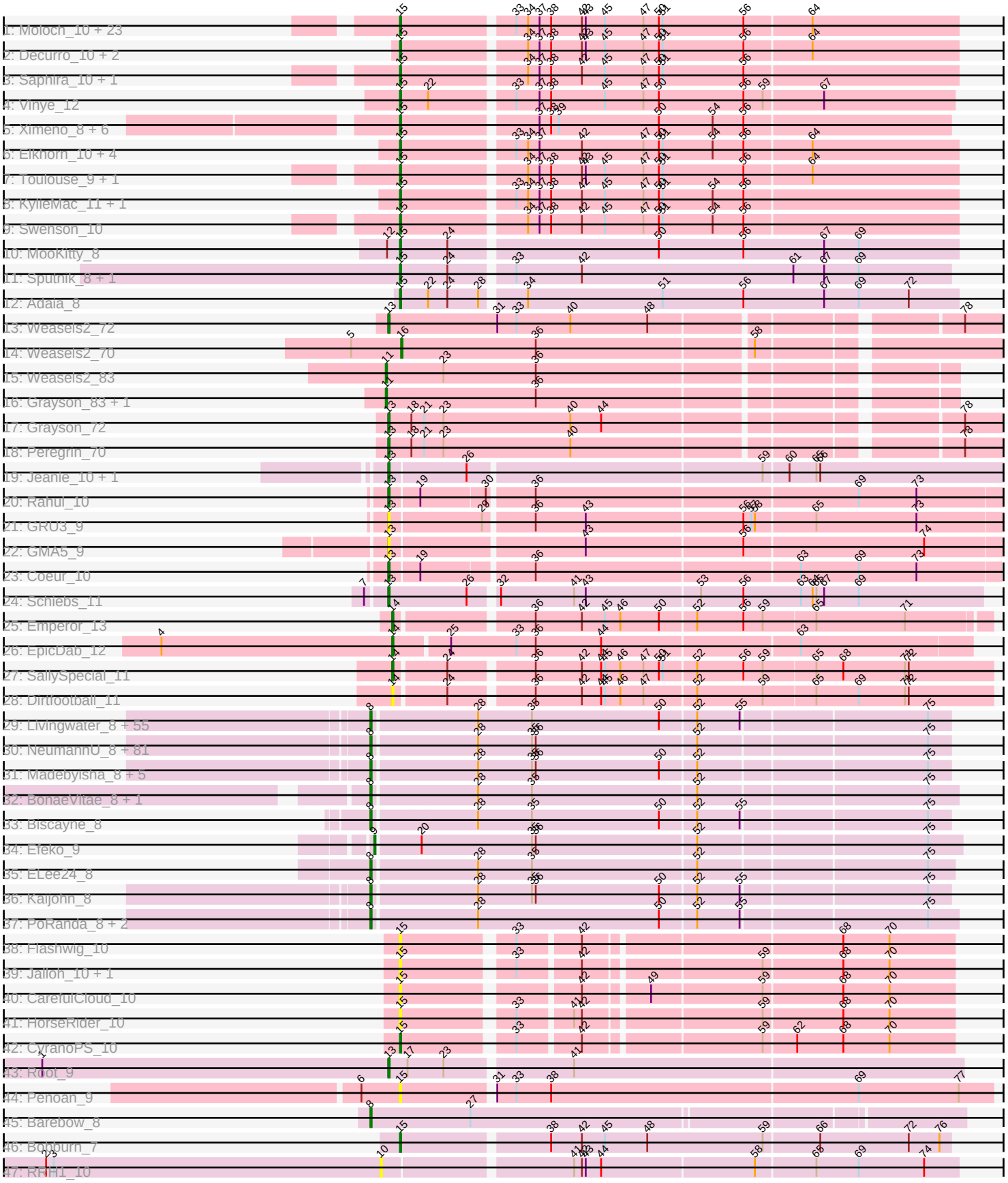
Pham 345363


1: Moloch_10 + 23
2: Decurro_10 + 2
3: Saphira_10 + 1
4: Vinye_12
5: Ximeno_8 + 6
6: Elkhorn_10 + 4
7: Toulouse_9 + 1
8: KylieMac_11 + 1
9: Swenson_10
10: MooKitty_8
11: Sputnik_8 + 1
12: Adala_8
13: Weasels2_72
14: Weasels2_70
15: Weasels2_83
16: Grayson_83 + 1
17: Grayson_72
18: Peregrin_70
19: Jeanie_10 + 1
20: Rahul_10
21: GRU3_9
22: GMA5_9
23: Coeur_10
24: Schiebs_11
25: Emperor_13
26: EpicDab_12
27: SallySpecial_11
28: Dirtfootball_11
29: Livingwater_8 + 55
30: NeumannO_8 + 81
31: Madebyisha_8 + 5
32: BonaeVitae_8 + 1
33: Biscayne_8
34: Efeko_9
35: ELee24_8
36: Kaijohn_8
37: PoRanda_8 + 2
38: Flashwig_10
39: Jallon_10 + 1
40: CarefulCloud_10
41: HorseRider_10
42: CyranoPS_10
43: Root_9
44: Penoan_9
45: Barebow_8
46: Bonburn_7
47: RHH1_10

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 345363 Report

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

Pham number 345363 has 233 members, 18 are drafts.

Phages represented in each track:
• Track 1 : Moloch_10, TinoCrisci_10, Massimo_10, Ronnie_10, LouisXIV_10, Arby_10, CGermain_10, Copper_10, Jessica_11, Mariposa_10, Guntur_10, Link_10, Dewayne_10, Prospero_10, Hunnie_10, Chestnut_10, Courtney3_10, Stratus_10, TymAbreu_10, Maggie_10, Sourignavong_11, Sandman_10, Inspire2_10, Azathoth_10
• Track 2 : Decurro_10, Muttlie_10, Yank_10
• Track 3 : Saphira_10, Taj14_10
• Track 4 : Vinye_12
• Track 5 : Ximeno_8, FirePit_8, Kels_8, SerialPhiller_8, StrawberryLem_8, Eyoseyas_8, Arielagos_8
• Track 6 : Elkhorn_10, StewieGriff_10, Laila_11, Blair_10, Lore_10
• Track 7 : Toulouse_9, Seume_10
• Track 8 : KylieMac_11, ElectricPheel_11
• Track 9 : Swenson_10
• Track 10 : MooKitty_8
• Track 11 : Sputnik_8, Atraxa_8
• Track 12 : Adaia_8
• Track 13 : Weasels2_72
• Track 14 : Weasels2_70
• Track 15 : Weasels2_83
• Track 16 : Grayson_83, Peregrin_81
• Track 17 : Grayson_72
• Track 18 : Peregrin_70
• Track 19 : Jeanie_10, McGonagall_10
• Track 20 : Rahul_10
• Track 21 : GRU3_9
• Track 22 : GMA5_9
• Track 23 : Coeur_10
• Track 24 : Schiebs_11
• Track 25 : Emperor_13
• Track 26 : EpicDab_12
• Track 27 : SallySpecial_11
• Track 28 : Dirtfootball_11
• Track 29 : Livingwater_8, KillerTomato_8, Ekko14_8, Namsahir_8, Nobel_8, Douggie_8, Abelaine_8, Lola20_8, Niffler_8, HarperAnne_8, Slizam_8, Miaurora_8, JRok_8, MrGreen_8, IzzyPants24_8, Elspeth_8, Cayde6_8, Rira_8, Lunatic_8, JooneeDee_8, BrokMonster_8, Concrete_8, Quaker_8, Clownery_8, Sippinontea_8,

MelBee03_8, Kevanna_8, Belthelas_8, Bri160_8, Trireme_8, TomBrady12_8, TinyTruffula_8, Bodhi17_8, Bintii_8, Bullzi2019_8, Anseraureola_8, Noelani_8, Oaklynn_8, Yami_8, Snuffles_9, McShie_8, Baine_8, Cazares_8, PuffyCat_8, Stem_8, TlaliMex_8, Loca_8, Leafy_8, Toxicola_8, Publix_8, Wolfpack_8, Trackstar_8, BoomRoasted_8, MauiIvory_8, KayPaulus_8, Azizam_8
• Track 30 : NeumannU_8, KyriosFaba_8, Goobery_8, Luxx_8, Majesty_8, Alucard_8, Godfather_8, Erin_8, Sachet_8, Minima_8, Burgy_8, Scamander_8, ManAs_8, EdElric_8, Yasuo_8, Jahseh_8, Eightball_8, Horacetta_8, RoscoWindex_8, Vanisius_8, Aztec_8, Goulash_8, TimoTea_8, Owens_8, Avvas_8, Gillker_8, SantasSleigh_8, Gardevoir_8, Bradley2_8, Dooby_8, JoBros_8, DirtPie_8, Dongwon_8, SeaWolves_8, TeddyBoy_8, GoldenBlanche_8, LionelHutz_8, Otwor_8, Charbie_8, JaimeB_8, Zahlia_8, Danno_8, Myram_8, Picnic_8, MasterPitts_8, Marichuy_8, Slentz_8, LaviMo_8, Sara_8, DaftyDuck_8, Rhogar_8, Grayscar_8, BarBear_8, PaoPu_8, Puddles3_8, Picconator_8, Maneater_8, Josuke_8, Yubaba_8, HeadMave_8, Aries55_8, BurtonThePup_8, Jannah_8, YertPhresh_8, Chatham_8, Octopus_8, Rhysand_8, Danimal_8, Sage7_8, BinkBonk_8, Tyrellus_8, Hulk_8, Duggle_8, Ciel_8, Scrunchy_8, Astro16_8, LemonPepper_8, Witch_8, Pondwater_8, Kojax4_8, Cheesecake_8, Jella_8
• Track 31 : Madebyisha_8, OdetoJoy_8, VitulaEligans_8, Gabbspett_8, Jerky_8, Hernandez44_8
• Track 32 : BonaeVitae_8, Naby_8
• Track 33 : Biscayne_8
• Track 34 : Efeko_9
• Track 35 : ELee24_8
• Track 36 : Kaijohn_8
• Track 37 : PoRanda_8, MirimarMandM_8, Upsilon_8
• Track 38 : Flashwig_10
• Track 39 : Jalloh_10, TailX7_10
• Track 40 : CarefulCloud_10
• Track 41 : HorseRider_10
• Track 42 : CyranoPS_10
• Track 43 : Root_9
• Track 44 : Penoan_9
• Track 45 : Barebow_8
• Track 46 : Bobburn_7
• Track 47 : RRH1_10

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

The start number called the most often in the published annotations is 8, it was called in 146 of the 215 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abelaine_8, Alucard_8, Anseraureola_8, Aries55_8, Astro16_8, Avvas_8, Azizam_8, Aztec_8, Baine_8, BarBear_8, Barebow_8, Belthelas_8, BinkBonk_8, Bintii_8, Biscayne_8, Bodhi17_8, BonaeVitae_8, BoomRoasted_8, Bradley2_8, Bri160_8, BrokMonster_8, Bullzi2019_8, Burgy_8, BurtonThePup_8, Cayde6_8, Cazares_8, Charbie_8, Chatham_8, Cheesecake_8, Ciel_8, Clownery_8, Concrete_8, DaftyDuck_8, Danimal_8, Danno_8, DirtPie_8, Dongwon_8, Dooby_8, Douggie_8, Duggle_8, ELee24_8, EdElric_8, Eightball_8, Ekko14_8, Elspeth_8, Erin_8,

Gabbspett_8, Gardevoir_8, Gillker_8, Godfather_8, GoldenBlanche_8, Goobery_8, Goulash_8, Grayscar_8, HarperAnne_8, HeadMave_8, Hernandez44_8, Horacetta_8, Hulk_8, IzzyPants24_8, JRok_8, Jahseh_8, JaimeB_8, Jannah_8, Jella_8, Jerky_8, JoBros_8, JooneeDee_8, Josuke_8, Kaijohn_8, KayPaulus_8, Kevanna_8, KillerTomato_8, Kojax4_8, KyriosFaba_8, LaviMo_8, Leafy_8, LemonPepper_8, LionelHutz_8, Livingwater_8, Loca_8, Lola20_8, Lunatic_8, Luxx_8, Madebyisha_8, Majesty_8, ManAs_8, Maneater_8, Marichuy_8, MasterPitts_8, MauiIvory_8, McShie_8, MelBee03_8, Miaurora_8, Minima_8, MirimarMandM_8, MrGreen_8, Myram_8, Naby_8, Namsahir_8, NeumannU_8, Niffler_8, Nobel_8, Noelani_8, Oaklynn_8, Octopus_8, OdetoJoy_8, Otwor_8, Owens_8, PaoPu_8, Picconator_8, Picnic_8, PoRanda_8, Pondwater_8, Publix_8, Puddles3_8, PuffyCat_8, Quaker_8, Rhogar_8, Rhysand_8, Rira_8, RoscoWindex_8, Sachet_8, Sage7_8, SantasSleigh_8, Sara_8, Scamander_8, Scrunchy_8, SeaWolves_8, Sippinontea_8, Slentz_8, Slizam_8, Snuffles_9, Stem_8, TeddyBoy_8, TimoTea_8, TinyTruffula_8, TlaliMex_8, TomBrady12_8, Toxicola_8, Trackstar_8, Trireme_8, Tyrellus_8, Upsilon_8, Vanisius_8, VitulaEligans_8, Witch_8, Wolfpack_8, Yami_8, Yasuo_8, YertPhresh_8, Yubaba_8, Zahlia_8,

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

Genes that do not have the "Most Annotated" start:
• Adaia_8, Arby_10, Arielagos_8, Atraxa_8, Azathoth_10, Blair_10, Bobburn_7, CGermain_10, CarefulCloud_10, Chestnut_10, Coeur_10, Copper_10, Courtney3_10, CyranoPS_10, Decurro_10, Dewayne_10, Dirtfootball_11, Efeko_9, ElectricPheel_11, Elkhorn_10, Emperor_13, EpicDab_12, Eyoseyas_8, FirePit_8, Flashwig_10, GMA5_9, GRU3_9, Grayson_72, Grayson_83, Guntur_10, HorseRider_10, Hunnie_10, Inspire2_10, Jalloh_10, Jeanie_10, Jessica_11, Kels_8, KylieMac_11, Laila_11, Link_10, Lore_10, LouisXIV_10, Maggie_10, Mariposa_10, Massimo_10, McGonagall_10, Moloch_10, MooKitty_8, Muttlie_10, Penoan_9, Peregrin_70, Peregrin_81, Prospero_10, RRH1_10, Rahul_10, Ronnie_10, Root_9, SallySpecial_11, Sandman_10, Saphira_10, Schiebs_11, SerialPhiller_8, Seume_10, Sourignavong_11, Sputnik_8, StewieGriff_10, Stratus_10, StrawberryLem_8, Swenson_10, TailX7_10, Taj14_10, TinoCrisci_10, Toulouse_9, TymAbreu_10, Vinye_12, Weasels2_70, Weasels2_72, Weasels2_83, Ximeno_8, Yank_10,

Summary by start number:

Start 8:
• Found in 153 of 233 (65.7%) of genes in pham
• Manual Annotations of this start: 146 of 215
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abelaine_8 (EE), Alucard_8 (EE), Anseraureola_8 (EE), Aries55_8 (EE), Astro16_8 (EE), Avvas_8 (EE), Azizam_8 (EE), Aztec_8 (EE), Baine_8 (EE), BarBear_8 (EE), Barebow_8 (singleton), Belthelas_8 (EE), BinkBonk_8 (EE), Bintii_8 (EE), Biscayne_8 (EE), Bodhi17_8 (EE), BonaeVitae_8 (EE), BoomRoasted_8 (EE), Bradley2_8 (EE), Bri160_8 (EE), BrokMonster_8 (EE), Bullzi2019_8 (EE), Burgy_8 (EE), BurtonThePup_8 (EE), Cayde6_8 (EE), Cazares_8 (EE), Charbie_8 (EE), Chatham_8 (EE), Cheesecake_8 (EE), Ciel_8 (EE), Clownery_8 (EE), Concrete_8 (EE), DaftyDuck_8 (EE), Danimal_8 (EE), Danno_8 (EE), DirtPie_8 (EE), Dongwon_8 (EE), Dooby_8 (EE), Douggie_8 (EE), Duggle_8 (EE), ELee24_8 (EE), EdElric_8 (EE), Eightball_8 (EE), Ekko14_8 (EE), Elspeth_8 (EE), Erin_8 (EE), Gabbspett_8 (EE), Gardevoir_8 (EE), Gillker_8

(EE), Godfather_8 (EE), GoldenBlanche_8 (EE), Goobery_8 (EE), Goulash_8 (EE), Grayscar_8 (EE), HarperAnne_8 (EE), HeadMave_8 (EE), Hernandez44_8 (EE), Horacetta_8 (EE), Hulk_8 (EE), IzzyPants24_8 (EE), JRok_8 (EE), Jahseh_8 (EE), JaimeB_8 (EE), Jannah_8 (EE), Jella_8 (EE), Jerky_8 (EE), JoBros_8 (EE), JooneeDee_8 (EE), Josuke_8 (EE), Kaijohn_8 (EE), KayPaulus_8 (EE), Kevanna_8 (EE), KillerTomato_8 (EE), Kojax4_8 (EE), KyriosFaba_8 (EE), LaviMo_8 (EE), Leafy_8 (EE), LemonPepper_8 (EE), LionelHutz_8 (EE), Livingwater_8 (EE), Loca_8 (EE), Lola20_8 (EE), Lunatic_8 (EE), Luxx_8 (EE), Madebyisha_8 (EE), Majesty_8 (EE), ManAs_8 (EE), Maneater_8 (EE), Marichuy_8 (EE), MasterPitts_8 (EE), MauiIvory_8 (EE), McShie_8 (EE), MelBee03_8 (EE), Miaurora_8 (EE), Minima_8 (EE), MirimarMandM_8 (EE), MrGreen_8 (EE), Myram_8 (EE), Naby_8 (EE), Namsahir_8 (EE), NeumannU_8 (EE), Niffler_8 (EE), Nobel_8 (EE), Noelani_8 (EE), Oaklynn_8 (EE), Octopus_8 (EE), OdetoJoy_8 (EE), Otwor_8 (EE), Owens_8 (EE), PaoPu_8 (EE), Picconator_8 (EE), Picnic_8 (EE), PoRanda_8 (EE), Pondwater_8 (EE), Publix_8 (EE), Puddles3_8 (EE), PuffyCat_8 (EE), Quaker_8 (EE), Rhogar_8 (EE), Rhysand_8 (EE), Rira_8 (EE), RoscoWindex_8 (EE), Sachet_8 (EE), Sage7_8 (EE), SantasSleigh_8 (EE), Sara_8 (EE), Scamander_8 (EE), Scrunchy_8 (EE), SeaWolves_8 (EE), Sippinontea_8 (EE), Slentz_8 (EE), Slizam_8 (EE), Snuffles_9 (EE), Stem_8 (EE), TeddyBoy_8 (EE), TimoTea_8 (EE), TinyTruffula_8 (EE), TlaliMex_8 (EE), TomBrady12_8 (EE), Toxicola_8 (EE), Trackstar_8 (EE), Trireme_8 (EE), Tyrellus_8 (EE), Upsilon_8 (EE), Vanisius_8 (EE), VitulaEligans_8 (EE), Witch_8 (EE), Wolfpack_8 (EE), Yami_8 (EE), Yasuo_8 (EE), YertPhresh_8 (EE), Yubaba_8 (EE), Zahlia_8 (EE),

Start 9:
• Found in 1 of 233 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 215
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Efeko_9 (EE),

Start 10:
• Found in 1 of 233 (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: RRH1_10 (singleton),

Start 11:
• Found in 3 of 233 (1.3%) of genes in pham
• Manual Annotations of this start: 3 of 215
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Grayson_83 (CB), Peregrin_81 (CB), Weasels2_83 (CB),

Start 13:
• Found in 11 of 233 (4.7%) of genes in pham
• Manual Annotations of this start: 9 of 215
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Coeur_10 (CW2), GMA5_9 (CW2), GRU3_9 (CW2), Grayson_72 (CB), Jeanie_10 (CW1), McGonagall_10 (CW1), Peregrin_70 (CB), Rahul_10 (CW2), Root_9 (JC), Schiebs_11 (CW3), Weasels2_72 (CB),

Start 14:

• Found in 4 of 233 (1.7%) of genes in pham
• Manual Annotations of this start: 3 of 215
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dirtfootball_11 (DM), Emperor_13 (DM), EpicDab_12 (DM), SallySpecial_11 (DM),

Start 15:
• Found in 59 of 233 (25.3%) of genes in pham
• Manual Annotations of this start: 52 of 215
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adaia_8 (AX), Arby_10 (AN), Arielagos_8 (AN), Atraxa_8 (AX), Azathoth_10 (AN), Blair_10 (AN), Bobburn_7 (singleton), CGermain_10 (AN), CarefulCloud_10 (ER), Chestnut_10 (AN), Copper_10 (AN), Courtney3_10 (AN), CyranoPS_10 (ER), Decurro_10 (AN), Dewayne_10 (AN), ElectricPheel_11 (AN), Elkhorn_10 (AN), Eyoseyas_8 (AN), FirePit_8 (AN), Flashwig_10 (ER), Guntur_10 (AN), HorseRider_10 (ER), Hunnie_10 (AN), Inspire2_10 (AN), Jalloh_10 (ER), Jessica_11 (AN), Kels_8 (AN), KylieMac_11 (AN), Laila_11 (AN), Link_10 (AN), Lore_10 (AN), LouisXIV_10 (AN), Maggie_10 (AN), Mariposa_10 (AN), Massimo_10 (AN), Moloch_10 (AN), MooKitty_8 (AX), Muttlie_10 (AN), Penoan_9 (UNK), Prospero_10 (AN), Ronnie_10 (AN), Sandman_10 (AN), Saphira_10 (AN), SerialPhiller_8 (AN), Seume_10 (AN), Sourignavong_11 (AN), Sputnik_8 (AX), StewieGriff_10 (AN), Stratus_10 (AN), StrawberryLem_8 (AN), Swenson_10 (AN), TailX7_10 (ER), Taj14_10 (AN), TinoCrisci_10 (AN), Toulouse_9 (AN), TymAbreu_10 (AN), Vinye_12 (AN), Ximeno_8 (AN), Yank_10 (AN),

Start 16:
• Found in 1 of 233 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 215
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Weasels2_70 (CB),

Summary by clusters:

There are 12 clusters represented in this pham: singleton, DM, JC, EE, CB, CW3, CW2, AN, CW1, AX, UNK, ER,

Info for manual annotations of cluster AN:
•Start number 15 was manually annotated 46 times for cluster AN.

Info for manual annotations of cluster AX:
•Start number 15 was manually annotated 4 times for cluster AX.

Info for manual annotations of cluster CB:
•Start number 11 was manually annotated 3 times for cluster CB.
•Start number 13 was manually annotated 3 times for cluster CB.
•Start number 16 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CW1:
•Start number 13 was manually annotated 2 times for cluster CW1.

Info for manual annotations of cluster CW2:
•Start number 13 was manually annotated 2 times for cluster CW2.

Info for manual annotations of cluster CW3:
•Start number 13 was manually annotated 1 time for cluster CW3.

Info for manual annotations of cluster DM:
•Start number 14 was manually annotated 3 times for cluster DM.

Info for manual annotations of cluster EE:
•Start number 8 was manually annotated 145 times for cluster EE.
•Start number 9 was manually annotated 1 time for cluster EE.

Info for manual annotations of cluster ER:
•Start number 15 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster JC:
•Start number 13 was manually annotated 1 time for cluster JC.

Gene Information:

Gene: Abelaine_8 Start: 6160, Stop: 6594, Start Num: 8
Candidate Starts for Abelaine_8:
(Start: 8 @6160 has 146 MA's), (28, 6238), (35, 6280), (50, 6379), (52, 6406), (55, 6439), (75, 6577),

Gene: Adaia_8 Start: 5580, Stop: 6005, Start Num: 15
Candidate Starts for Adaia_8:
(Start: 15 @5580 has 52 MA's), (22, 5601), (24, 5616), (28, 5640), (34, 5670), (51, 5775), (56, 5838), (67, 5901), (69, 5928), (72, 5967),

Gene: Alucard_8 Start: 6143, Stop: 6577, Start Num: 8
Candidate Starts for Alucard_8:
(Start: 8 @6143 has 146 MA's), (28, 6221), (35, 6263), (36, 6266), (52, 6389), (75, 6560),

Gene: Anseraureola_8 Start: 6166, Stop: 6600, Start Num: 8
Candidate Starts for Anseraureola_8:
(Start: 8 @6166 has 146 MA's), (28, 6244), (35, 6286), (50, 6385), (52, 6412), (55, 6445), (75, 6583),

Gene: Arby_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Arby_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Arielagos_8 Start: 5656, Stop: 6072, Start Num: 15
Candidate Starts for Arielagos_8:
(Start: 15 @5656 has 52 MA's), (37, 5755), (38, 5764), (39, 5770), (50, 5848), (54, 5890), (56, 5914),

Gene: Aries55_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Aries55_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Astro16_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Astro16_8:

(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Atraxa_8 Start: 5666, Stop: 6085, Start Num: 15
Candidate Starts for Atraxa_8:
(Start: 15 @5666 has 52 MA's), (24, 5702), (33, 5747), (42, 5798), (61, 5963), (67, 5987), (69, 6014),

Gene: Avvas_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Avvas_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Azathoth_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Azathoth_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Azizam_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Azizam_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (50, 6361), (52, 6388), (55, 6421), (75, 6559),

Gene: Aztec_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Aztec_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Baine_8 Start: 6139, Stop: 6573, Start Num: 8
Candidate Starts for Baine_8:
(Start: 8 @6139 has 146 MA's), (28, 6217), (35, 6259), (50, 6358), (52, 6385), (55, 6418), (75, 6556),

Gene: BarBear_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for BarBear_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Barebow_8 Start: 5720, Stop: 6166, Start Num: 8
Candidate Starts for Barebow_8:
(Start: 8 @5720 has 146 MA's), (27, 5798),

Gene: Belthelas_8 Start: 6193, Stop: 6627, Start Num: 8
Candidate Starts for Belthelas_8:
(Start: 8 @6193 has 146 MA's), (28, 6271), (35, 6313), (50, 6412), (52, 6439), (55, 6472), (75, 6610),

Gene: BinkBonk_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for BinkBonk_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Bintii_8 Start: 6169, Stop: 6609, Start Num: 8
Candidate Starts for Bintii_8:
(Start: 8 @6169 has 146 MA's), (28, 6247), (35, 6289), (50, 6388), (52, 6415), (55, 6448), (75, 6586),

Gene: Biscayne_8 Start: 6202, Stop: 6636, Start Num: 8
Candidate Starts for Biscayne_8:
(Start: 8 @6202 has 146 MA's), (28, 6280), (35, 6322), (50, 6421), (52, 6448), (55, 6481), (75, 6619),

Gene: Blair_10 Start: 6013, Stop: 6435, Start Num: 15
Candidate Starts for Blair_10:

(Start: 15 @6013 has 52 MA's), (33, 6094), (34, 6103), (37, 6112), (42, 6145), (47, 6193), (50, 6205), (51, 6208), (54, 6247), (56, 6271), (64, 6322),

Gene: Bobburn_7 Start: 5670, Stop: 6086, Start Num: 15
Candidate Starts for Bobburn_7:
(Start: 15 @5670 has 52 MA's), (38, 5778), (42, 5802), (45, 5820), (48, 5853), (59, 5943), (66, 5985), (72, 6054), (76, 6078),

Gene: Bodhi17_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for Bodhi17_8:
(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: BonaeVitae_8 Start: 5865, Stop: 6305, Start Num: 8
Candidate Starts for BonaeVitae_8:
(Start: 8 @5865 has 146 MA's), (28, 5943), (35, 5985), (52, 6111), (75, 6282),

Gene: BoomRoasted_8 Start: 6190, Stop: 6624, Start Num: 8
Candidate Starts for BoomRoasted_8:
(Start: 8 @6190 has 146 MA's), (28, 6268), (35, 6310), (50, 6409), (52, 6436), (55, 6469), (75, 6607),

Gene: Bradley2_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Bradley2_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Bri160_8 Start: 6190, Stop: 6624, Start Num: 8
Candidate Starts for Bri160_8:
(Start: 8 @6190 has 146 MA's), (28, 6268), (35, 6310), (50, 6409), (52, 6436), (55, 6469), (75, 6607),

Gene: BrokMonster_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for BrokMonster_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (50, 6361), (52, 6388), (55, 6421), (75, 6559),

Gene: Bullzi2019_8 Start: 6160, Stop: 6597, Start Num: 8
Candidate Starts for Bullzi2019_8:
(Start: 8 @6160 has 146 MA's), (28, 6238), (35, 6280), (50, 6379), (52, 6406), (55, 6439), (75, 6577),

Gene: Burgy_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Burgy_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: BurtonThePup_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for BurtonThePup_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: CGermain_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for CGermain_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: CarefulCloud_10 Start: 6341, Stop: 6739, Start Num: 15
Candidate Starts for CarefulCloud_10:
(Start: 15 @6341 has 52 MA's), (42, 6464), (49, 6509), (59, 6593), (68, 6653), (70, 6689),

Gene: Cayde6_8 Start: 6139, Stop: 6573, Start Num: 8
Candidate Starts for Cayde6_8:
(Start: 8 @6139 has 146 MA's), (28, 6217), (35, 6259), (50, 6358), (52, 6385), (55, 6418), (75, 6556),

Gene: Cazares_8 Start: 6130, Stop: 6567, Start Num: 8
Candidate Starts for Cazares_8:
(Start: 8 @6130 has 146 MA's), (28, 6208), (35, 6250), (50, 6349), (52, 6376), (55, 6409), (75, 6547),

Gene: Charbie_8 Start: 6130, Stop: 6564, Start Num: 8
Candidate Starts for Charbie_8:
(Start: 8 @6130 has 146 MA's), (28, 6208), (35, 6250), (36, 6253), (52, 6376), (75, 6547),

Gene: Chatham_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Chatham_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Cheesecake_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Cheesecake_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Chestnut_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Chestnut_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Ciel_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Ciel_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Clownery_8 Start: 6247, Stop: 6684, Start Num: 8
Candidate Starts for Clownery_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (50, 6466), (52, 6493), (55, 6526), (75, 6664),

Gene: Coeur_10 Start: 6891, Stop: 7346, Start Num: 13
Candidate Starts for Coeur_10:
(Start: 13 @6891 has 9 MA's), (19, 6912), (36, 6993), (63, 7194), (69, 7239), (73, 7284),

Gene: Concrete_8 Start: 6190, Stop: 6624, Start Num: 8
Candidate Starts for Concrete_8:
(Start: 8 @6190 has 146 MA's), (28, 6268), (35, 6310), (50, 6409), (52, 6436), (55, 6469), (75, 6607),

Gene: Copper_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Copper_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Courtney3_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Courtney3_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: CyranoPS_10 Start: 6339, Stop: 6737, Start Num: 15
Candidate Starts for CyranoPS_10:

(Start: 15 @6339 has 52 MA's), (33, 6417), (42, 6462), (59, 6591), (62, 6615), (68, 6651), (70, 6687),

Gene: DaftyDuck_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for DaftyDuck_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Danimal_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Danimal_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Danno_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Danno_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Decurro_10 Start: 6015, Stop: 6437, Start Num: 15
Candidate Starts for Decurro_10:
(Start: 15 @6015 has 52 MA's), (34, 6105), (37, 6114), (38, 6123), (42, 6147), (43, 6150), (45, 6165), (47, 6195), (50, 6207), (51, 6210), (56, 6273), (64, 6324),

Gene: Dewayne_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Dewayne_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: DirtPie_8 Start: 6247, Stop: 6681, Start Num: 8
Candidate Starts for DirtPie_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (36, 6370), (52, 6493), (75, 6664),

Gene: Dirtfootball_11 Start: 7054, Stop: 7500, Start Num: 14
Candidate Starts for Dirtfootball_11:
(Start: 14 @7054 has 3 MA's), (24, 7090), (36, 7150), (42, 7186), (44, 7201), (45, 7204), (46, 7216), (47, 7234), (52, 7273), (59, 7324), (65, 7363), (69, 7396), (71, 7432), (72, 7435),

Gene: Dongwon_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Dongwon_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Dooby_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Dooby_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Douggie_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for Douggie_8:
(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: Duggle_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Duggle_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: ELee24_8 Start: 6198, Stop: 6635, Start Num: 8
Candidate Starts for ELee24_8:
(Start: 8 @6198 has 146 MA's), (28, 6276), (35, 6318), (52, 6444), (75, 6615),

Gene: EdElric_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for EdElric_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Efeko_9 Start: 6030, Stop: 6470, Start Num: 9
Candidate Starts for Efeko_9:
(Start: 9 @6030 has 1 MA's), (20, 6063), (35, 6147), (36, 6150), (52, 6273), (75, 6444),

Gene: Eightball_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Eightball_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Ekko14_8 Start: 6127, Stop: 6564, Start Num: 8
Candidate Starts for Ekko14_8:
(Start: 8 @6127 has 146 MA's), (28, 6205), (35, 6247), (50, 6346), (52, 6373), (55, 6406), (75, 6544),

Gene: ElectricPheel_11 Start: 6087, Stop: 6509, Start Num: 15
Candidate Starts for ElectricPheel_11:
(Start: 15 @6087 has 52 MA's), (33, 6168), (34, 6177), (37, 6186), (38, 6195), (42, 6219), (45, 6237), (47, 6267), (50, 6279), (51, 6282), (54, 6321), (56, 6345),

Gene: Elkhorn_10 Start: 6013, Stop: 6435, Start Num: 15
Candidate Starts for Elkhorn_10:
(Start: 15 @6013 has 52 MA's), (33, 6094), (34, 6103), (37, 6112), (42, 6145), (47, 6193), (50, 6205), (51, 6208), (54, 6247), (56, 6271), (64, 6322),

Gene: Elspeth_8 Start: 6127, Stop: 6564, Start Num: 8
Candidate Starts for Elspeth_8:
(Start: 8 @6127 has 146 MA's), (28, 6205), (35, 6247), (50, 6346), (52, 6373), (55, 6406), (75, 6544),

Gene: Emperor_13 Start: 8116, Stop: 8556, Start Num: 14
Candidate Starts for Emperor_13:
(Start: 14 @8116 has 3 MA's), (36, 8212), (42, 8248), (45, 8266), (46, 8278), (50, 8308), (52, 8335), (56, 8371), (59, 8386), (65, 8425), (71, 8494),

Gene: EpicDab_12 Start: 8084, Stop: 8521, Start Num: 14
Candidate Starts for EpicDab_12:
(4, 7904), (Start: 14 @8084 has 3 MA's), (25, 8123), (33, 8174), (36, 8189), (44, 8240), (63, 8390),

Gene: Erin_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Erin_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Eyoseyas_8 Start: 5656, Stop: 6072, Start Num: 15
Candidate Starts for Eyoseyas_8:
(Start: 15 @5656 has 52 MA's), (37, 5755), (38, 5764), (39, 5770), (50, 5848), (54, 5890), (56, 5914),

Gene: FirePit_8 Start: 5656, Stop: 6072, Start Num: 15
Candidate Starts for FirePit_8:
(Start: 15 @5656 has 52 MA's), (37, 5755), (38, 5764), (39, 5770), (50, 5848), (54, 5890), (56, 5914),

Gene: Flashwig_10 Start: 6341, Stop: 6739, Start Num: 15
Candidate Starts for Flashwig_10:

(Start: 15 @6341 has 52 MA's), (33, 6419), (42, 6464), (68, 6653), (70, 6689),

Gene: GMA5_9 Start: 6746, Stop: 7207, Start Num: 13
Candidate Starts for GMA5_9:
(Start: 13 @6746 has 9 MA's), (43, 6890), (56, 7010), (74, 7148),

Gene: GRU3_9 Start: 6800, Stop: 7261, Start Num: 13
Candidate Starts for GRU3_9:
(Start: 13 @6800 has 9 MA's), (29, 6869), (36, 6905), (43, 6944), (56, 7064), (57, 7070), (58, 7073), (65, 7118), (73, 7196),

Gene: Gabbspett_8 Start: 6247, Stop: 6681, Start Num: 8
Candidate Starts for Gabbspett_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (36, 6370), (50, 6466), (52, 6493), (75, 6664),

Gene: Gardevoir_8 Start: 6143, Stop: 6577, Start Num: 8
Candidate Starts for Gardevoir_8:
(Start: 8 @6143 has 146 MA's), (28, 6221), (35, 6263), (36, 6266), (52, 6389), (75, 6560),

Gene: Gillker_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Gillker_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Godfather_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Godfather_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: GoldenBlanche_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for GoldenBlanche_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Goobery_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Goobery_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Goulash_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Goulash_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Grayscar_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Grayscar_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Grayson_83 Start: 43154, Stop: 43570, Start Num: 11
Candidate Starts for Grayson_83:
(Start: 11 @43154 has 3 MA's), (36, 43271),

Gene: Grayson_72 Start: 32748, Stop: 33194, Start Num: 13
Candidate Starts for Grayson_72:
(Start: 13 @32748 has 9 MA's), (18, 32766), (21, 32775), (23, 32790), (40, 32889), (44, 32913), (78, 33165),

Gene: Guntur_10 Start: 6014, Stop: 6436, Start Num: 15

Candidate Starts for Guntur_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: HarperAnne_8 Start: 6127, Stop: 6564, Start Num: 8
Candidate Starts for HarperAnne_8:
(Start: 8 @6127 has 146 MA's), (28, 6205), (35, 6247), (50, 6346), (52, 6373), (55, 6406), (75, 6544),

Gene: HeadMave_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for HeadMave_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Hernandez44_8 Start: 6247, Stop: 6681, Start Num: 8
Candidate Starts for Hernandez44_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (36, 6370), (50, 6466), (52, 6493), (75, 6664),

Gene: Horacetta_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Horacetta_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: HorseRider_10 Start: 6341, Stop: 6739, Start Num: 15
Candidate Starts for HorseRider_10:
(Start: 15 @6341 has 52 MA's), (33, 6419), (41, 6458), (42, 6464), (59, 6593), (68, 6653), (70, 6689),

Gene: Hulk_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Hulk_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Hunnie_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Hunnie_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Inspire2_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Inspire2_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: IzzyPants24_8 Start: 6178, Stop: 6615, Start Num: 8
Candidate Starts for IzzyPants24_8:
(Start: 8 @6178 has 146 MA's), (28, 6256), (35, 6298), (50, 6397), (52, 6424), (55, 6457), (75, 6595),

Gene: JRok_8 Start: 6139, Stop: 6573, Start Num: 8
Candidate Starts for JRok_8:
(Start: 8 @6139 has 146 MA's), (28, 6217), (35, 6259), (50, 6358), (52, 6385), (55, 6418), (75, 6556),

Gene: Jahseh_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Jahseh_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: JaimeB_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for JaimeB_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Jalloh_10 Start: 6349, Stop: 6747, Start Num: 15
Candidate Starts for Jalloh_10:
(Start: 15 @6349 has 52 MA's), (33, 6427), (42, 6472), (59, 6601), (68, 6661), (70, 6697),

Gene: Jannah_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Jannah_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Jeanie_10 Start: 6696, Stop: 7160, Start Num: 13
Candidate Starts for Jeanie_10:
(Start: 13 @6696 has 9 MA's), (26, 6753), (59, 6975), (60, 6993), (65, 7014), (66, 7017),

Gene: Jella_8 Start: 6166, Stop: 6600, Start Num: 8
Candidate Starts for Jella_8:
(Start: 8 @6166 has 146 MA's), (28, 6244), (35, 6286), (36, 6289), (52, 6412), (75, 6583),

Gene: Jerky_8 Start: 6226, Stop: 6660, Start Num: 8
Candidate Starts for Jerky_8:
(Start: 8 @6226 has 146 MA's), (28, 6304), (35, 6346), (36, 6349), (50, 6445), (52, 6472), (75, 6643),

Gene: Jessica_11 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Jessica_11:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: JoBros_8 Start: 6143, Stop: 6577, Start Num: 8
Candidate Starts for JoBros_8:
(Start: 8 @6143 has 146 MA's), (28, 6221), (35, 6263), (36, 6266), (52, 6389), (75, 6560),

Gene: JooneeDee_8 Start: 6169, Stop: 6609, Start Num: 8
Candidate Starts for JooneeDee_8:
(Start: 8 @6169 has 146 MA's), (28, 6247), (35, 6289), (50, 6388), (52, 6415), (55, 6448), (75, 6586),

Gene: Josuke_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Josuke_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Kaijohn_8 Start: 6145, Stop: 6579, Start Num: 8
Candidate Starts for Kaijohn_8:
(Start: 8 @6145 has 146 MA's), (28, 6223), (35, 6265), (36, 6268), (50, 6364), (52, 6391), (55, 6424), (75, 6562),

Gene: KayPaulus_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for KayPaulus_8:
(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: Kels_8 Start: 5581, Stop: 5997, Start Num: 15
Candidate Starts for Kels_8:
(Start: 15 @5581 has 52 MA's), (37, 5680), (38, 5689), (39, 5695), (50, 5773), (54, 5815), (56, 5839),

Gene: Kevanna_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for Kevanna_8:

(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: KillerTomato_8 Start: 6190, Stop: 6624, Start Num: 8
Candidate Starts for KillerTomato_8:
(Start: 8 @6190 has 146 MA's), (28, 6268), (35, 6310), (50, 6409), (52, 6436), (55, 6469), (75, 6607),

Gene: Kojax4_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Kojax4_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: KylieMac_11 Start: 6000, Stop: 6422, Start Num: 15
Candidate Starts for KylieMac_11:
(Start: 15 @6000 has 52 MA's), (33, 6081), (34, 6090), (37, 6099), (38, 6108), (42, 6132), (45, 6150), (47, 6180), (50, 6192), (51, 6195), (54, 6234), (56, 6258),

Gene: KyriosFaba_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for KyriosFaba_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Laila_11 Start: 6013, Stop: 6435, Start Num: 15
Candidate Starts for Laila_11:
(Start: 15 @6013 has 52 MA's), (33, 6094), (34, 6103), (37, 6112), (42, 6145), (47, 6193), (50, 6205), (51, 6208), (54, 6247), (56, 6271), (64, 6322),

Gene: LaviMo_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for LaviMo_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Leafy_8 Start: 6160, Stop: 6594, Start Num: 8
Candidate Starts for Leafy_8:
(Start: 8 @6160 has 146 MA's), (28, 6238), (35, 6280), (50, 6379), (52, 6406), (55, 6439), (75, 6577),

Gene: LemonPepper_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for LemonPepper_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Link_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Link_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: LionelHutz_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for LionelHutz_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Livingwater_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for Livingwater_8:
(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: Loca_8 Start: 6163, Stop: 6597, Start Num: 8
Candidate Starts for Loca_8:
(Start: 8 @6163 has 146 MA's), (28, 6241), (35, 6283), (50, 6382), (52, 6409), (55, 6442), (75, 6580),

Gene: Lola20_8 Start: 6139, Stop: 6573, Start Num: 8
Candidate Starts for Lola20_8:
(Start: 8 @6139 has 146 MA's), (28, 6217), (35, 6259), (50, 6358), (52, 6385), (55, 6418), (75, 6556),

Gene: Lore_10 Start: 6013, Stop: 6435, Start Num: 15
Candidate Starts for Lore_10:
(Start: 15 @6013 has 52 MA's), (33, 6094), (34, 6103), (37, 6112), (42, 6145), (47, 6193), (50, 6205), (51, 6208), (54, 6247), (56, 6271), (64, 6322),

Gene: LouisXIV_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for LouisXIV_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Lunatic_8 Start: 6130, Stop: 6567, Start Num: 8
Candidate Starts for Lunatic_8:
(Start: 8 @6130 has 146 MA's), (28, 6208), (35, 6250), (50, 6349), (52, 6376), (55, 6409), (75, 6547),

Gene: Luxx_8 Start: 6166, Stop: 6600, Start Num: 8
Candidate Starts for Luxx_8:
(Start: 8 @6166 has 146 MA's), (28, 6244), (35, 6286), (36, 6289), (52, 6412), (75, 6583),

Gene: Madebyisha_8 Start: 6226, Stop: 6660, Start Num: 8
Candidate Starts for Madebyisha_8:
(Start: 8 @6226 has 146 MA's), (28, 6304), (35, 6346), (36, 6349), (50, 6445), (52, 6472), (75, 6643),

Gene: Maggie_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Maggie_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Majesty_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Majesty_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: ManAs_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for ManAs_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Maneater_8 Start: 6130, Stop: 6564, Start Num: 8
Candidate Starts for Maneater_8:
(Start: 8 @6130 has 146 MA's), (28, 6208), (35, 6250), (36, 6253), (52, 6376), (75, 6547),

Gene: Marichuy_8 Start: 6247, Stop: 6681, Start Num: 8
Candidate Starts for Marichuy_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (36, 6370), (52, 6493), (75, 6664),

Gene: Mariposa_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Mariposa_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Massimo_10 Start: 6014, Stop: 6436, Start Num: 15

Candidate Starts for Massimo_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: MasterPitts_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for MasterPitts_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: MauiIvory_8 Start: 6244, Stop: 6681, Start Num: 8
Candidate Starts for MauiIvory_8:
(Start: 8 @6244 has 146 MA's), (28, 6322), (35, 6364), (50, 6463), (52, 6490), (55, 6523), (75, 6661),

Gene: McGonagall_10 Start: 6696, Stop: 7160, Start Num: 13
Candidate Starts for McGonagall_10:
(Start: 13 @6696 has 9 MA's), (26, 6753), (59, 6975), (60, 6993), (65, 7014), (66, 7017),

Gene: McShie_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for McShie_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (50, 6361), (52, 6388), (55, 6421), (75, 6559),

Gene: MelBee03_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for MelBee03_8:
(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: Miaurora_8 Start: 6247, Stop: 6684, Start Num: 8
Candidate Starts for Miaurora_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (50, 6466), (52, 6493), (55, 6526), (75, 6664),

Gene: Minima_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Minima_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: MirimarMandM_8 Start: 6211, Stop: 6651, Start Num: 8
Candidate Starts for MirimarMandM_8:
(Start: 8 @6211 has 146 MA's), (28, 6289), (50, 6430), (52, 6457), (55, 6490), (75, 6628),

Gene: Moloch_10 Start: 6088, Stop: 6510, Start Num: 15
Candidate Starts for Moloch_10:
(Start: 15 @6088 has 52 MA's), (33, 6169), (34, 6178), (37, 6187), (38, 6196), (42, 6220), (43, 6223), (45, 6238), (47, 6268), (50, 6280), (51, 6283), (56, 6346), (64, 6397),

Gene: MooKitty_8 Start: 5563, Stop: 5988, Start Num: 15
Candidate Starts for MooKitty_8:
(12, 5554), (Start: 15 @5563 has 52 MA's), (24, 5599), (50, 5755), (56, 5821), (67, 5884), (69, 5911),

Gene: MrGreen_8 Start: 6157, Stop: 6591, Start Num: 8
Candidate Starts for MrGreen_8:
(Start: 8 @6157 has 146 MA's), (28, 6235), (35, 6277), (50, 6376), (52, 6403), (55, 6436), (75, 6574),

Gene: Muttlie_10 Start: 6015, Stop: 6437, Start Num: 15
Candidate Starts for Muttlie_10:
(Start: 15 @6015 has 52 MA's), (34, 6105), (37, 6114), (38, 6123), (42, 6147), (43, 6150), (45, 6165), (47, 6195), (50, 6207), (51, 6210), (56, 6273), (64, 6324),

Gene: Myram_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Myram_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Naby_8 Start: 5865, Stop: 6305, Start Num: 8
Candidate Starts for Naby_8:
(Start: 8 @5865 has 146 MA's), (28, 5943), (35, 5985), (52, 6111), (75, 6282),

Gene: Namsahir_8 Start: 6202, Stop: 6639, Start Num: 8
Candidate Starts for Namsahir_8:
(Start: 8 @6202 has 146 MA's), (28, 6280), (35, 6322), (50, 6421), (52, 6448), (55, 6481), (75, 6619),

Gene: NeumannU_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for NeumannU_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Niffler_8 Start: 6220, Stop: 6657, Start Num: 8
Candidate Starts for Niffler_8:
(Start: 8 @6220 has 146 MA's), (28, 6298), (35, 6340), (50, 6439), (52, 6466), (55, 6499), (75, 6637),

Gene: Nobel_8 Start: 6247, Stop: 6684, Start Num: 8
Candidate Starts for Nobel_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (50, 6466), (52, 6493), (55, 6526), (75, 6664),

Gene: Noelani_8 Start: 6127, Stop: 6561, Start Num: 8
Candidate Starts for Noelani_8:
(Start: 8 @6127 has 146 MA's), (28, 6205), (35, 6247), (50, 6346), (52, 6373), (55, 6406), (75, 6544),

Gene: Oaklynn_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Oaklynn_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (50, 6361), (52, 6388), (55, 6421), (75, 6559),

Gene: Octopus_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Octopus_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: OdetoJoy_8 Start: 6226, Stop: 6660, Start Num: 8
Candidate Starts for OdetoJoy_8:
(Start: 8 @6226 has 146 MA's), (28, 6304), (35, 6346), (36, 6349), (50, 6445), (52, 6472), (75, 6643),

Gene: Otwor_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Otwor_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Owens_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Owens_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: PaoPu_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for PaoPu_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Penoan_9 Start: 6360, Stop: 6809, Start Num: 15
Candidate Starts for Penoan_9:
(6, 6330), (Start: 15 @6360 has 52 MA's), (31, 6426), (33, 6441), (38, 6468), (69, 6705), (77, 6783),

Gene: Peregrin_81 Start: 41934, Stop: 42350, Start Num: 11
Candidate Starts for Peregrin_81:
(Start: 11 @41934 has 3 MA's), (36, 42051),

Gene: Peregrin_70 Start: 31530, Stop: 31976, Start Num: 13
Candidate Starts for Peregrin_70:
(Start: 13 @31530 has 9 MA's), (18, 31548), (21, 31557), (23, 31572), (40, 31671), (78, 31947),

Gene: Picconator_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Picconator_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Picnic_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Picnic_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: PoRanda_8 Start: 6211, Stop: 6651, Start Num: 8
Candidate Starts for PoRanda_8:
(Start: 8 @6211 has 146 MA's), (28, 6289), (50, 6430), (52, 6457), (55, 6490), (75, 6628),

Gene: Pondwater_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Pondwater_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Prospero_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Prospero_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Publix_8 Start: 6202, Stop: 6639, Start Num: 8
Candidate Starts for Publix_8:
(Start: 8 @6202 has 146 MA's), (28, 6280), (35, 6322), (50, 6421), (52, 6448), (55, 6481), (75, 6619),

Gene: Puddles3_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Puddles3_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: PuffyCat_8 Start: 6172, Stop: 6609, Start Num: 8
Candidate Starts for PuffyCat_8:
(Start: 8 @6172 has 146 MA's), (28, 6250), (35, 6292), (50, 6391), (52, 6418), (55, 6451), (75, 6589),

Gene: Quaker_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for Quaker_8:
(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: RRH1_10 Start: 7140, Stop: 7571, Start Num: 10
Candidate Starts for RRH1_10:
(2, 6879), (3, 6885), (10, 7140), (41, 7278), (42, 7284), (43, 7287), (44, 7299), (58, 7416), (65, 7461), (69, 7494), (74, 7545),

Gene: Rahul_10 Start: 6906, Stop: 7367, Start Num: 13
Candidate Starts for Rahul_10:
(Start: 13 @6906 has 9 MA's), (19, 6927), (30, 6975), (36, 7008), (69, 7254), (73, 7299),

Gene: Rhogar_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Rhogar_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Rhysand_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Rhysand_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Rira_8 Start: 6178, Stop: 6615, Start Num: 8
Candidate Starts for Rira_8:
(Start: 8 @6178 has 146 MA's), (28, 6256), (35, 6298), (50, 6397), (52, 6424), (55, 6457), (75, 6595),

Gene: Ronnie_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Ronnie_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Root_9 Start: 6429, Stop: 6863, Start Num: 13
Candidate Starts for Root_9:
(1, 6159), (Start: 13 @6429 has 9 MA's), (17, 6444), (23, 6471), (41, 6564),

Gene: RoscoWindex_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for RoscoWindex_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Sachet_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Sachet_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Sage7_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Sage7_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: SallySpecial_11 Start: 7051, Stop: 7497, Start Num: 14
Candidate Starts for SallySpecial_11:
(Start: 14 @7051 has 3 MA's), (24, 7087), (36, 7147), (42, 7183), (44, 7198), (45, 7201), (46, 7213), (47, 7231), (50, 7243), (51, 7246), (52, 7270), (56, 7306), (59, 7321), (65, 7360), (68, 7381), (71, 7429), (72, 7432),

Gene: Sandman_10 Start: 6088, Stop: 6510, Start Num: 15
Candidate Starts for Sandman_10:
(Start: 15 @6088 has 52 MA's), (33, 6169), (34, 6178), (37, 6187), (38, 6196), (42, 6220), (43, 6223), (45, 6238), (47, 6268), (50, 6280), (51, 6283), (56, 6346), (64, 6397),

Gene: SantasSleigh_8 Start: 6178, Stop: 6612, Start Num: 8
Candidate Starts for SantasSleigh_8:
(Start: 8 @6178 has 146 MA's), (28, 6256), (35, 6298), (36, 6301), (52, 6424), (75, 6595),

Gene: Saphira_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for Saphira_10:
(Start: 15 @6014 has 52 MA's), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272),

Gene: Sara_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for Sara_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Scamander_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Scamander_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Schiebs_11 Start: 6492, Stop: 6941, Start Num: 13
Candidate Starts for Schiebs_11:
(7, 6477), (Start: 13 @6492 has 9 MA's), (26, 6552), (32, 6570), (41, 6627), (43, 6636), (53, 6723), (56, 6756), (63, 6801), (64, 6810), (65, 6813), (67, 6819), (69, 6846),

Gene: Scrunchy_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Scrunchy_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: SeaWolves_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for SeaWolves_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: SerialPhiller_8 Start: 5656, Stop: 6072, Start Num: 15
Candidate Starts for SerialPhiller_8:
(Start: 15 @5656 has 52 MA's), (37, 5755), (38, 5764), (39, 5770), (50, 5848), (54, 5890), (56, 5914),

Gene: Seume_10 Start: 5810, Stop: 6232, Start Num: 15
Candidate Starts for Seume_10:
(Start: 15 @5810 has 52 MA's), (34, 5900), (37, 5909), (38, 5918), (42, 5942), (43, 5945), (45, 5960), (47, 5990), (50, 6002), (51, 6005), (56, 6068), (64, 6119),

Gene: Sippinontea_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for Sippinontea_8:
(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: Slentz_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Slentz_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Slizam_8 Start: 6178, Stop: 6615, Start Num: 8
Candidate Starts for Slizam_8:
(Start: 8 @6178 has 146 MA's), (28, 6256), (35, 6298), (50, 6397), (52, 6424), (55, 6457), (75, 6595),

Gene: Snuffles_9 Start: 6348, Stop: 6785, Start Num: 8
Candidate Starts for Snuffles_9:
(Start: 8 @6348 has 146 MA's), (28, 6426), (35, 6468), (50, 6567), (52, 6594), (55, 6627), (75, 6765),

Gene: Sourignavong_11 Start: 6115, Stop: 6537, Start Num: 15
Candidate Starts for Sourignavong_11:

(Start: 15 @6115 has 52 MA's), (33, 6196), (34, 6205), (37, 6214), (38, 6223), (42, 6247), (43, 6250), (45, 6265), (47, 6295), (50, 6307), (51, 6310), (56, 6373), (64, 6424),

Gene: Sputnik_8 Start: 5666, Stop: 6085, Start Num: 15
Candidate Starts for Sputnik_8:
(Start: 15 @5666 has 52 MA's), (24, 5702), (33, 5747), (42, 5798), (61, 5963), (67, 5987), (69, 6014),

Gene: Stem_8 Start: 6178, Stop: 6615, Start Num: 8
Candidate Starts for Stem_8:
(Start: 8 @6178 has 146 MA's), (28, 6256), (35, 6298), (50, 6397), (52, 6424), (55, 6457), (75, 6595),

Gene: StewieGriff_10 Start: 6013, Stop: 6435, Start Num: 15
Candidate Starts for StewieGriff_10:
(Start: 15 @6013 has 52 MA's), (33, 6094), (34, 6103), (37, 6112), (42, 6145), (47, 6193), (50, 6205), (51, 6208), (54, 6247), (56, 6271), (64, 6322),

Gene: Stratus_10 Start: 6088, Stop: 6510, Start Num: 15
Candidate Starts for Stratus_10:
(Start: 15 @6088 has 52 MA's), (33, 6169), (34, 6178), (37, 6187), (38, 6196), (42, 6220), (43, 6223), (45, 6238), (47, 6268), (50, 6280), (51, 6283), (56, 6346), (64, 6397),

Gene: StrawberryLem_8 Start: 5581, Stop: 5997, Start Num: 15
Candidate Starts for StrawberryLem_8:
(Start: 15 @5581 has 52 MA's), (37, 5680), (38, 5689), (39, 5695), (50, 5773), (54, 5815), (56, 5839),

Gene: Swenson_10 Start: 6137, Stop: 6559, Start Num: 15
Candidate Starts for Swenson_10:
(Start: 15 @6137 has 52 MA's), (34, 6227), (37, 6236), (38, 6245), (42, 6269), (45, 6287), (47, 6317), (50, 6329), (51, 6332), (54, 6371), (56, 6395),

Gene: TailX7_10 Start: 6338, Stop: 6736, Start Num: 15
Candidate Starts for TailX7_10:
(Start: 15 @6338 has 52 MA's), (33, 6416), (42, 6461), (59, 6590), (68, 6650), (70, 6686),

Gene: Taj14_10 Start: 5993, Stop: 6415, Start Num: 15
Candidate Starts for Taj14_10:
(Start: 15 @5993 has 52 MA's), (34, 6083), (37, 6092), (38, 6101), (42, 6125), (45, 6143), (47, 6173), (50, 6185), (51, 6188), (56, 6251),

Gene: TeddyBoy_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for TeddyBoy_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: TimoTea_8 Start: 6130, Stop: 6564, Start Num: 8
Candidate Starts for TimoTea_8:
(Start: 8 @6130 has 146 MA's), (28, 6208), (35, 6250), (36, 6253), (52, 6376), (75, 6547),

Gene: TinoCrisci_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for TinoCrisci_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: TinyTruffula_8 Start: 6247, Stop: 6684, Start Num: 8

Candidate Starts for TinyTruffula_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (50, 6466), (52, 6493), (55, 6526), (75, 6664),

Gene: TlaliMex_8 Start: 6241, Stop: 6681, Start Num: 8
Candidate Starts for TlaliMex_8:
(Start: 8 @6241 has 146 MA's), (28, 6319), (35, 6361), (50, 6460), (52, 6487), (55, 6520), (75, 6658),

Gene: TomBrady12_8 Start: 6178, Stop: 6615, Start Num: 8
Candidate Starts for TomBrady12_8:
(Start: 8 @6178 has 146 MA's), (28, 6256), (35, 6298), (50, 6397), (52, 6424), (55, 6457), (75, 6595),

Gene: Toulouse_9 Start: 5810, Stop: 6232, Start Num: 15
Candidate Starts for Toulouse_9:
(Start: 15 @5810 has 52 MA's), (34, 5900), (37, 5909), (38, 5918), (42, 5942), (43, 5945), (45, 5960), (47, 5990), (50, 6002), (51, 6005), (56, 6068), (64, 6119),

Gene: Toxicola_8 Start: 6055, Stop: 6489, Start Num: 8
Candidate Starts for Toxicola_8:
(Start: 8 @6055 has 146 MA's), (28, 6133), (35, 6175), (50, 6274), (52, 6301), (55, 6334), (75, 6472),

Gene: Trackstar_8 Start: 6247, Stop: 6684, Start Num: 8
Candidate Starts for Trackstar_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (50, 6466), (52, 6493), (55, 6526), (75, 6664),

Gene: Trireme_8 Start: 6247, Stop: 6684, Start Num: 8
Candidate Starts for Trireme_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (50, 6466), (52, 6493), (55, 6526), (75, 6664),

Gene: TymAbreu_10 Start: 6014, Stop: 6436, Start Num: 15
Candidate Starts for TymAbreu_10:
(Start: 15 @6014 has 52 MA's), (33, 6095), (34, 6104), (37, 6113), (38, 6122), (42, 6146), (43, 6149), (45, 6164), (47, 6194), (50, 6206), (51, 6209), (56, 6272), (64, 6323),

Gene: Tyrellus_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Tyrellus_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Upsilon_8 Start: 6211, Stop: 6651, Start Num: 8
Candidate Starts for Upsilon_8:
(Start: 8 @6211 has 146 MA's), (28, 6289), (50, 6430), (52, 6457), (55, 6490), (75, 6628),

Gene: Vanisius_8 Start: 6154, Stop: 6588, Start Num: 8
Candidate Starts for Vanisius_8:
(Start: 8 @6154 has 146 MA's), (28, 6232), (35, 6274), (36, 6277), (52, 6400), (75, 6571),

Gene: Vinye_12 Start: 6320, Stop: 6739, Start Num: 15
Candidate Starts for Vinye_12:
(Start: 15 @6320 has 52 MA's), (22, 6341), (33, 6401), (37, 6419), (38, 6428), (45, 6470), (47, 6500), (50, 6512), (56, 6578), (59, 6593), (67, 6638),

Gene: VitulaEligans_8 Start: 6226, Stop: 6660, Start Num: 8
Candidate Starts for VitulaEligans_8:
(Start: 8 @6226 has 146 MA's), (28, 6304), (35, 6346), (36, 6349), (50, 6445), (52, 6472), (75, 6643),

Gene: Weasels2_72 Start: 32356, Stop: 32802, Start Num: 13
Candidate Starts for Weasels2_72:
(Start: 13 @32356 has 9 MA's), (31, 32440), (33, 32455), (40, 32497), (48, 32557), (78, 32773),

Gene: Weasels2_70 Start: 30153, Stop: 30596, Start Num: 16
Candidate Starts for Weasels2_70:
(5, 30114), (Start: 16 @30153 has 1 MA's), (36, 30258), (58, 30420),

Gene: Weasels2_83 Start: 42792, Stop: 43208, Start Num: 11
Candidate Starts for Weasels2_83:
(Start: 11 @42792 has 3 MA's), (23, 42837), (36, 42909),

Gene: Witch_8 Start: 6143, Stop: 6577, Start Num: 8
Candidate Starts for Witch_8:
(Start: 8 @6143 has 146 MA's), (28, 6221), (35, 6263), (36, 6266), (52, 6389), (75, 6560),

Gene: Wolfpack_8 Start: 6136, Stop: 6570, Start Num: 8
Candidate Starts for Wolfpack_8:
(Start: 8 @6136 has 146 MA's), (28, 6214), (35, 6256), (50, 6355), (52, 6382), (55, 6415), (75, 6553),

Gene: Ximeno_8 Start: 5656, Stop: 6072, Start Num: 15
Candidate Starts for Ximeno_8:
(Start: 15 @5656 has 52 MA's), (37, 5755), (38, 5764), (39, 5770), (50, 5848), (54, 5890), (56, 5914),

Gene: Yami_8 Start: 6130, Stop: 6567, Start Num: 8
Candidate Starts for Yami_8:
(Start: 8 @6130 has 146 MA's), (28, 6208), (35, 6250), (50, 6349), (52, 6376), (55, 6409), (75, 6547),

Gene: Yank_10 Start: 6015, Stop: 6437, Start Num: 15
Candidate Starts for Yank_10:
(Start: 15 @6015 has 52 MA's), (34, 6105), (37, 6114), (38, 6123), (42, 6147), (43, 6150), (45, 6165), (47, 6195), (50, 6207), (51, 6210), (56, 6273), (64, 6324),

Gene: Yasuo_8 Start: 6139, Stop: 6573, Start Num: 8
Candidate Starts for Yasuo_8:
(Start: 8 @6139 has 146 MA's), (28, 6217), (35, 6259), (36, 6262), (52, 6385), (75, 6556),

Gene: YertPhresh_8 Start: 6142, Stop: 6576, Start Num: 8
Candidate Starts for YertPhresh_8:
(Start: 8 @6142 has 146 MA's), (28, 6220), (35, 6262), (36, 6265), (52, 6388), (75, 6559),

Gene: Yubaba_8 Start: 6143, Stop: 6577, Start Num: 8
Candidate Starts for Yubaba_8:
(Start: 8 @6143 has 146 MA's), (28, 6221), (35, 6263), (36, 6266), (52, 6389), (75, 6560),

Gene: Zahlia_8 Start: 6247, Stop: 6681, Start Num: 8
Candidate Starts for Zahlia_8:
(Start: 8 @6247 has 146 MA's), (28, 6325), (35, 6367), (36, 6370), (52, 6493), (75, 6664),