609, Stop: 34728, Start Num: 29

Candidate Starts for Yotsuba_45:

(Start: 29 @34609 has 3 MA's), (35, 34639), (47, 34699), (48, 34711),

Gene: Zeina_52 Start: 33997, Stop: 34095, Start Num: 33

Candidate Starts for Zeina_52:

(Start: 31 @33979 has 5 MA's), (Start: 33 @33997 has 7 MA's), (38, 34024), (48, 34075),

Gene: Zeph_78 Start: 51894, Stop: 52013, Start Num: 28

Candidate Starts for Zeph_78:

(Start: 28 @51894 has 62 MA's), (38, 51951), (48, 52002),

Gene: Zippen_50 Start: 35509, Stop: 35622, Start Num: 30

Candidate Starts for Zippen_50:

(Start: 30 @35509 has 58 MA's), (Start: 34 @35533 has 2 MA's), (41, 35566),