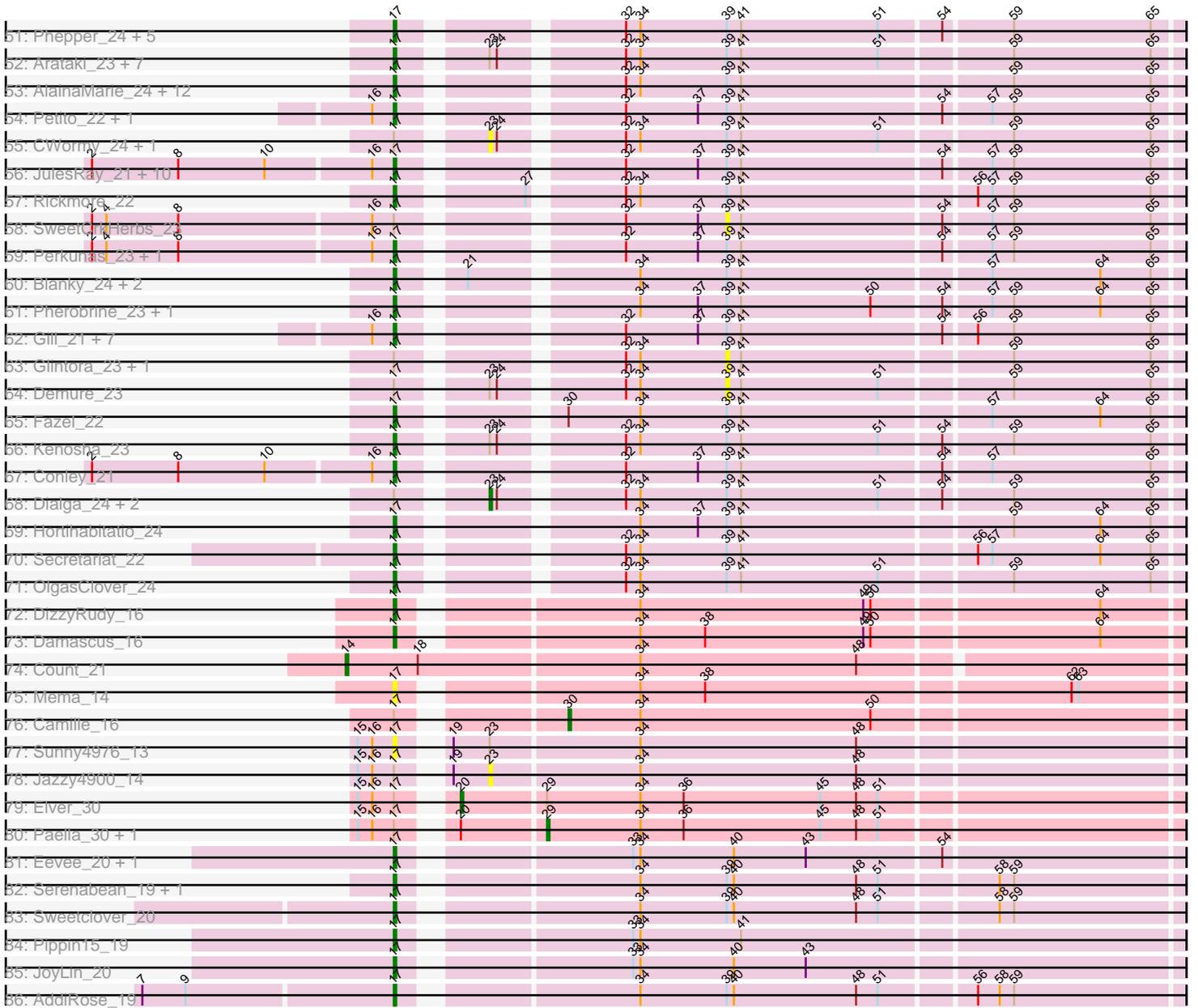Pham 289053

Pham 289053

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 289053 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289053 has 248 members, 50 are drafts.

Phages represented in each track:
• Track 1 : Heisenberger_14, Circum_14
• Track 2 : Hankly_13, KeaneyLin_13, Benllo_13, GoCrazy_13
• Track 3 : Elsa_14, Arcadia_14, Correa_14, Kardesai_13, Dynamite_14, Xenomorph_13, Nason_14, Mooshroom_14, Bowling_14, NapoleonB_14, BenitoAntonio_14, JEGGS_14, YoshiYama_13
• Track 4 : Mudcat_14, Onestar_14, Tribby_14, Cheesy_14
• Track 5 : Nightmare_16, Darby_15, Issa_15, AreFloNak_15, ScienceWizSam_16, Breylor17_16, CastorTray_17, Synepsis_14, Westerlin_15, DevitoJr_15, Nivinsha_15, Teacup_15, Trustiboi_16, Gordon_15, Tatanka_14
• Track 6 : Acai_15
• Track 7 : Brunswick_15, CapnMurica_15, Niktson_15, ElephantMan_15
• Track 8 : MiniBagel_15, Tenno_16, Dinallo_16
• Track 9 : LucySwiss_15
• Track 10 : Giantsbane_17
• Track 11 : Bouchard_16, Tokki_16, LilHuddy_16, Chlochlo_16
• Track 12 : Phaby_16, Shepard_16
• Track 13 : Ingrid_16, Loretta_16
• Track 14 : MediumFry_15, Caterpillar_15
• Track 15 : Anandi_18
• Track 16 : Makai_16, Truckee_15
• Track 17 : Navi1117_15, KevinMinion_14, GantcherGoblin_14, Zeina_15
• Track 18 : Tenney120_15, Stardrop_16
• Track 19 : Mardi_16
• Track 20 : Kinny_17, Biscute_16, Lewando_18, Barbonzobean_18
• Track 21 : Argan_14, Uzumaki_15
• Track 22 : Altjira_14
• Track 23 : Renaldo_20
• Track 24 : Phaila_14
• Track 25 : PoeMe_16
• Track 26 : TrixiePhattel_15
• Track 27 : Leathea_15
• Track 28 : Zippen_17, Inked_17
• Track 29 : Shiba_15, HerbBucket_14, DoctorPepper_15, Jeremy4pt0_14, Spain_14, ProfFrink_15, Michelle_15, Egad_15, MrAaronian_15, Djungelskog_15, Salk_15, Stayer_15, Boog_15, BronxBay_15, Sloopyjoe_15, Linda_15, Raunak_15, StarLord_15
• Track 30 : Natasha_16, RustyBoy_16

- Track 31 : Powelldog_17, Sporto_16
- Track 32 : Sprinkle_16
- Track 33 : TonyStarch_16, HazuAndZazu_16
- Track 34 : FidgetOrca_16, Maya_16, OlympicHelado_16, Namo_16, CherryBlossom_16, FrodoSwaggins_16, IceWarrior_16, Hoshi_16, Jaylociraptor_16, Meibysrarus_16, Indigenous_16, Soshi_16, Rima_16, GirlPower_15, DrGrey_16, TieDye_15, TaidaOne_16, Spectropatronm_16, Madamato_16, Esketit_16, Popy_16, Espio_17
- Track 35 : Wigberry_16
- Track 36 : PherryCruz_10, GoblinVoyage_11, Sangak_11, Doxi13_11, RavenPuff_10
- Track 37 : Bilo_11, SheRa_11, HotFries_10, Moozy_11, Annihilus_11
- Track 38 : RosaAsantewaa_11
- Track 39 : Scap1_11
- Track 40 : Monse_11
- Track 41 : Ditters_11
- Track 42 : LibertyBell_14
- Track 43 : Regigigas_14, CricKo_13, FromIndy_14, Miek_13, SendItCS_12, Rainydai_13, Thiqqums_13
- Track 44 : Bing_16
- Track 45 : Kardashian_14
- Track 46 : ClubPenguin_14
- Track 47 : Pepy6_027
- Track 48 : Poco6_028
- Track 49 : PerroGrande22_31
- Track 50 : Schwartz33_25
- Track 51 : Phepper_24, Runhaar_24, Eddiemania_25, Burley_24, Nadmeg_24, Vardy_24
- Track 52 : Arataki_23, Madvan_24, Zeph_25, Gusicorn_24, BetterYeti_24, Hydrus_25, Aloe25_26, ShaggyRogers_24
- Track 53 : AlainaMarie_24, Aflac_24, Chikenjars_24, Duffington_24, MajinBuu_24, Citrus_23, Jodelie19_24, TenaciousP_24, Nithya_24, EndAve_24, BluerMoon_24, Figliar_24, Luthien_25
- Track 54 : Petito_22, NoPickles_21
- Track 55 : CWormy_24, PestoPenguin_26
- Track 56 : JulesRay_21, Avazak_21, Dancer_21, Football_22, FortCran_21, Tairn4Wing_23, Bugg_22, Captrips_21, Artorias_21, ChickyNuggy_22, Trufflozitus_24
- Track 57 : Rickmore_22
- Track 58 : SweetCrkHerbs_23
- Track 59 : Perkunas_23, Talon44_22
- Track 60 : Blanky_24, OhMyWard_24, Mossy_25
- Track 61 : Pherobrine_23, Mysticmoon_24
- Track 62 : Gill_21, Capybara_21, Gravy_21, Magel_21, Kerry_21, Tanis_21, Odesza_21, Roney_21
- Track 63 : Glintora_23, Tonaltzin_26
- Track 64 : Demure_23
- Track 65 : Fazel_22
- Track 66 : Kenosha_23
- Track 67 : Conley_21
- Track 68 : Dialga_24, Crocheter_23, Untouchable_23
- Track 69 : Hortihabitatio_24
- Track 70 : Secretariat_22

• Track 71 : OlgasClover_24
• Track 72 : DizzyRudy_16
• Track 73 : Damascus_16
• Track 74 : Count_21
• Track 75 : Mema_14
• Track 76 : Camille_16
• Track 77 : Sunny4976_13
• Track 78 : Jazzy4900_14
• Track 79 : Elver_30
• Track 80 : Paella_30, Qui_30
• Track 81 : Eevee_20, Yotsuba_20
• Track 82 : Serenabean_19, Daddyjeff_19
• Track 83 : Sweetclover_20
• Track 84 : Pippin15_19
• Track 85 : JoyLin_20
• Track 86 : AddiRose_19

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

The start number called the most often in the published annotations is 17, it was called in 159 of the 198 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AddiRose_19, Aflac_24, AlainaMarie_24, Aloe25_26, Anandi_18, Annihilus_11, Arataki_23, Arcadia_14, AreFloNak_15, Argan_14, Artorias_21, Avazak_21, Barbonzobean_18, BenitoAntonio_14, Benllo_13, BetterYeti_24, Bilo_11, Bing_16, Biscute_16, Blanky_24, BluerMoon_24, Boog_15, Bouchard_16, Bowling_14, Breylor17_16, BronxBay_15, Brunswick_15, Bugg_22, Burley_24, CapnMurica_15, Captrips_21, Capybara_21, CastorTray_17, Caterpillar_15, Cheesy_14, ChickyNuggy_22, Chikenjars_24, Chlochlo_16, Circum_14, Citrus_23, Conley_21, Correa_14, Daddyjeff_19, Damascus_16, Dancer_21, Darby_15, DevitoJr_15, Dinallo_16, DizzyRudy_16, Djungelskog_15, DoctorPepper_15, Doxi13_11, Duffington_24, Dynamite_14, Eddiemania_25, Eevee_20, Egad_15, ElephantMan_15, Elsa_14, EndAve_24, Fazel_22, Figliar_24, Football_22, FortCran_21, GantcherGoblin_14, Giantsbane_17, Gill_21, GoCrazy_13, GoblinVoyage_11, Gordon_15, Gravy_21, Gusicorn_24, Hankly_13, Heisenberger_14, HerbBucket_14, Hortihabitatio_24, HotFries_10, Hydrus_25, Ingrid_16, Inked_17, Issa_15, JEGGS_14, Jeremy4pt0_14, Jodelie19_24, JoyLin_20, JulesRay_21, Kardashian_14, Kardesai_13, KeaneyLin_13, Kenosha_23, Kerry_21, KevinMinion_14, Kinny_17, Leathea_15, Lewando_18, LilHuddy_16, Linda_15, Loretta_16, LucySwiss_15, Luthien_25, Madvan_24, Magel_21, MajinBuu_24, Makai_16, MediumFry_15, Mema_14, Michelle_15, MiniBagel_15, Monse_11, Mooshroom_14, Moozy_11, Mossy_25, MrAaronian_15, Mudcat_14, Mysticmoon_24, Nadmeg_24, NapoleonB_14, Nason_14, Natasha_16, Navi1117_15, Nightmare_16, Niktson_15, Nithya_24, Nivinsha_15, NoPickles_21, Odesza_21, OhMyWard_24, OlgasClover_24, Onestar_14, Pepy6_027, Perkunas_23, PerroGrande22_31, Petito_22, Phaby_16, Phepper_24, Pherobrine_23, PherryCruz_10, Pippin15_19, Poco6_028, Powelldog_17, ProfFrink_15, Raunak_15, RavenPuff_10, Rickmore_22, Roney_21, RosaAsantewaa_11, Runhaar_24, RustyBoy_16, Salk_15, Sangak_11, Schwartz33_25, ScienceWizSam_16, Secretariat_22, Serenabean_19,

ShaggyRogers_24, SheRa_11, Shepard_16, Shiba_15, Sloopyjoe_15, Spain_14, Sporto_16, Sprinkle_16, StarLord_15, Stayer_15, Sunny4976_13, Sweetclover_20, Synepsis_14, Tairn4Wing_23, Talon44_22, Tanis_21, Tatanka_14, Teacup_15, TenaciousP_24, Tenno_16, Tokki_16, Tribby_14, TrixiePhattel_15, Truckee_15, Trufflozitus_24, Trustiboi_16, Uzumaki_15, Vardy_24, Westerlin_15, Wigberry_16, Xenomorph_13, YoshiYama_13, Yotsuba_20, Zeina_15, Zeph_25, Zippen_17,

Genes that have the "Most Annotated" start but do not call it:
• Acai_15, Altjira_14, CWormy_24, Camille_16, Crocheter_23, Demure_23, Dialga_24, Elver_30, Glintora_23, Jazzy4900_14, LibertyBell_14, Mardi_16, Paella_30, PestoPenguin_26, Phaila_14, PoeMe_16, Qui_30, Renaldo_20, Stardrop_16, SweetCrkHerbs_23, Tenney120_15, Tonaltzin_26, Untouchable_23,

Genes that do not have the "Most Annotated" start:
• CherryBlossom_16, ClubPenguin_14, Count_21, CricKo_13, Ditters_11, DrGrey_16, Esketit_16, Espio_17, FidgetOrca_16, FrodoSwaggins_16, FromIndy_14, GirlPower_15, HazuAndZazu_16, Hoshi_16, IceWarrior_16, Indigenous_16, Jaylociraptor_16, Madamato_16, Maya_16, Meibysrarus_16, Miek_13, Namo_16, OlympicHelado_16, Popy_16, Rainydai_13, Regigigas_14, Rima_16, Scap1_11, SendItCS_12, Soshi_16, Spectropatronm_16, TaidaOne_16, Thiqqums_13, TieDye_15, TonyStarch_16,

Summary by start number:

Start 14:
• Found in 1 of 248 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 198
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Count_21 (EL),

Start 16:
• Found in 98 of 248 (39.5%) of genes in pham
• Manual Annotations of this start: 7 of 198
• Called 9.2% of time when present
• Phage (with cluster) where this start called: CricKo_13 (BI4), FromIndy_14 (BI4), HazuAndZazu_16 (BI1), Miek_13 (BI4), Rainydai_13 (BI4), Regigigas_14 (BI4), SendItCS_12 (BI4), Thiqqums_13 (BI4), TonyStarch_16 (BI1),

Start 17:
• Found in 213 of 248 (85.9%) of genes in pham
• Manual Annotations of this start: 159 of 198
• Called 89.2% of time when present
• Phage (with cluster) where this start called: AddiRose_19 (JA), Aflac_24 (DJ), AlainaMarie_24 (DJ), Aloe25_26 (DJ), Anandi_18 (AU4), Annihilus_11 (BI2), Arataki_23 (DJ), Arcadia_14 (AM), AreFloNak_15 (AU1), Argan_14 (AU6), Artorias_21 (DJ), Avazak_21 (DJ), Barbonzobean_18 (AU6), BenitoAntonio_14 (AM), Benllo_13 (AM), BetterYeti_24 (DJ), Bilo_11 (BI2), Bing_16 (BI5), Biscute_16 (AU6), Blanky_24 (DJ), BluerMoon_24 (DJ), Boog_15 (AW), Bouchard_16 (AU2), Bowling_14 (AM), Breylor17_16 (AU1), BronxBay_15 (AW), Brunswick_15 (AU1), Bugg_22 (DJ), Burley_24 (DJ), CapnMurica_15 (AU1), Captrips_21 (DJ), Capybara_21 (DJ), CastorTray_17 (AU1), Caterpillar_15 (AU4), Cheesy_14 (AM), ChickyNuggy_22 (DJ), Chikenjars_24 (DJ), Chlochlo_16 (AU2), Circum_14 (AM), Citrus_23 (DJ), Conley_21 (DJ), Correa_14 (AM), Daddyjeff_19 (JA), Damascus_16

(EL), Dancer_21 (DJ), Darby_15 (AU1), DevitoJr_15 (AU1), Dinallo_16 (AU1), DizzyRudy_16 (EL), Djungelskog_15 (AW), DoctorPepper_15 (AW), Doxi13_11 (BI2), Duffington_24 (DJ), Dynamite_14 (AM), Eddiemania_25 (DJ), Eevee_20 (JA), Egad_15 (AW), ElephantMan_15 (AU1), Elsa_14 (AM), EndAve_24 (DJ), Fazel_22 (DJ), Figliar_24 (DJ), Football_22 (DJ), FortCran_21 (DJ), GantcherGoblin_14 (AU6), Giantsbane_17 (AU2), Gill_21 (DJ), GoCrazy_13 (AM), GoblinVoyage_11 (BI2), Gordon_15 (AU1), Gravy_21 (DJ), Gusicorn_24 (DJ), Hankly_13 (AM), Heisenberger_14 (AM), HerbBucket_14 (AW), Hortihabitatio_24 (DJ), HotFries_10 (BI2), Hydrus_25 (DJ), Ingrid_16 (AU3), Inked_17 (AU7), Issa_15 (AU1), JEGGS_14 (AM), Jeremy4pt0_14 (AW), Jodelie19_24 (DJ), JoyLin_20 (JA), JulesRay_21 (DJ), Kardashian_14 (BI6), Kardesai_13 (AM), KeaneyLin_13 (AM), Kenosha_23 (DJ), Kerry_21 (DJ), KevinMinion_14 (AU6), Kinny_17 (AU6), Leathea_15 (AU6), Lewando_18 (AU6), LilHuddy_16 (AU2), Linda_15 (AW), Loretta_16 (AU3), LucySwiss_15 (AU1), Luthien_25 (DJ), Madvan_24 (DJ), Magel_21 (DJ), MajinBuu_24 (DJ), Makai_16 (AU5), MediumFry_15 (AU4), Mema_14 (EL), Michelle_15 (AW), MiniBagel_15 (AU1), Monse_11 (BI2), Mooshroom_14 (AM), Moozy_11 (BI2), Mossy_25 (DJ), MrAaronian_15 (AW), Mudcat_14 (AM), Mysticmoon_24 (DJ), Nadmeg_24 (DJ), NapoleonB_14 (AM), Nason_14 (AM), Natasha_16 (AW), Navi1117_15 (AU6), Nightmare_16 (AU1), Niktson_15 (AU1), Nithya_24 (DJ), Nivinsha_15 (AU1), NoPickles_21 (DJ), Odesza_21 (DJ), OhMyWard_24 (DJ), OlgasClover_24 (DJ), Onestar_14 (AW), Pepy6_027 (CC), Perkunas_23 (DJ), PerroGrande22_31 (CC), Petito_22 (DJ), Phaby_16 (AU2), Phepper_24 (DJ), Pherobrine_23 (DJ), PherryCruz_10 (BI2), Pippin15_19 (JA), Poco6_028 (CC), Powelldog_17 (AW), ProfFrink_15 (AW), Raunak_15 (AW), RavenPuff_10 (BI2), Rickmore_22 (DJ), Roney_21 (DJ), RosaAsantewaa_11 (BI2), Runhaar_24 (DJ), RustyBoy_16 (AW), Salk_15 (AW), Sangak_11 (BI2), Schwartz33_25 (DJ), ScienceWizSam_16 (AU1), Secretariat_22 (DJ), Serenabean_19 (JA), ShaggyRogers_24 (DJ), SheRa_11 (BI2), Shepard_16 (AU2), Shiba_15 (AW), Sloopyjoe_15 (AW), Spain_14 (AW), Sporto_16 (AW), Sprinkle_16 (AW), StarLord_15 (AW), Stayer_15 (AW), Sunny4976_13 (FI), Sweetclover_20 (JA), Synepsis_14 (AU1), Tairn4Wing_23 (DJ), Talon44_22 (DJ), Tanis_21 (DJ), Tatanka_14 (AU1), Teacup_15 (AU1), TenaciousP_24 (DJ), Tenno_16 (AU1), Tokki_16 (AU2), Tribby_14 (AM), TrixiePhattel_15 (AU6), Truckee_15 (AU5), Trufflozitus_24 (DJ), Trustiboi_16 (AU1), Uzumaki_15 (AU6), Vardy_24 (DJ), Westerlin_15 (AU1), Wigberry_16 (BI1), Xenomorph_13 (AM), YoshiYama_13 (AM), Yotsuba_20 (JA), Zeina_15 (AU6), Zeph_25 (DJ), Zippen_17 (AU7),

Start 20:
• Found in 3 of 248 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 198
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Elver_30 (FK),

Start 21:
• Found in 4 of 248 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 198
• Called 25.0% of time when present
• Phage (with cluster) where this start called: ClubPenguin_14 (BI7),

Start 22:
• Found in 1 of 248 (0.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Renaldo_20 (AU6),

Start 23:
• Found in 17 of 248 (6.9%) of genes in pham
• Manual Annotations of this start: 2 of 198
• Called 35.3% of time when present
• Phage (with cluster) where this start called: CWormy_24 (DJ), Crocheter_23 (DJ), Dialga_24 (DJ), Jazzy4900_14 (FI), PestoPenguin_26 (DJ), Untouchable_23 (DJ),

Start 26:
• Found in 43 of 248 (17.3%) of genes in pham
• Manual Annotations of this start: 24 of 198
• Called 60.5% of time when present
• Phage (with cluster) where this start called: CherryBlossom_16 (BI1), DrGrey_16 (BI1), Esketit_16 (BI1), Espio_17 (BI1), FidgetOrca_16 (BI1), FrodoSwaggins_16 (BI1), GirlPower_15 (BI1), Hoshi_16 (BI1), IceWarrior_16 (BI1), Indigenous_16 (BI1), Jaylociraptor_16 (BI1), LibertyBell_14 (BI3), Madamato_16 (BI1), Maya_16 (BI1), Meibysrarus_16 (BI1), Namo_16 (BI1), OlympicHelado_16 (BI1), Popy_16 (BI1), Rima_16 (BI1), Scap1_11 (BI2), Soshi_16 (BI1), Spectropatronm_16 (BI1), Stardrop_16 (AU6), TaidaOne_16 (BI1), Tenney120_15 (AU6), TieDye_15 (BI1),

Start 29:
• Found in 34 of 248 (13.7%) of genes in pham
• Manual Annotations of this start: 2 of 198
• Called 8.8% of time when present
• Phage (with cluster) where this start called: Acai_15 (AU1), Paella_30 (FK), Qui_30 (FK),

Start 30:
• Found in 12 of 248 (4.8%) of genes in pham
• Manual Annotations of this start: 1 of 198
• Called 8.3% of time when present
• Phage (with cluster) where this start called: Camille_16 (EL),

Start 34:
• Found in 215 of 248 (86.7%) of genes in pham
• No Manual Annotations of this start.
• Called 1.9% of time when present
• Phage (with cluster) where this start called: Ditters_11 (BI2), Mardi_16 (AU6), Phaila_14 (AU6), PoeMe_16 (AU6),

Start 38:
• Found in 31 of 248 (12.5%) of genes in pham
• No Manual Annotations of this start.
• Called 3.2% of time when present
• Phage (with cluster) where this start called: Altjira_14 (AU6),

Start 39:
• Found in 81 of 248 (32.7%) of genes in pham
• No Manual Annotations of this start.
• Called 4.9% of time when present
• Phage (with cluster) where this start called: Demure_23 (DJ), Glintora_23 (DJ), SweetCrkHerbs_23 (DJ), Tonaltzin_26 (DJ),

Summary by clusters:

There are 22 clusters represented in this pham: DJ, FI, FK, JA, AU1, AU3, AU2, AU5, AU4, AU7, AU6, EL, CC, AM, AW, BI6, BI7, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster AM:
•Start number 17 was manually annotated 21 times for cluster AM.

Info for manual annotations of cluster AU1:
•Start number 17 was manually annotated 19 times for cluster AU1.

Info for manual annotations of cluster AU2:
•Start number 17 was manually annotated 7 times for cluster AU2.

Info for manual annotations of cluster AU3:
•Start number 17 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:
•Start number 17 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:
•Start number 17 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:
•Start number 17 was manually annotated 10 times for cluster AU6.
•Start number 26 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AU7:
•Start number 17 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:
•Start number 17 was manually annotated 18 times for cluster AW.

Info for manual annotations of cluster BI1:
•Start number 16 was manually annotated 2 times for cluster BI1.
•Start number 26 was manually annotated 21 times for cluster BI1.

Info for manual annotations of cluster BI2:
•Start number 17 was manually annotated 10 times for cluster BI2.
•Start number 26 was manually annotated 1 time for cluster BI2.

Info for manual annotations of cluster BI3:
•Start number 26 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:
•Start number 16 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:
•Start number 17 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:
•Start number 17 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:
•Start number 21 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster DJ:
•Start number 17 was manually annotated 54 times for cluster DJ.
•Start number 23 was manually annotated 2 times for cluster DJ.

Info for manual annotations of cluster EL:
•Start number 14 was manually annotated 1 time for cluster EL.
•Start number 17 was manually annotated 2 times for cluster EL.
•Start number 30 was manually annotated 1 time for cluster EL.

Info for manual annotations of cluster FK:
•Start number 20 was manually annotated 1 time for cluster FK.
•Start number 29 was manually annotated 2 times for cluster FK.

Info for manual annotations of cluster JA:
•Start number 17 was manually annotated 8 times for cluster JA.

Gene Information:
Gene: Acai_15 Start: 11690, Stop: 11947, Start Num: 29
Candidate Starts for Acai_15:
(11, 11600), (Start: 16 @11639 has 7 MA's), (Start: 17 @11648 has 159 MA's), (Start: 29 @11690 has 2 MA's), (34, 11729), (42, 11792), (48, 11819), (64, 11915),

Gene: AddiRose_19 Start: 14971, Stop: 15276, Start Num: 17
Candidate Starts for AddiRose_19:
(7, 14869), (9, 14887), (Start: 17 @14971 has 159 MA's), (34, 15058), (39, 15094), (40, 15097), (48, 15148), (51, 15157), (56, 15193), (58, 15202), (59, 15208),

Gene: Aflac_24 Start: 18141, Stop: 18443, Start Num: 17
Candidate Starts for Aflac_24:
(Start: 17 @18141 has 159 MA's), (32, 18219), (34, 18225), (39, 18261), (41, 18267), (59, 18375), (65, 18432),

Gene: AlainaMarie_24 Start: 18128, Stop: 18430, Start Num: 17
Candidate Starts for AlainaMarie_24:
(Start: 17 @18128 has 159 MA's), (32, 18206), (34, 18212), (39, 18248), (41, 18254), (59, 18362), (65, 18419),

Gene: Aloe25_26 Start: 17919, Stop: 18221, Start Num: 17
Candidate Starts for Aloe25_26:
(Start: 17 @17919 has 159 MA's), (Start: 23 @17949 has 2 MA's), (24, 17952), (32, 17997), (34, 18003), (39, 18039), (41, 18045), (51, 18102), (59, 18153), (65, 18210),

Gene: Altjira_14 Start: 11521, Stop: 11712, Start Num: 38
Candidate Starts for Altjira_14:

(Start: 17 @11410 has 159 MA's), (Start: 26 @11449 has 24 MA's), (34, 11494), (38, 11521), (44, 11566), (47, 11581), (48, 11584), (59, 11644),

Gene: Anandi_18 Start: 12091, Stop: 12390, Start Num: 17
Candidate Starts for Anandi_18:
(Start: 16 @12082 has 7 MA's), (Start: 17 @12091 has 159 MA's), (34, 12172), (48, 12262),

Gene: Annihilus_11 Start: 8133, Stop: 8435, Start Num: 17
Candidate Starts for Annihilus_11:
(Start: 17 @8133 has 159 MA's), (27, 8169), (28, 8175), (32, 8211), (34, 8217), (36, 8235), (47, 8304), (48, 8307), (50, 8313), (59, 8367), (65, 8424),

Gene: Arataki_23 Start: 17236, Stop: 17538, Start Num: 17
Candidate Starts for Arataki_23:
(Start: 17 @17236 has 159 MA's), (Start: 23 @17266 has 2 MA's), (24, 17269), (32, 17314), (34, 17320), (39, 17356), (41, 17362), (51, 17419), (59, 17470), (65, 17527),

Gene: Arcadia_14 Start: 10729, Stop: 11031, Start Num: 17
Candidate Starts for Arcadia_14:
(Start: 17 @10729 has 159 MA's), (34, 10813), (47, 10900),

Gene: AreFloNak_15 Start: 11529, Stop: 11828, Start Num: 17
Candidate Starts for AreFloNak_15:
(11, 11481), (15, 11514), (Start: 16 @11520 has 7 MA's), (Start: 17 @11529 has 159 MA's), (Start: 29 @11571 has 2 MA's), (34, 11610), (42, 11673), (48, 11700), (64, 11796),

Gene: Argan_14 Start: 10931, Stop: 11233, Start Num: 17
Candidate Starts for Argan_14:
(Start: 17 @10931 has 159 MA's), (24, 10961), (Start: 26 @10970 has 24 MA's), (34, 11015), (38, 11042), (44, 11087), (47, 11102), (48, 11105), (59, 11165),

Gene: Artorias_21 Start: 15482, Stop: 15784, Start Num: 17
Candidate Starts for Artorias_21:
(2, 15359), (8, 15395), (10, 15431), (Start: 16 @15473 has 7 MA's), (Start: 17 @15482 has 159 MA's), (32, 15560), (37, 15590), (39, 15602), (41, 15608), (54, 15689), (57, 15707), (59, 15716), (65, 15773),

Gene: Avazak_21 Start: 15489, Stop: 15791, Start Num: 17
Candidate Starts for Avazak_21:
(2, 15366), (8, 15402), (10, 15438), (Start: 16 @15480 has 7 MA's), (Start: 17 @15489 has 159 MA's), (32, 15567), (37, 15597), (39, 15609), (41, 15615), (54, 15696), (57, 15714), (59, 15723), (65, 15780),

Gene: Barbonzobean_18 Start: 12580, Stop: 12885, Start Num: 17
Candidate Starts for Barbonzobean_18:
(Start: 17 @12580 has 159 MA's), (27, 12622), (34, 12667), (39, 12703), (44, 12739), (47, 12754), (48, 12757), (57, 12808),

Gene: BenitoAntonio_14 Start: 10337, Stop: 10639, Start Num: 17
Candidate Starts for BenitoAntonio_14:
(Start: 17 @10337 has 159 MA's), (34, 10421), (47, 10508),

Gene: Benllo_13 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Benllo_13:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510), (56, 10558),

Gene: BetterYeti_24 Start: 17919, Stop: 18221, Start Num: 17
Candidate Starts for BetterYeti_24:
(Start: 17 @17919 has 159 MA's), (Start: 23 @17949 has 2 MA's), (24, 17952), (32, 17997), (34, 18003), (39, 18039), (41, 18045), (51, 18102), (59, 18153), (65, 18210),

Gene: Bilo_11 Start: 8625, Stop: 8927, Start Num: 17
Candidate Starts for Bilo_11:
(Start: 17 @8625 has 159 MA's), (27, 8661), (28, 8667), (32, 8703), (34, 8709), (36, 8727), (47, 8796), (48, 8799), (50, 8805), (59, 8859), (65, 8916),

Gene: Bing_16 Start: 10620, Stop: 10940, Start Num: 17
Candidate Starts for Bing_16:
(Start: 16 @10611 has 7 MA's), (Start: 17 @10620 has 159 MA's), (Start: 26 @10668 has 24 MA's), (32, 10710), (34, 10716), (48, 10806), (52, 10836), (53, 10839), (59, 10872),

Gene: Biscute_16 Start: 12580, Stop: 12885, Start Num: 17
Candidate Starts for Biscute_16:
(Start: 17 @12580 has 159 MA's), (27, 12622), (34, 12667), (39, 12703), (44, 12739), (47, 12754), (48, 12757), (57, 12808),

Gene: Blanky_24 Start: 19124, Stop: 19426, Start Num: 17
Candidate Starts for Blanky_24:
(Start: 17 @19124 has 159 MA's), (Start: 21 @19145 has 1 MA's), (34, 19208), (39, 19244), (41, 19250), (57, 19349), (64, 19394), (65, 19415),

Gene: BluerMoon_24 Start: 18135, Stop: 18437, Start Num: 17
Candidate Starts for BluerMoon_24:
(Start: 17 @18135 has 159 MA's), (32, 18213), (34, 18219), (39, 18255), (41, 18261), (59, 18369), (65, 18426),

Gene: Boog_15 Start: 10762, Stop: 11061, Start Num: 17
Candidate Starts for Boog_15:
(Start: 17 @10762 has 159 MA's), (24, 10792), (34, 10843), (38, 10870), (47, 10930),

Gene: Bouchard_16 Start: 12340, Stop: 12636, Start Num: 17
Candidate Starts for Bouchard_16:
(3, 12217), (4, 12220), (5, 12223), (6, 12229), (9, 12253), (11, 12292), (Start: 17 @12340 has 159 MA's), (Start: 30 @12388 has 1 MA's), (34, 12418), (47, 12505), (48, 12508), (64, 12604),

Gene: Bowling_14 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Bowling_14:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: Breylor17_16 Start: 12194, Stop: 12493, Start Num: 17
Candidate Starts for Breylor17_16:
(11, 12146), (15, 12179), (Start: 16 @12185 has 7 MA's), (Start: 17 @12194 has 159 MA's), (Start: 29 @12236 has 2 MA's), (34, 12275), (42, 12338), (48, 12365), (64, 12461),

Gene: BronxBay_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for BronxBay_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Brunswick_15 Start: 11644, Stop: 11943, Start Num: 17
Candidate Starts for Brunswick_15:
(11, 11596), (Start: 16 @11635 has 7 MA's), (Start: 17 @11644 has 159 MA's), (Start: 29 @11686 has 2 MA's), (34, 11725), (42, 11788), (48, 11815), (64, 11911),

Gene: Bugg_22 Start: 15495, Stop: 15797, Start Num: 17
Candidate Starts for Bugg_22:
(2, 15372), (8, 15408), (10, 15444), (Start: 16 @15486 has 7 MA's), (Start: 17 @15495 has 159 MA's), (32, 15573), (37, 15603), (39, 15615), (41, 15621), (54, 15702), (57, 15720), (59, 15729), (65, 15786),

Gene: Burley_24 Start: 17881, Stop: 18183, Start Num: 17
Candidate Starts for Burley_24:
(Start: 17 @17881 has 159 MA's), (32, 17959), (34, 17965), (39, 18001), (41, 18007), (51, 18064), (54, 18088), (59, 18115), (65, 18172),

Gene: CWormy_24 Start: 17610, Stop: 17882, Start Num: 23
Candidate Starts for CWormy_24:
(Start: 17 @17580 has 159 MA's), (Start: 23 @17610 has 2 MA's), (24, 17613), (32, 17658), (34, 17664), (39, 17700), (41, 17706), (51, 17763), (59, 17814), (65, 17871),

Gene: Camille_16 Start: 10644, Stop: 10892, Start Num: 30
Candidate Starts for Camille_16:
(Start: 17 @10587 has 159 MA's), (Start: 30 @10644 has 1 MA's), (34, 10674), (50, 10770),

Gene: CapnMurica_15 Start: 12744, Stop: 13043, Start Num: 17
Candidate Starts for CapnMurica_15:
(11, 12696), (Start: 16 @12735 has 7 MA's), (Start: 17 @12744 has 159 MA's), (Start: 29 @12786 has 2 MA's), (34, 12825), (42, 12888), (48, 12915), (64, 13011),

Gene: Captrips_21 Start: 15489, Stop: 15791, Start Num: 17
Candidate Starts for Captrips_21:
(2, 15366), (8, 15402), (10, 15438), (Start: 16 @15480 has 7 MA's), (Start: 17 @15489 has 159 MA's), (32, 15567), (37, 15597), (39, 15609), (41, 15615), (54, 15696), (57, 15714), (59, 15723), (65, 15780),

Gene: Capybara_21 Start: 15208, Stop: 15510, Start Num: 17
Candidate Starts for Capybara_21:
(Start: 16 @15199 has 7 MA's), (Start: 17 @15208 has 159 MA's), (32, 15286), (37, 15316), (39, 15328), (41, 15334), (54, 15415), (56, 15427), (59, 15442), (65, 15499),

Gene: CastorTray_17 Start: 12045, Stop: 12344, Start Num: 17
Candidate Starts for CastorTray_17:
(11, 11997), (15, 12030), (Start: 16 @12036 has 7 MA's), (Start: 17 @12045 has 159 MA's), (Start: 29 @12087 has 2 MA's), (34, 12126), (42, 12189), (48, 12216), (64, 12312),

Gene: Caterpillar_15 Start: 11214, Stop: 11513, Start Num: 17
Candidate Starts for Caterpillar_15:
(15, 11199), (Start: 17 @11214 has 159 MA's), (Start: 29 @11256 has 2 MA's), (34, 11295), (42, 11358), (48, 11385),

Gene: Cheesy_14 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Cheesy_14:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: CherryBlossom_16 Start: 11145, Stop: 11411, Start Num: 26
Candidate Starts for CherryBlossom_16:
(Start: 16 @11088 has 7 MA's), (Start: 26 @11145 has 24 MA's), (34, 11193), (59, 11343),

Gene: ChickyNuggy_22 Start: 15200, Stop: 15502, Start Num: 17
Candidate Starts for ChickyNuggy_22:
(2, 15077), (8, 15113), (10, 15149), (Start: 16 @15191 has 7 MA's), (Start: 17 @15200 has 159 MA's),
(32, 15278), (37, 15308), (39, 15320), (41, 15326), (54, 15407), (57, 15425), (59, 15434), (65, 15491),

Gene: Chikenjars_24 Start: 18131, Stop: 18433, Start Num: 17
Candidate Starts for Chikenjars_24:
(Start: 17 @18131 has 159 MA's), (32, 18209), (34, 18215), (39, 18251), (41, 18257), (59, 18365), (65,
18422),

Gene: Chlochlo_16 Start: 12369, Stop: 12665, Start Num: 17
Candidate Starts for Chlochlo_16:
(3, 12246), (4, 12249), (5, 12252), (6, 12258), (9, 12282), (11, 12321), (Start: 17 @12369 has 159
MA's), (Start: 30 @12417 has 1 MA's), (34, 12447), (47, 12534), (48, 12537), (64, 12633),

Gene: Circum_14 Start: 10342, Stop: 10644, Start Num: 17
Candidate Starts for Circum_14:
(Start: 17 @10342 has 159 MA's), (34, 10426), (47, 10513), (56, 10561),

Gene: Citrus_23 Start: 18135, Stop: 18437, Start Num: 17
Candidate Starts for Citrus_23:
(Start: 17 @18135 has 159 MA's), (32, 18213), (34, 18219), (39, 18255), (41, 18261), (59, 18369), (65,
18426),

Gene: ClubPenguin_14 Start: 11154, Stop: 11441, Start Num: 21
Candidate Starts for ClubPenguin_14:
(Start: 16 @11127 has 7 MA's), (Start: 21 @11154 has 1 MA's), (Start: 26 @11175 has 24 MA's), (32,
11217), (34, 11223), (36, 11241), (62, 11397),

Gene: Conley_21 Start: 15506, Stop: 15808, Start Num: 17
Candidate Starts for Conley_21:
(2, 15383), (8, 15419), (10, 15455), (Start: 16 @15497 has 7 MA's), (Start: 17 @15506 has 159 MA's),
(32, 15584), (37, 15614), (39, 15626), (41, 15632), (54, 15713), (57, 15731), (65, 15797),

Gene: Correa_14 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Correa_14:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: Count_21 Start: 13666, Stop: 14001, Start Num: 14
Candidate Starts for Count_21:
(Start: 14 @13666 has 1 MA's), (18, 13696), (34, 13786), (48, 13876),

Gene: CricKo_13 Start: 9815, Stop: 10138, Start Num: 16
Candidate Starts for CricKo_13:
(Start: 16 @9815 has 7 MA's), (48, 10010), (50, 10016),

Gene: Crocheter_23 Start: 16871, Stop: 17143, Start Num: 23
Candidate Starts for Crocheter_23:

(Start: 17 @16841 has 159 MA's), (Start: 23 @16871 has 2 MA's), (24, 16874), (32, 16919), (34, 16925), (39, 16961), (41, 16967), (51, 17024), (54, 17048), (59, 17075), (65, 17132),

Gene: Daddyjeff_19 Start: 14937, Stop: 15242, Start Num: 17
Candidate Starts for Daddyjeff_19:
(Start: 17 @14937 has 159 MA's), (34, 15024), (39, 15060), (40, 15063), (48, 15114), (51, 15123), (58, 15168), (59, 15174),

Gene: Damascus_16 Start: 10466, Stop: 10771, Start Num: 17
Candidate Starts for Damascus_16:
(Start: 17 @10466 has 159 MA's), (34, 10553), (38, 10580), (49, 10646), (50, 10649), (64, 10739),

Gene: Dancer_21 Start: 15188, Stop: 15490, Start Num: 17
Candidate Starts for Dancer_21:
(2, 15065), (8, 15101), (10, 15137), (Start: 16 @15179 has 7 MA's), (Start: 17 @15188 has 159 MA's), (32, 15266), (37, 15296), (39, 15308), (41, 15314), (54, 15395), (57, 15413), (59, 15422), (65, 15479),

Gene: Darby_15 Start: 11511, Stop: 11810, Start Num: 17
Candidate Starts for Darby_15:
(11, 11463), (15, 11496), (Start: 16 @11502 has 7 MA's), (Start: 17 @11511 has 159 MA's), (Start: 29 @11553 has 2 MA's), (34, 11592), (42, 11655), (48, 11682), (64, 11778),

Gene: Demure_23 Start: 17356, Stop: 17538, Start Num: 39
Candidate Starts for Demure_23:
(Start: 17 @17236 has 159 MA's), (Start: 23 @17266 has 2 MA's), (24, 17269), (32, 17314), (34, 17320), (39, 17356), (41, 17362), (51, 17419), (59, 17470), (65, 17527),

Gene: DevitoJr_15 Start: 11650, Stop: 11949, Start Num: 17
Candidate Starts for DevitoJr_15:
(11, 11602), (15, 11635), (Start: 16 @11641 has 7 MA's), (Start: 17 @11650 has 159 MA's), (Start: 29 @11692 has 2 MA's), (34, 11731), (42, 11794), (48, 11821), (64, 11917),

Gene: Dialga_24 Start: 16893, Stop: 17165, Start Num: 23
Candidate Starts for Dialga_24:
(Start: 17 @16863 has 159 MA's), (Start: 23 @16893 has 2 MA's), (24, 16896), (32, 16941), (34, 16947), (39, 16983), (41, 16989), (51, 17046), (54, 17070), (59, 17097), (65, 17154),

Gene: Dinallo_16 Start: 12741, Stop: 13037, Start Num: 17
Candidate Starts for Dinallo_16:
(Start: 16 @12732 has 7 MA's), (Start: 17 @12741 has 159 MA's), (25, 12771), (Start: 29 @12780 has 2 MA's), (34, 12819), (42, 12882), (48, 12909), (64, 13005),

Gene: Ditters_11 Start: 8728, Stop: 8946, Start Num: 34
Candidate Starts for Ditters_11:
(Start: 16 @8632 has 7 MA's), (Start: 26 @8680 has 24 MA's), (32, 8722), (34, 8728), (47, 8815), (50, 8824), (65, 8935),

Gene: DizzyRudy_16 Start: 10464, Stop: 10769, Start Num: 17
Candidate Starts for DizzyRudy_16:
(Start: 17 @10464 has 159 MA's), (34, 10551), (49, 10644), (50, 10647), (64, 10737),

Gene: Djungelskog_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Djungelskog_15:

(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: DoctorPepper_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for DoctorPepper_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Doxi13_11 Start: 8104, Stop: 8406, Start Num: 17
Candidate Starts for Doxi13_11:
(Start: 17 @8104 has 159 MA's), (28, 8146), (32, 8182), (34, 8188), (36, 8206), (47, 8275), (48, 8278), (50, 8284), (59, 8338), (65, 8395),

Gene: DrGrey_16 Start: 11647, Stop: 11913, Start Num: 26
Candidate Starts for DrGrey_16:
(Start: 16 @11590 has 7 MA's), (Start: 26 @11647 has 24 MA's), (34, 11695), (59, 11845),

Gene: Duffington_24 Start: 18116, Stop: 18418, Start Num: 17
Candidate Starts for Duffington_24:
(Start: 17 @18116 has 159 MA's), (32, 18194), (34, 18200), (39, 18236), (41, 18242), (59, 18350), (65, 18407),

Gene: Dynamite_14 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Dynamite_14:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: Eddiemania_25 Start: 18778, Stop: 19080, Start Num: 17
Candidate Starts for Eddiemania_25:
(Start: 17 @18778 has 159 MA's), (32, 18856), (34, 18862), (39, 18898), (41, 18904), (51, 18961), (54, 18985), (59, 19012), (65, 19069),

Gene: Eevee_20 Start: 16839, Stop: 17144, Start Num: 17
Candidate Starts for Eevee_20:
(Start: 17 @16839 has 159 MA's), (33, 16923), (34, 16926), (40, 16965), (43, 16995), (54, 17049),

Gene: Egad_15 Start: 10762, Stop: 11061, Start Num: 17
Candidate Starts for Egad_15:
(Start: 17 @10762 has 159 MA's), (24, 10792), (34, 10843), (38, 10870), (47, 10930),

Gene: ElephantMan_15 Start: 12215, Stop: 12514, Start Num: 17
Candidate Starts for ElephantMan_15:
(11, 12167), (Start: 16 @12206 has 7 MA's), (Start: 17 @12215 has 159 MA's), (Start: 29 @12257 has 2 MA's), (34, 12296), (42, 12359), (48, 12386), (64, 12482),

Gene: Elsa_14 Start: 10729, Stop: 11031, Start Num: 17
Candidate Starts for Elsa_14:
(Start: 17 @10729 has 159 MA's), (34, 10813), (47, 10900),

Gene: Elver_30 Start: 21104, Stop: 21394, Start Num: 20
Candidate Starts for Elver_30:
(15, 21074), (Start: 16 @21080 has 7 MA's), (Start: 17 @21089 has 159 MA's), (Start: 20 @21104 has 1 MA's), (Start: 29 @21137 has 2 MA's), (34, 21176), (36, 21194), (45, 21251), (48, 21266), (51, 21275),

Gene: EndAve_24 Start: 18131, Stop: 18433, Start Num: 17

Candidate Starts for EndAve_24:
(Start: 17 @18131 has 159 MA's), (32, 18209), (34, 18215), (39, 18251), (41, 18257), (59, 18365), (65, 18422),

Gene: Esketit_16 Start: 11128, Stop: 11394, Start Num: 26
Candidate Starts for Esketit_16:
(Start: 16 @11071 has 7 MA's), (Start: 26 @11128 has 24 MA's), (34, 11176), (59, 11326),

Gene: Espio_17 Start: 11648, Stop: 11914, Start Num: 26
Candidate Starts for Espio_17:
(Start: 16 @11591 has 7 MA's), (Start: 26 @11648 has 24 MA's), (34, 11696), (59, 11846),

Gene: Fazel_22 Start: 17164, Stop: 17466, Start Num: 17
Candidate Starts for Fazel_22:
(Start: 17 @17164 has 159 MA's), (Start: 30 @17218 has 1 MA's), (34, 17248), (39, 17284), (41, 17290), (57, 17389), (64, 17434), (65, 17455),

Gene: FidgetOrca_16 Start: 11134, Stop: 11400, Start Num: 26
Candidate Starts for FidgetOrca_16:
(Start: 16 @11077 has 7 MA's), (Start: 26 @11134 has 24 MA's), (34, 11182), (59, 11332),

Gene: Figliar_24 Start: 18141, Stop: 18443, Start Num: 17
Candidate Starts for Figliar_24:
(Start: 17 @18141 has 159 MA's), (32, 18219), (34, 18225), (39, 18261), (41, 18267), (59, 18375), (65, 18432),

Gene: Football_22 Start: 15200, Stop: 15502, Start Num: 17
Candidate Starts for Football_22:
(2, 15077), (8, 15113), (10, 15149), (Start: 16 @15191 has 7 MA's), (Start: 17 @15200 has 159 MA's), (32, 15278), (37, 15308), (39, 15320), (41, 15326), (54, 15407), (57, 15425), (59, 15434), (65, 15491),

Gene: FortCran_21 Start: 15482, Stop: 15784, Start Num: 17
Candidate Starts for FortCran_21:
(2, 15359), (8, 15395), (10, 15431), (Start: 16 @15473 has 7 MA's), (Start: 17 @15482 has 159 MA's), (32, 15560), (37, 15590), (39, 15602), (41, 15608), (54, 15689), (57, 15707), (59, 15716), (65, 15773),

Gene: FrodoSwaggins_16 Start: 11647, Stop: 11913, Start Num: 26
Candidate Starts for FrodoSwaggins_16:
(Start: 16 @11590 has 7 MA's), (Start: 26 @11647 has 24 MA's), (34, 11695), (59, 11845),

Gene: FromIndy_14 Start: 9800, Stop: 10123, Start Num: 16
Candidate Starts for FromIndy_14:
(Start: 16 @9800 has 7 MA's), (48, 9995), (50, 10001),

Gene: GantcherGoblin_14 Start: 10931, Stop: 11233, Start Num: 17
Candidate Starts for GantcherGoblin_14:
(Start: 17 @10931 has 159 MA's), (Start: 26 @10970 has 24 MA's), (34, 11015), (38, 11042), (44, 11087), (47, 11102), (48, 11105), (59, 11165),

Gene: Giantsbane_17 Start: 12880, Stop: 13176, Start Num: 17
Candidate Starts for Giantsbane_17:
(Start: 17 @12880 has 159 MA's), (Start: 29 @12919 has 2 MA's), (Start: 30 @12928 has 1 MA's), (34, 12958), (42, 13021), (48, 13048), (64, 13144),

Gene: Gill_21 Start: 15208, Stop: 15510, Start Num: 17
Candidate Starts for Gill_21:
(Start: 16 @15199 has 7 MA's), (Start: 17 @15208 has 159 MA's), (32, 15286), (37, 15316), (39, 15328), (41, 15334), (54, 15415), (56, 15427), (59, 15442), (65, 15499),

Gene: GirlPower_15 Start: 12613, Stop: 12879, Start Num: 26
Candidate Starts for GirlPower_15:
(Start: 16 @12556 has 7 MA's), (Start: 26 @12613 has 24 MA's), (34, 12661), (59, 12811),

Gene: Glintora_23 Start: 18221, Stop: 18403, Start Num: 39
Candidate Starts for Glintora_23:
(Start: 17 @18101 has 159 MA's), (32, 18179), (34, 18185), (39, 18221), (41, 18227), (59, 18335), (65, 18392),

Gene: GoCrazy_13 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for GoCrazy_13:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510), (56, 10558),

Gene: GoblinVoyage_11 Start: 8104, Stop: 8406, Start Num: 17
Candidate Starts for GoblinVoyage_11:
(Start: 17 @8104 has 159 MA's), (28, 8146), (32, 8182), (34, 8188), (36, 8206), (47, 8275), (48, 8278), (50, 8284), (59, 8338), (65, 8395),

Gene: Gordon_15 Start: 12774, Stop: 13073, Start Num: 17
Candidate Starts for Gordon_15:
(11, 12726), (15, 12759), (Start: 16 @12765 has 7 MA's), (Start: 17 @12774 has 159 MA's), (Start: 29 @12816 has 2 MA's), (34, 12855), (42, 12918), (48, 12945), (64, 13041),

Gene: Gravy_21 Start: 15208, Stop: 15510, Start Num: 17
Candidate Starts for Gravy_21:
(Start: 16 @15199 has 7 MA's), (Start: 17 @15208 has 159 MA's), (32, 15286), (37, 15316), (39, 15328), (41, 15334), (54, 15415), (56, 15427), (59, 15442), (65, 15499),

Gene: Gusicorn_24 Start: 17919, Stop: 18221, Start Num: 17
Candidate Starts for Gusicorn_24:
(Start: 17 @17919 has 159 MA's), (Start: 23 @17949 has 2 MA's), (24, 17952), (32, 17997), (34, 18003), (39, 18039), (41, 18045), (51, 18102), (59, 18153), (65, 18210),

Gene: Hankly_13 Start: 10363, Stop: 10665, Start Num: 17
Candidate Starts for Hankly_13:
(Start: 17 @10363 has 159 MA's), (34, 10447), (47, 10534), (56, 10582),

Gene: HazuAndZazu_16 Start: 11591, Stop: 11914, Start Num: 16
Candidate Starts for HazuAndZazu_16:
(Start: 16 @11591 has 7 MA's), (Start: 26 @11648 has 24 MA's), (34, 11696), (59, 11846),

Gene: Heisenberger_14 Start: 10342, Stop: 10644, Start Num: 17
Candidate Starts for Heisenberger_14:
(Start: 17 @10342 has 159 MA's), (34, 10426), (47, 10513), (56, 10561),

Gene: HerbBucket_14 Start: 10762, Stop: 11061, Start Num: 17
Candidate Starts for HerbBucket_14:

(Start: 17 @10762 has 159 MA's), (24, 10792), (34, 10843), (38, 10870), (47, 10930),

Gene: Hortihabitatio_24 Start: 17544, Stop: 17846, Start Num: 17
Candidate Starts for Hortihabitatio_24:
(Start: 17 @17544 has 159 MA's), (34, 17628), (37, 17652), (39, 17664), (41, 17670), (59, 17778), (64, 17814), (65, 17835),

Gene: Hoshi_16 Start: 11128, Stop: 11394, Start Num: 26
Candidate Starts for Hoshi_16:
(Start: 16 @11071 has 7 MA's), (Start: 26 @11128 has 24 MA's), (34, 11176), (59, 11326),

Gene: HotFries_10 Start: 8103, Stop: 8405, Start Num: 17
Candidate Starts for HotFries_10:
(Start: 17 @8103 has 159 MA's), (27, 8139), (28, 8145), (32, 8181), (34, 8187), (36, 8205), (47, 8274), (48, 8277), (50, 8283), (59, 8337), (65, 8394),

Gene: Hydrus_25 Start: 18648, Stop: 18950, Start Num: 17
Candidate Starts for Hydrus_25:
(Start: 17 @18648 has 159 MA's), (Start: 23 @18678 has 2 MA's), (24, 18681), (32, 18726), (34, 18732), (39, 18768), (41, 18774), (51, 18831), (59, 18882), (65, 18939),

Gene: IceWarrior_16 Start: 11128, Stop: 11394, Start Num: 26
Candidate Starts for IceWarrior_16:
(Start: 16 @11071 has 7 MA's), (Start: 26 @11128 has 24 MA's), (34, 11176), (59, 11326),

Gene: Indigenous_16 Start: 11128, Stop: 11394, Start Num: 26
Candidate Starts for Indigenous_16:
(Start: 16 @11071 has 7 MA's), (Start: 26 @11128 has 24 MA's), (34, 11176), (59, 11326),

Gene: Ingrid_16 Start: 12505, Stop: 12804, Start Num: 17
Candidate Starts for Ingrid_16:
(11, 12457), (15, 12490), (Start: 16 @12496 has 7 MA's), (Start: 17 @12505 has 159 MA's), (Start: 29 @12547 has 2 MA's), (34, 12586), (48, 12676), (63, 12763),

Gene: Inked_17 Start: 12280, Stop: 12579, Start Num: 17
Candidate Starts for Inked_17:
(11, 12232), (15, 12265), (Start: 16 @12271 has 7 MA's), (Start: 17 @12280 has 159 MA's), (Start: 29 @12322 has 2 MA's), (34, 12361), (48, 12451), (55, 12493),

Gene: Issa_15 Start: 11484, Stop: 11783, Start Num: 17
Candidate Starts for Issa_15:
(11, 11436), (15, 11469), (Start: 16 @11475 has 7 MA's), (Start: 17 @11484 has 159 MA's), (Start: 29 @11526 has 2 MA's), (34, 11565), (42, 11628), (48, 11655), (64, 11751),

Gene: JEGGS_14 Start: 10341, Stop: 10643, Start Num: 17
Candidate Starts for JEGGS_14:
(Start: 17 @10341 has 159 MA's), (34, 10425), (47, 10512),

Gene: Jaylociraptor_16 Start: 11128, Stop: 11394, Start Num: 26
Candidate Starts for Jaylociraptor_16:
(Start: 16 @11071 has 7 MA's), (Start: 26 @11128 has 24 MA's), (34, 11176), (59, 11326),

Gene: Jazzy4900_14 Start: 10104, Stop: 10382, Start Num: 23

Candidate Starts for Jazzy4900_14:
(15, 10062), (Start: 16 @10068 has 7 MA's), (Start: 17 @10077 has 159 MA's), (19, 10089), (Start: 23 @10104 has 2 MA's), (34, 10164), (48, 10254),

Gene: Jeremy4pt0_14 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Jeremy4pt0_14:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Jodelie19_24 Start: 18135, Stop: 18437, Start Num: 17
Candidate Starts for Jodelie19_24:
(Start: 17 @18135 has 159 MA's), (32, 18213), (34, 18219), (39, 18255), (41, 18261), (59, 18369), (65, 18426),

Gene: JoyLin_20 Start: 16830, Stop: 17135, Start Num: 17
Candidate Starts for JoyLin_20:
(Start: 17 @16830 has 159 MA's), (33, 16914), (34, 16917), (40, 16956), (43, 16986),

Gene: JulesRay_21 Start: 15482, Stop: 15784, Start Num: 17
Candidate Starts for JulesRay_21:
(2, 15359), (8, 15395), (10, 15431), (Start: 16 @15473 has 7 MA's), (Start: 17 @15482 has 159 MA's), (32, 15560), (37, 15590), (39, 15602), (41, 15608), (54, 15689), (57, 15707), (59, 15716), (65, 15773),

Gene: Kardashian_14 Start: 10831, Stop: 11148, Start Num: 17
Candidate Starts for Kardashian_14:
(Start: 16 @10822 has 7 MA's), (Start: 17 @10831 has 159 MA's), (25, 10873), (27, 10882), (34, 10927), (48, 11017), (60, 11086),

Gene: Kardesai_13 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Kardesai_13:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: KeaneyLin_13 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for KeaneyLin_13:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510), (56, 10558),

Gene: Kenosha_23 Start: 17252, Stop: 17554, Start Num: 17
Candidate Starts for Kenosha_23:
(Start: 17 @17252 has 159 MA's), (Start: 23 @17282 has 2 MA's), (24, 17285), (32, 17330), (34, 17336), (39, 17372), (41, 17378), (51, 17435), (54, 17459), (59, 17486), (65, 17543),

Gene: Kerry_21 Start: 15208, Stop: 15510, Start Num: 17
Candidate Starts for Kerry_21:
(Start: 16 @15199 has 7 MA's), (Start: 17 @15208 has 159 MA's), (32, 15286), (37, 15316), (39, 15328), (41, 15334), (54, 15415), (56, 15427), (59, 15442), (65, 15499),

Gene: KevinMinion_14 Start: 11090, Stop: 11392, Start Num: 17
Candidate Starts for KevinMinion_14:
(Start: 17 @11090 has 159 MA's), (Start: 26 @11129 has 24 MA's), (34, 11174), (38, 11201), (44, 11246), (47, 11261), (48, 11264), (59, 11324),

Gene: Kinny_17 Start: 12884, Stop: 13189, Start Num: 17
Candidate Starts for Kinny_17:

(Start: 17 @12884 has 159 MA's), (27, 12926), (34, 12971), (39, 13007), (44, 13043), (47, 13058), (48, 13061), (57, 13112),

Gene: Leathea_15 Start: 11101, Stop: 11406, Start Num: 17
Candidate Starts for Leathea_15:
(9, 11014), (13, 11080), (Start: 17 @11101 has 159 MA's), (34, 11188), (47, 11275), (48, 11278), (57, 11329),

Gene: Lewando_18 Start: 12883, Stop: 13188, Start Num: 17
Candidate Starts for Lewando_18:
(Start: 17 @12883 has 159 MA's), (27, 12925), (34, 12970), (39, 13006), (44, 13042), (47, 13057), (48, 13060), (57, 13111),

Gene: LibertyBell_14 Start: 9801, Stop: 10067, Start Num: 26
Candidate Starts for LibertyBell_14:
(Start: 16 @9753 has 7 MA's), (Start: 17 @9762 has 159 MA's), (Start: 26 @9801 has 24 MA's), (32, 9843), (34, 9849), (48, 9939), (59, 9999), (60, 10008),

Gene: LilHuddy_16 Start: 12342, Stop: 12638, Start Num: 17
Candidate Starts for LilHuddy_16:
(3, 12219), (4, 12222), (5, 12225), (6, 12231), (9, 12255), (11, 12294), (Start: 17 @12342 has 159 MA's), (Start: 30 @12390 has 1 MA's), (34, 12420), (47, 12507), (48, 12510), (64, 12606),

Gene: Linda_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Linda_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Loretta_16 Start: 12505, Stop: 12804, Start Num: 17
Candidate Starts for Loretta_16:
(11, 12457), (15, 12490), (Start: 16 @12496 has 7 MA's), (Start: 17 @12505 has 159 MA's), (Start: 29 @12547 has 2 MA's), (34, 12586), (48, 12676), (63, 12763),

Gene: LucySwiss_15 Start: 11509, Stop: 11808, Start Num: 17
Candidate Starts for LucySwiss_15:
(1, 11377), (3, 11386), (4, 11389), (6, 11398), (11, 11461), (15, 11494), (Start: 16 @11500 has 7 MA's), (Start: 17 @11509 has 159 MA's), (Start: 29 @11551 has 2 MA's), (34, 11590), (42, 11653), (48, 11680),

Gene: Luthien_25 Start: 18129, Stop: 18431, Start Num: 17
Candidate Starts for Luthien_25:
(Start: 17 @18129 has 159 MA's), (32, 18207), (34, 18213), (39, 18249), (41, 18255), (59, 18363), (65, 18420),

Gene: Madamato_16 Start: 11113, Stop: 11379, Start Num: 26
Candidate Starts for Madamato_16:
(Start: 16 @11056 has 7 MA's), (Start: 26 @11113 has 24 MA's), (34, 11161), (59, 11311),

Gene: Madvan_24 Start: 17914, Stop: 18216, Start Num: 17
Candidate Starts for Madvan_24:
(Start: 17 @17914 has 159 MA's), (Start: 23 @17944 has 2 MA's), (24, 17947), (32, 17992), (34, 17998), (39, 18034), (41, 18040), (51, 18097), (59, 18148), (65, 18205),

Gene: Magel_21 Start: 15208, Stop: 15510, Start Num: 17

Candidate Starts for Magel_21:
(Start: 16 @15199 has 7 MA's), (Start: 17 @15208 has 159 MA's), (32, 15286), (37, 15316), (39, 15328), (41, 15334), (54, 15415), (56, 15427), (59, 15442), (65, 15499),

Gene: MajinBuu_24 Start: 18136, Stop: 18438, Start Num: 17
Candidate Starts for MajinBuu_24:
(Start: 17 @18136 has 159 MA's), (32, 18214), (34, 18220), (39, 18256), (41, 18262), (59, 18370), (65, 18427),

Gene: Makai_16 Start: 12188, Stop: 12484, Start Num: 17
Candidate Starts for Makai_16:
(Start: 17 @12188 has 159 MA's), (24, 12215), (25, 12218), (Start: 30 @12236 has 1 MA's), (34, 12266), (35, 12269), (47, 12353), (48, 12356), (63, 12443),

Gene: Mardi_16 Start: 11603, Stop: 11821, Start Num: 34
Candidate Starts for Mardi_16:
(Start: 17 @11519 has 159 MA's), (24, 11549), (Start: 26 @11558 has 24 MA's), (34, 11603), (44, 11675), (47, 11690), (48, 11693), (59, 11753),

Gene: Maya_16 Start: 11142, Stop: 11408, Start Num: 26
Candidate Starts for Maya_16:
(Start: 16 @11085 has 7 MA's), (Start: 26 @11142 has 24 MA's), (34, 11190), (59, 11340),

Gene: MediumFry_15 Start: 11243, Stop: 11542, Start Num: 17
Candidate Starts for MediumFry_15:
(15, 11228), (Start: 17 @11243 has 159 MA's), (Start: 29 @11285 has 2 MA's), (34, 11324), (42, 11387), (48, 11414),

Gene: Meibysrarus_16 Start: 11128, Stop: 11394, Start Num: 26
Candidate Starts for Meibysrarus_16:
(Start: 16 @11071 has 7 MA's), (Start: 26 @11128 has 24 MA's), (34, 11176), (59, 11326),

Gene: Mema_14 Start: 10677, Stop: 10982, Start Num: 17
Candidate Starts for Mema_14:
(Start: 17 @10677 has 159 MA's), (34, 10764), (38, 10791), (62, 10938), (63, 10941),

Gene: Michelle_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Michelle_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Miek_13 Start: 9815, Stop: 10138, Start Num: 16
Candidate Starts for Miek_13:
(Start: 16 @9815 has 7 MA's), (48, 10010), (50, 10016),

Gene: MiniBagel_15 Start: 12732, Stop: 13028, Start Num: 17
Candidate Starts for MiniBagel_15:
(Start: 16 @12723 has 7 MA's), (Start: 17 @12732 has 159 MA's), (25, 12762), (Start: 29 @12771 has 2 MA's), (34, 12810), (42, 12873), (48, 12900), (64, 12996),

Gene: Monse_11 Start: 8151, Stop: 8456, Start Num: 17
Candidate Starts for Monse_11:
(Start: 17 @8151 has 159 MA's), (Start: 26 @8190 has 24 MA's), (32, 8232), (34, 8238), (36, 8256), (47, 8325), (50, 8334), (65, 8445),

Gene: Mooshroom_14 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Mooshroom_14:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: Moozy_11 Start: 8120, Stop: 8422, Start Num: 17
Candidate Starts for Moozy_11:
(Start: 17 @8120 has 159 MA's), (27, 8156), (28, 8162), (32, 8198), (34, 8204), (36, 8222), (47, 8291), (48, 8294), (50, 8300), (59, 8354), (65, 8411),

Gene: Mossy_25 Start: 19339, Stop: 19641, Start Num: 17
Candidate Starts for Mossy_25:
(Start: 17 @19339 has 159 MA's), (Start: 21 @19360 has 1 MA's), (34, 19423), (39, 19459), (41, 19465), (57, 19564), (64, 19609), (65, 19630),

Gene: MrAaronian_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for MrAaronian_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Mudcat_14 Start: 10340, Stop: 10642, Start Num: 17
Candidate Starts for Mudcat_14:
(Start: 17 @10340 has 159 MA's), (34, 10424), (47, 10511),

Gene: Mysticmoon_24 Start: 17938, Stop: 18240, Start Num: 17
Candidate Starts for Mysticmoon_24:
(Start: 17 @17938 has 159 MA's), (34, 18022), (37, 18046), (39, 18058), (41, 18064), (50, 18118), (54, 18145), (57, 18163), (59, 18172), (64, 18208), (65, 18229),

Gene: Nadmeg_24 Start: 17915, Stop: 18217, Start Num: 17
Candidate Starts for Nadmeg_24:
(Start: 17 @17915 has 159 MA's), (32, 17993), (34, 17999), (39, 18035), (41, 18041), (51, 18098), (54, 18122), (59, 18149), (65, 18206),

Gene: Namo_16 Start: 11134, Stop: 11400, Start Num: 26
Candidate Starts for Namo_16:
(Start: 16 @11077 has 7 MA's), (Start: 26 @11134 has 24 MA's), (34, 11182), (59, 11332),

Gene: NapoleonB_14 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for NapoleonB_14:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: Nason_14 Start: 10729, Stop: 11031, Start Num: 17
Candidate Starts for Nason_14:
(Start: 17 @10729 has 159 MA's), (34, 10813), (47, 10900),

Gene: Natasha_16 Start: 11855, Stop: 12160, Start Num: 17
Candidate Starts for Natasha_16:
(Start: 17 @11855 has 159 MA's), (34, 11942), (46, 12020), (47, 12029), (48, 12032), (53, 12062), (62, 12116),

Gene: Navi1117_15 Start: 11326, Stop: 11628, Start Num: 17
Candidate Starts for Navi1117_15:

(Start: 17 @11326 has 159 MA's), (Start: 26 @11365 has 24 MA's), (34, 11410), (38, 11437), (44, 11482), (47, 11497), (48, 11500), (59, 11560),

Gene: Nightmare_16 Start: 12048, Stop: 12347, Start Num: 17
Candidate Starts for Nightmare_16:
(11, 12000), (15, 12033), (Start: 16 @12039 has 7 MA's), (Start: 17 @12048 has 159 MA's), (Start: 29 @12090 has 2 MA's), (34, 12129), (42, 12192), (48, 12219), (64, 12315),

Gene: Niktson_15 Start: 12215, Stop: 12514, Start Num: 17
Candidate Starts for Niktson_15:
(11, 12167), (Start: 16 @12206 has 7 MA's), (Start: 17 @12215 has 159 MA's), (Start: 29 @12257 has 2 MA's), (34, 12296), (42, 12359), (48, 12386), (64, 12482),

Gene: Nithya_24 Start: 18128, Stop: 18430, Start Num: 17
Candidate Starts for Nithya_24:
(Start: 17 @18128 has 159 MA's), (32, 18206), (34, 18212), (39, 18248), (41, 18254), (59, 18362), (65, 18419),

Gene: Nivinsha_15 Start: 11529, Stop: 11828, Start Num: 17
Candidate Starts for Nivinsha_15:
(11, 11481), (15, 11514), (Start: 16 @11520 has 7 MA's), (Start: 17 @11529 has 159 MA's), (Start: 29 @11571 has 2 MA's), (34, 11610), (42, 11673), (48, 11700), (64, 11796),

Gene: NoPickles_21 Start: 15208, Stop: 15510, Start Num: 17
Candidate Starts for NoPickles_21:
(Start: 16 @15199 has 7 MA's), (Start: 17 @15208 has 159 MA's), (32, 15286), (37, 15316), (39, 15328), (41, 15334), (54, 15415), (57, 15433), (59, 15442), (65, 15499),

Gene: Odesza_21 Start: 15208, Stop: 15510, Start Num: 17
Candidate Starts for Odesza_21:
(Start: 16 @15199 has 7 MA's), (Start: 17 @15208 has 159 MA's), (32, 15286), (37, 15316), (39, 15328), (41, 15334), (54, 15415), (56, 15427), (59, 15442), (65, 15499),

Gene: OhMyWard_24 Start: 18679, Stop: 18981, Start Num: 17
Candidate Starts for OhMyWard_24:
(Start: 17 @18679 has 159 MA's), (Start: 21 @18700 has 1 MA's), (34, 18763), (39, 18799), (41, 18805), (57, 18904), (64, 18949), (65, 18970),

Gene: OlgasClover_24 Start: 18864, Stop: 19166, Start Num: 17
Candidate Starts for OlgasClover_24:
(Start: 17 @18864 has 159 MA's), (32, 18942), (34, 18948), (39, 18984), (41, 18990), (51, 19047), (59, 19098), (65, 19155),

Gene: OlympicHelado_16 Start: 11134, Stop: 11400, Start Num: 26
Candidate Starts for OlympicHelado_16:
(Start: 16 @11077 has 7 MA's), (Start: 26 @11134 has 24 MA's), (34, 11182), (59, 11332),

Gene: Onestar_14 Start: 10786, Stop: 11085, Start Num: 17
Candidate Starts for Onestar_14:
(Start: 17 @10786 has 159 MA's), (34, 10867), (47, 10954),

Gene: Paella_30 Start: 21139, Stop: 21396, Start Num: 29
Candidate Starts for Paella_30:

(15, 21076), (Start: 16 @21082 has 7 MA's), (Start: 17 @21091 has 159 MA's), (Start: 20 @21106 has 1 MA's), (Start: 29 @21139 has 2 MA's), (34, 21178), (36, 21196), (45, 21253), (48, 21268), (51, 21277),

Gene: Pepy6_027 Start: 24605, Stop: 24907, Start Num: 17
Candidate Starts for Pepy6_027:
(Start: 17 @24605 has 159 MA's), (19, 24620), (34, 24689), (59, 24839), (64, 24875), (65, 24896),

Gene: Perkunas_23 Start: 16004, Stop: 16306, Start Num: 17
Candidate Starts for Perkunas_23:
(2, 15881), (4, 15887), (8, 15917), (Start: 16 @15995 has 7 MA's), (Start: 17 @16004 has 159 MA's), (32, 16082), (37, 16112), (39, 16124), (41, 16130), (54, 16211), (57, 16229), (59, 16238), (65, 16295),

Gene: PerroGrande22_31 Start: 25925, Stop: 26227, Start Num: 17
Candidate Starts for PerroGrande22_31:
(2, 25799), (4, 25805), (8, 25835), (10, 25871), (Start: 17 @25925 has 159 MA's), (32, 26003), (34, 26009), (59, 26159), (64, 26195), (65, 26216),

Gene: PestoPenguin_26 Start: 17949, Stop: 18221, Start Num: 23
Candidate Starts for PestoPenguin_26:
(Start: 17 @17919 has 159 MA's), (Start: 23 @17949 has 2 MA's), (24, 17952), (32, 17997), (34, 18003), (39, 18039), (41, 18045), (51, 18102), (59, 18153), (65, 18210),

Gene: Petito_22 Start: 15699, Stop: 16001, Start Num: 17
Candidate Starts for Petito_22:
(Start: 16 @15690 has 7 MA's), (Start: 17 @15699 has 159 MA's), (32, 15777), (37, 15807), (39, 15819), (41, 15825), (54, 15906), (57, 15924), (59, 15933), (65, 15990),

Gene: Phaby_16 Start: 12334, Stop: 12630, Start Num: 17
Candidate Starts for Phaby_16:
(4, 12214), (5, 12217), (6, 12223), (9, 12247), (11, 12286), (Start: 17 @12334 has 159 MA's), (Start: 30 @12382 has 1 MA's), (34, 12412), (47, 12499), (48, 12502), (64, 12598),

Gene: Phaila_14 Start: 10741, Stop: 10959, Start Num: 34
Candidate Starts for Phaila_14:
(Start: 17 @10657 has 159 MA's), (Start: 26 @10696 has 24 MA's), (34, 10741), (38, 10768), (44, 10813), (47, 10828), (48, 10831), (59, 10891),

Gene: Phepper_24 Start: 17913, Stop: 18215, Start Num: 17
Candidate Starts for Phepper_24:
(Start: 17 @17913 has 159 MA's), (32, 17991), (34, 17997), (39, 18033), (41, 18039), (51, 18096), (54, 18120), (59, 18147), (65, 18204),

Gene: Pherobrine_23 Start: 17936, Stop: 18238, Start Num: 17
Candidate Starts for Pherobrine_23:
(Start: 17 @17936 has 159 MA's), (34, 18020), (37, 18044), (39, 18056), (41, 18062), (50, 18116), (54, 18143), (57, 18161), (59, 18170), (64, 18206), (65, 18227),

Gene: PherryCruz_10 Start: 8103, Stop: 8405, Start Num: 17
Candidate Starts for PherryCruz_10:
(Start: 17 @8103 has 159 MA's), (28, 8145), (32, 8181), (34, 8187), (36, 8205), (47, 8274), (48, 8277), (50, 8283), (59, 8337), (65, 8394),

Gene: Pippin15_19 Start: 14498, Stop: 14803, Start Num: 17
Candidate Starts for Pippin15_19:
(Start: 17 @14498 has 159 MA's), (33, 14582), (34, 14585), (41, 14627),

Gene: Poco6_028 Start: 26618, Stop: 26920, Start Num: 17
Candidate Starts for Poco6_028:
(2, 26492), (4, 26498), (8, 26528), (10, 26564), (11, 26570), (Start: 17 @26618 has 159 MA's), (32, 26696), (34, 26702), (59, 26852), (64, 26888), (65, 26909),

Gene: PoeMe_16 Start: 11439, Stop: 11657, Start Num: 34
Candidate Starts for PoeMe_16:
(Start: 17 @11355 has 159 MA's), (24, 11385), (Start: 26 @11394 has 24 MA's), (34, 11439), (38, 11466), (44, 11511), (47, 11526), (48, 11529), (59, 11589),

Gene: Popy_16 Start: 11647, Stop: 11913, Start Num: 26
Candidate Starts for Popy_16:
(Start: 16 @11590 has 7 MA's), (Start: 26 @11647 has 24 MA's), (34, 11695), (59, 11845),

Gene: Powelldog_17 Start: 12545, Stop: 12850, Start Num: 17
Candidate Starts for Powelldog_17:
(Start: 17 @12545 has 159 MA's), (34, 12632), (47, 12719), (58, 12776),

Gene: ProfFrink_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for ProfFrink_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Qui_30 Start: 21139, Stop: 21396, Start Num: 29
Candidate Starts for Qui_30:
(15, 21076), (Start: 16 @21082 has 7 MA's), (Start: 17 @21091 has 159 MA's), (Start: 20 @21106 has 1 MA's), (Start: 29 @21139 has 2 MA's), (34, 21178), (36, 21196), (45, 21253), (48, 21268), (51, 21277),

Gene: Rainydai_13 Start: 9815, Stop: 10138, Start Num: 16
Candidate Starts for Rainydai_13:
(Start: 16 @9815 has 7 MA's), (48, 10010), (50, 10016),

Gene: Raunak_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Raunak_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: RavenPuff_10 Start: 8103, Stop: 8405, Start Num: 17
Candidate Starts for RavenPuff_10:
(Start: 17 @8103 has 159 MA's), (28, 8145), (32, 8181), (34, 8187), (36, 8205), (47, 8274), (48, 8277), (50, 8283), (59, 8337), (65, 8394),

Gene: Regigigas_14 Start: 9815, Stop: 10138, Start Num: 16
Candidate Starts for Regigigas_14:
(Start: 16 @9815 has 7 MA's), (48, 10010), (50, 10016),

Gene: Renaldo_20 Start: 12908, Stop: 13189, Start Num: 22
Candidate Starts for Renaldo_20:
(Start: 17 @12884 has 159 MA's), (22, 12908), (27, 12926), (34, 12971), (39, 13007), (44, 13043), (47, 13058), (48, 13061), (57, 13112),

Gene: Rickmore_22 Start: 16159, Stop: 16461, Start Num: 17
Candidate Starts for Rickmore_22:
(Start: 17 @16159 has 159 MA's), (27, 16204), (32, 16237), (34, 16243), (39, 16279), (41, 16285), (56, 16378), (57, 16384), (59, 16393), (65, 16450),

Gene: Rima_16 Start: 11134, Stop: 11400, Start Num: 26
Candidate Starts for Rima_16:
(Start: 16 @11077 has 7 MA's), (Start: 26 @11134 has 24 MA's), (34, 11182), (59, 11332),

Gene: Roney_21 Start: 15208, Stop: 15510, Start Num: 17
Candidate Starts for Roney_21:
(Start: 16 @15199 has 7 MA's), (Start: 17 @15208 has 159 MA's), (32, 15286), (37, 15316), (39, 15328), (41, 15334), (54, 15415), (56, 15427), (59, 15442), (65, 15499),

Gene: RosaAsantewaa_11 Start: 8049, Stop: 8354, Start Num: 17
Candidate Starts for RosaAsantewaa_11:
(Start: 16 @8040 has 7 MA's), (Start: 17 @8049 has 159 MA's), (40, 8175), (48, 8226), (60, 8295), (61, 8304),

Gene: Runhaar_24 Start: 17915, Stop: 18217, Start Num: 17
Candidate Starts for Runhaar_24:
(Start: 17 @17915 has 159 MA's), (32, 17993), (34, 17999), (39, 18035), (41, 18041), (51, 18098), (54, 18122), (59, 18149), (65, 18206),

Gene: RustyBoy_16 Start: 11855, Stop: 12160, Start Num: 17
Candidate Starts for RustyBoy_16:
(Start: 17 @11855 has 159 MA's), (34, 11942), (46, 12020), (47, 12029), (48, 12032), (53, 12062), (62, 12116),

Gene: Salk_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Salk_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Sangak_11 Start: 8105, Stop: 8407, Start Num: 17
Candidate Starts for Sangak_11:
(Start: 17 @8105 has 159 MA's), (28, 8147), (32, 8183), (34, 8189), (36, 8207), (47, 8276), (48, 8279), (50, 8285), (59, 8339), (65, 8396),

Gene: Scap1_11 Start: 8150, Stop: 8416, Start Num: 26
Candidate Starts for Scap1_11:
(Start: 16 @8102 has 7 MA's), (Start: 26 @8150 has 24 MA's), (32, 8192), (34, 8198), (47, 8285), (50, 8294), (58, 8342), (65, 8405),

Gene: Schwartz33_25 Start: 18248, Stop: 18550, Start Num: 17
Candidate Starts for Schwartz33_25:
(Start: 17 @18248 has 159 MA's), (Start: 30 @18302 has 1 MA's), (32, 18326), (34, 18332), (39, 18368), (41, 18374), (53, 18452), (57, 18473), (59, 18482), (64, 18518), (65, 18539),

Gene: ScienceWizSam_16 Start: 11484, Stop: 11783, Start Num: 17
Candidate Starts for ScienceWizSam_16:
(11, 11436), (15, 11469), (Start: 16 @11475 has 7 MA's), (Start: 17 @11484 has 159 MA's), (Start: 29 @11526 has 2 MA's), (34, 11565), (42, 11628), (48, 11655), (64, 11751),

Gene: Secretariat_22 Start: 16968, Stop: 17270, Start Num: 17
Candidate Starts for Secretariat_22:
(Start: 17 @16968 has 159 MA's), (32, 17046), (34, 17052), (39, 17088), (41, 17094), (56, 17187), (57, 17193), (64, 17238), (65, 17259),

Gene: SendItCS_12 Start: 9815, Stop: 10138, Start Num: 16
Candidate Starts for SendItCS_12:
(Start: 16 @9815 has 7 MA's), (48, 10010), (50, 10016),

Gene: Serenabean_19 Start: 14966, Stop: 15271, Start Num: 17
Candidate Starts for Serenabean_19:
(Start: 17 @14966 has 159 MA's), (34, 15053), (39, 15089), (40, 15092), (48, 15143), (51, 15152), (58, 15197), (59, 15203),

Gene: ShaggyRogers_24 Start: 17918, Stop: 18220, Start Num: 17
Candidate Starts for ShaggyRogers_24:
(Start: 17 @17918 has 159 MA's), (Start: 23 @17948 has 2 MA's), (24, 17951), (32, 17996), (34, 18002), (39, 18038), (41, 18044), (51, 18101), (59, 18152), (65, 18209),

Gene: SheRa_11 Start: 8103, Stop: 8405, Start Num: 17
Candidate Starts for SheRa_11:
(Start: 17 @8103 has 159 MA's), (27, 8139), (28, 8145), (32, 8181), (34, 8187), (36, 8205), (47, 8274), (48, 8277), (50, 8283), (59, 8337), (65, 8394),

Gene: Shepard_16 Start: 12339, Stop: 12635, Start Num: 17
Candidate Starts for Shepard_16:
(4, 12219), (5, 12222), (6, 12228), (9, 12252), (11, 12291), (Start: 17 @12339 has 159 MA's), (Start: 30 @12387 has 1 MA's), (34, 12417), (47, 12504), (48, 12507), (64, 12603),

Gene: Shiba_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Shiba_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Sloopyjoe_15 Start: 10762, Stop: 11061, Start Num: 17
Candidate Starts for Sloopyjoe_15:
(Start: 17 @10762 has 159 MA's), (24, 10792), (34, 10843), (38, 10870), (47, 10930),

Gene: Soshi_16 Start: 11656, Stop: 11922, Start Num: 26
Candidate Starts for Soshi_16:
(Start: 16 @11599 has 7 MA's), (Start: 26 @11656 has 24 MA's), (34, 11704), (59, 11854),

Gene: Spain_14 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Spain_14:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Spectropatronm_16 Start: 11128, Stop: 11394, Start Num: 26
Candidate Starts for Spectropatronm_16:
(Start: 16 @11071 has 7 MA's), (Start: 26 @11128 has 24 MA's), (34, 11176), (59, 11326),

Gene: Sporto_16 Start: 11962, Stop: 12267, Start Num: 17
Candidate Starts for Sporto_16:
(Start: 17 @11962 has 159 MA's), (34, 12049), (47, 12136), (58, 12193),

Gene: Sprinkle_16 Start: 12480, Stop: 12785, Start Num: 17
Candidate Starts for Sprinkle_16:
(Start: 17 @12480 has 159 MA's), (31, 12549), (34, 12567), (46, 12645), (47, 12654), (62, 12741),

Gene: StarLord_15 Start: 10762, Stop: 11061, Start Num: 17
Candidate Starts for StarLord_15:
(Start: 17 @10762 has 159 MA's), (24, 10792), (34, 10843), (38, 10870), (47, 10930),

Gene: Stardrop_16 Start: 11267, Stop: 11530, Start Num: 26
Candidate Starts for Stardrop_16:
(Start: 17 @11228 has 159 MA's), (24, 11258), (Start: 26 @11267 has 24 MA's), (34, 11312), (38, 11339), (44, 11384), (47, 11399), (48, 11402), (59, 11462),

Gene: Stayer_15 Start: 10761, Stop: 11060, Start Num: 17
Candidate Starts for Stayer_15:
(Start: 17 @10761 has 159 MA's), (24, 10791), (34, 10842), (38, 10869), (47, 10929),

Gene: Sunny4976_13 Start: 10077, Stop: 10382, Start Num: 17
Candidate Starts for Sunny4976_13:
(15, 10062), (Start: 16 @10068 has 7 MA's), (Start: 17 @10077 has 159 MA's), (19, 10089), (Start: 23 @10104 has 2 MA's), (34, 10164), (48, 10254),

Gene: SweetCrkHerbs_23 Start: 15800, Stop: 15982, Start Num: 39
Candidate Starts for SweetCrkHerbs_23:
(2, 15557), (4, 15563), (8, 15593), (Start: 16 @15671 has 7 MA's), (Start: 17 @15680 has 159 MA's), (32, 15758), (37, 15788), (39, 15800), (41, 15806), (54, 15887), (57, 15905), (59, 15914), (65, 15971),

Gene: Sweetclover_20 Start: 14440, Stop: 14745, Start Num: 17
Candidate Starts for Sweetclover_20:
(Start: 17 @14440 has 159 MA's), (34, 14527), (39, 14563), (40, 14566), (48, 14617), (51, 14626), (58, 14671), (59, 14677),

Gene: Synepsis_14 Start: 11649, Stop: 11948, Start Num: 17
Candidate Starts for Synepsis_14:
(11, 11601), (15, 11634), (Start: 16 @11640 has 7 MA's), (Start: 17 @11649 has 159 MA's), (Start: 29 @11691 has 2 MA's), (34, 11730), (42, 11793), (48, 11820), (64, 11916),

Gene: TaidaOne_16 Start: 11776, Stop: 12042, Start Num: 26
Candidate Starts for TaidaOne_16:
(Start: 16 @11719 has 7 MA's), (Start: 26 @11776 has 24 MA's), (34, 11824), (59, 11974),

Gene: Tairn4Wing_23 Start: 15481, Stop: 15783, Start Num: 17
Candidate Starts for Tairn4Wing_23:
(2, 15358), (8, 15394), (10, 15430), (Start: 16 @15472 has 7 MA's), (Start: 17 @15481 has 159 MA's), (32, 15559), (37, 15589), (39, 15601), (41, 15607), (54, 15688), (57, 15706), (59, 15715), (65, 15772),

Gene: Talon44_22 Start: 15680, Stop: 15982, Start Num: 17
Candidate Starts for Talon44_22:
(2, 15557), (4, 15563), (8, 15593), (Start: 16 @15671 has 7 MA's), (Start: 17 @15680 has 159 MA's), (32, 15758), (37, 15788), (39, 15800), (41, 15806), (54, 15887), (57, 15905), (59, 15914), (65, 15971),

Gene: Tanis_21 Start: 15058, Stop: 15360, Start Num: 17

Candidate Starts for Tanis_21:
(Start: 16 @15049 has 7 MA's), (Start: 17 @15058 has 159 MA's), (32, 15136), (37, 15166), (39, 15178), (41, 15184), (54, 15265), (56, 15277), (59, 15292), (65, 15349),

Gene: Tatanka_14 Start: 11586, Stop: 11885, Start Num: 17
Candidate Starts for Tatanka_14:
(11, 11538), (15, 11571), (Start: 16 @11577 has 7 MA's), (Start: 17 @11586 has 159 MA's), (Start: 29 @11628 has 2 MA's), (34, 11667), (42, 11730), (48, 11757), (64, 11853),

Gene: Teacup_15 Start: 11490, Stop: 11789, Start Num: 17
Candidate Starts for Teacup_15:
(11, 11442), (15, 11475), (Start: 16 @11481 has 7 MA's), (Start: 17 @11490 has 159 MA's), (Start: 29 @11532 has 2 MA's), (34, 11571), (42, 11634), (48, 11661), (64, 11757),

Gene: TenaciousP_24 Start: 18135, Stop: 18437, Start Num: 17
Candidate Starts for TenaciousP_24:
(Start: 17 @18135 has 159 MA's), (32, 18213), (34, 18219), (39, 18255), (41, 18261), (59, 18369), (65, 18426),

Gene: Tenney120_15 Start: 11253, Stop: 11516, Start Num: 26
Candidate Starts for Tenney120_15:
(Start: 17 @11214 has 159 MA's), (24, 11244), (Start: 26 @11253 has 24 MA's), (34, 11298), (38, 11325), (44, 11370), (47, 11385), (48, 11388), (59, 11448),

Gene: Tenno_16 Start: 12741, Stop: 13037, Start Num: 17
Candidate Starts for Tenno_16:
(Start: 16 @12732 has 7 MA's), (Start: 17 @12741 has 159 MA's), (25, 12771), (Start: 29 @12780 has 2 MA's), (34, 12819), (42, 12882), (48, 12909), (64, 13005),

Gene: Thiqqums_13 Start: 9815, Stop: 10138, Start Num: 16
Candidate Starts for Thiqqums_13:
(Start: 16 @9815 has 7 MA's), (48, 10010), (50, 10016),

Gene: TieDye_15 Start: 10838, Stop: 11104, Start Num: 26
Candidate Starts for TieDye_15:
(Start: 16 @10781 has 7 MA's), (Start: 26 @10838 has 24 MA's), (34, 10886), (59, 11036),

Gene: Tokki_16 Start: 12384, Stop: 12680, Start Num: 17
Candidate Starts for Tokki_16:
(3, 12261), (4, 12264), (5, 12267), (6, 12273), (9, 12297), (11, 12336), (Start: 17 @12384 has 159 MA's), (Start: 30 @12432 has 1 MA's), (34, 12462), (47, 12549), (48, 12552), (64, 12648),

Gene: Tonaltzin_26 Start: 18255, Stop: 18437, Start Num: 39
Candidate Starts for Tonaltzin_26:
(Start: 17 @18135 has 159 MA's), (32, 18213), (34, 18219), (39, 18255), (41, 18261), (59, 18369), (65, 18426),

Gene: TonyStarch_16 Start: 11077, Stop: 11400, Start Num: 16
Candidate Starts for TonyStarch_16:
(Start: 16 @11077 has 7 MA's), (Start: 26 @11134 has 24 MA's), (34, 11182), (59, 11332),

Gene: Tribby_14 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Tribby_14:

(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: TrixiePhattel_15 Start: 11174, Stop: 11479, Start Num: 17
Candidate Starts for TrixiePhattel_15:
(12, 11129), (13, 11153), (15, 11159), (Start: 17 @11174 has 159 MA's), (34, 11261), (44, 11333), (47, 11348), (48, 11351), (57, 11402),

Gene: Truckee_15 Start: 11593, Stop: 11889, Start Num: 17
Candidate Starts for Truckee_15:
(Start: 17 @11593 has 159 MA's), (24, 11620), (25, 11623), (Start: 30 @11641 has 1 MA's), (34, 11671), (35, 11674), (47, 11758), (48, 11761), (63, 11848),

Gene: Trufflozitus_24 Start: 15482, Stop: 15784, Start Num: 17
Candidate Starts for Trufflozitus_24:
(2, 15359), (8, 15395), (10, 15431), (Start: 16 @15473 has 7 MA's), (Start: 17 @15482 has 159 MA's), (32, 15560), (37, 15590), (39, 15602), (41, 15608), (54, 15689), (57, 15707), (59, 15716), (65, 15773),

Gene: Trustiboi_16 Start: 12213, Stop: 12512, Start Num: 17
Candidate Starts for Trustiboi_16:
(11, 12165), (15, 12198), (Start: 16 @12204 has 7 MA's), (Start: 17 @12213 has 159 MA's), (Start: 29 @12255 has 2 MA's), (34, 12294), (42, 12357), (48, 12384), (64, 12480),

Gene: Untouchable_23 Start: 16870, Stop: 17142, Start Num: 23
Candidate Starts for Untouchable_23:
(Start: 17 @16840 has 159 MA's), (Start: 23 @16870 has 2 MA's), (24, 16873), (32, 16918), (34, 16924), (39, 16960), (41, 16966), (51, 17023), (54, 17047), (59, 17074), (65, 17131),

Gene: Uzumaki_15 Start: 11214, Stop: 11516, Start Num: 17
Candidate Starts for Uzumaki_15:
(Start: 17 @11214 has 159 MA's), (24, 11244), (Start: 26 @11253 has 24 MA's), (34, 11298), (38, 11325), (44, 11370), (47, 11385), (48, 11388), (59, 11448),

Gene: Vardy_24 Start: 17880, Stop: 18182, Start Num: 17
Candidate Starts for Vardy_24:
(Start: 17 @17880 has 159 MA's), (32, 17958), (34, 17964), (39, 18000), (41, 18006), (51, 18063), (54, 18087), (59, 18114), (65, 18171),

Gene: Westerlin_15 Start: 12732, Stop: 13031, Start Num: 17
Candidate Starts for Westerlin_15:
(11, 12684), (15, 12717), (Start: 16 @12723 has 7 MA's), (Start: 17 @12732 has 159 MA's), (Start: 29 @12774 has 2 MA's), (34, 12813), (42, 12876), (48, 12903), (64, 12999),

Gene: Wigberry_16 Start: 10159, Stop: 10479, Start Num: 17
Candidate Starts for Wigberry_16:
(Start: 16 @10150 has 7 MA's), (Start: 17 @10159 has 159 MA's), (Start: 26 @10207 has 24 MA's), (32, 10249), (34, 10255), (48, 10345), (53, 10378), (59, 10411),

Gene: Xenomorph_13 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for Xenomorph_13:
(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: YoshiYama_13 Start: 10339, Stop: 10641, Start Num: 17
Candidate Starts for YoshiYama_13:

(Start: 17 @10339 has 159 MA's), (34, 10423), (47, 10510),

Gene: Yotsuba_20 Start: 16839, Stop: 17144, Start Num: 17
Candidate Starts for Yotsuba_20:
(Start: 17 @16839 has 159 MA's), (33, 16923), (34, 16926), (40, 16965), (43, 16995), (54, 17049),

Gene: Zeina_15 Start: 11224, Stop: 11526, Start Num: 17
Candidate Starts for Zeina_15:
(Start: 17 @11224 has 159 MA's), (Start: 26 @11263 has 24 MA's), (34, 11308), (38, 11335), (44, 11380), (47, 11395), (48, 11398), (59, 11458),

Gene: Zeph_25 Start: 18630, Stop: 18932, Start Num: 17
Candidate Starts for Zeph_25:
(Start: 17 @18630 has 159 MA's), (Start: 23 @18660 has 2 MA's), (24, 18663), (32, 18708), (34, 18714), (39, 18750), (41, 18756), (51, 18813), (59, 18864), (65, 18921),

Gene: Zippen_17 Start: 12311, Stop: 12610, Start Num: 17
Candidate Starts for Zippen_17:
(11, 12263), (15, 12296), (Start: 16 @12302 has 7 MA's), (Start: 17 @12311 has 159 MA's), (Start: 29 @12353 has 2 MA's), (34, 12392), (48, 12482), (55, 12524),