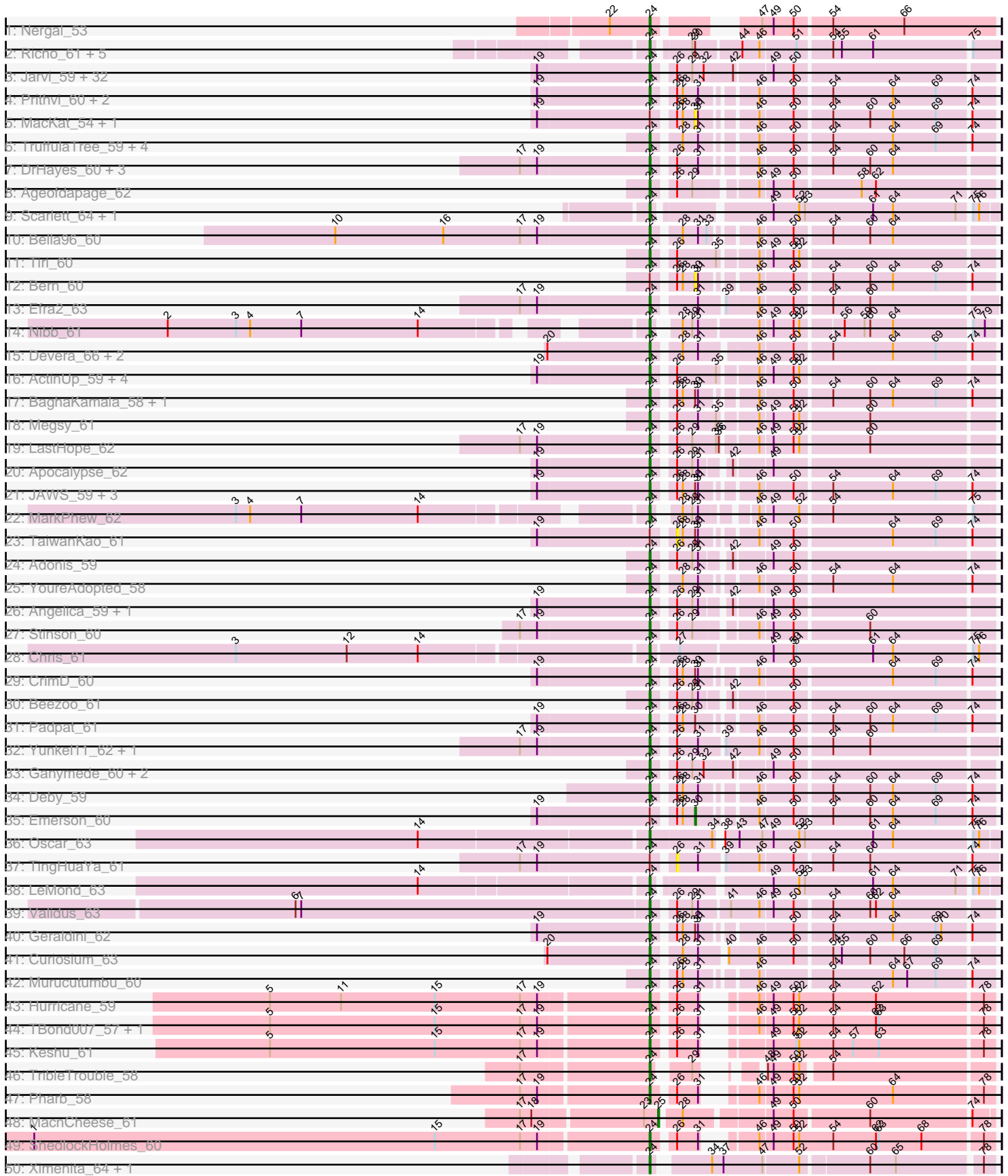
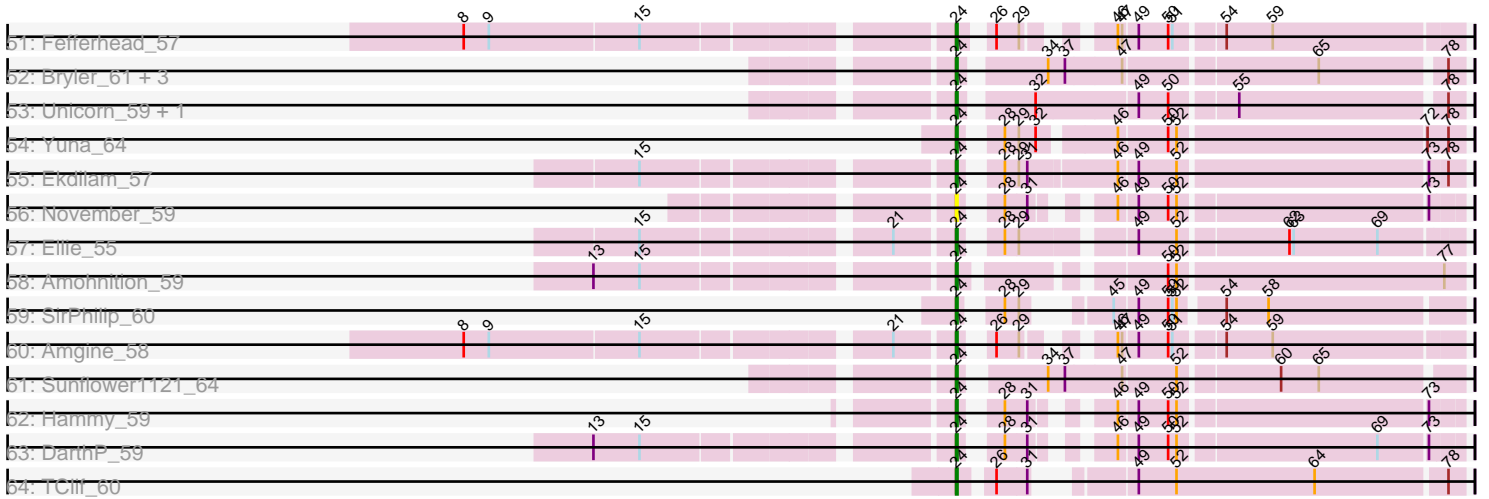


Pham 200036



Pham 200036



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 200036 Report

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

Pham number 200036 has 132 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Nergal_53
- Track 2 : Richo_61, Dartin_61, Shaobing_61, Niklas_61, McMater_61, Peanam_61
- Track 3 : Jarvi_59, Peel_59, CREW_59, Topper_59, Boiiii_59, BGIlluviae_59, Dalmuri_59, Asayake_59, Hyperbowlee_59, Jeckyll_59, CallaLilly_61, Padfoot_59, AlishaPH_59, Atiba_60, CaseJules_61, BEEST_59, Inky_59, Joy99_59, Capricorn_59, Lunahalos_59, Blizzard_59, Belladonna_59, Durfee_59, Adephagia_59, Homura_59, Tachez_59, Spock_59, Twitch_59, ShiaSurprise_60, Llorens_59, Piatt_59, Anaya_61, Rosmarinus_59
- Track 4 : Prithvi_60, LindNT_58, TreyKay_60
- Track 5 : MacKat_54, Clipper_63
- Track 6 : TruffulaTree_59, Slimphazie_59, Pokerus_58, BarrelRoll_59, Rapunzel97_60
- Track 7 : DrHayes_60, TiniBug_60, Urkel_60, SamuelLPlaqson_60
- Track 8 : Ageofdapage_62
- Track 9 : Scarlett_64, KiSi_64
- Track 10 : Bella96_60
- Track 11 : Tiri_60
- Track 12 : Bern_60
- Track 13 : Efra2_63
- Track 14 : Nibb_61
- Track 15 : Devera_66, Dole_64, Illumine_64
- Track 16 : ActinUp_59, HedwigODU_59, Ramen_60, Jayhawk_60, Zabiza_54
- Track 17 : BaghaKamala_58, CheetoDust_58
- Track 18 : Megsy_61
- Track 19 : LastHope_62
- Track 20 : Apocalypse_62
- Track 21 : JAWS_59, Veliki_60, Mynx_60, Zavala_61
- Track 22 : MarkPhew_62
- Track 23 : TaiwanKao_61
- Track 24 : Adonis_59
- Track 25 : YoureAdopted_58
- Track 26 : Angelica_59, MeaningOfLife_60
- Track 27 : Stinson_60
- Track 28 : Chris_61
- Track 29 : CrimD_60
- Track 30 : Beezoo_61
- Track 31 : Padpat_61

- Track 32 : Yunkel11_62, Guanica15_62
- Track 33 : Ganymede_60, QuincyRose_58, Sulley_59
- Track 34 : Deby_59
- Track 35 : Emerson_60
- Track 36 : Oscar_63
- Track 37 : TingHuaYa_61
- Track 38 : LeMond_63
- Track 39 : Validus_63
- Track 40 : Geraldini_62
- Track 41 : Curiosium_63
- Track 42 : Murucutumbu_60
- Track 43 : Hurricane_59
- Track 44 : TBond007_57, Pixie_58
- Track 45 : Keshu_61
- Track 46 : TribbleTrouble_58
- Track 47 : Pharb_58
- Track 48 : MacnCheese_61
- Track 49 : ShedlockHolmes_60
- Track 50 : Ximenita_64, Shadow1_63
- Track 51 : Fefferhead_57
- Track 52 : Bryler_61, Tierra_61, Cain_61, Phrank_61
- Track 53 : Unicorn_59, PhelpsODU_59
- Track 54 : Yuna_64
- Track 55 : Ekdilam_57
- Track 56 : November_59
- Track 57 : Ellie_55
- Track 58 : Amohnition_59
- Track 59 : SirPhilip_60
- Track 60 : Amgine_58
- Track 61 : Sunflower1121_64
- Track 62 : Hammy_59
- Track 63 : DarthP_59
- Track 64 : TClif_60

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

The start number called the most often in the published annotations is 24, it was called in 120 of the 122 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_59, Adephegia_59, Adonis_59, Ageofdapage_62, AlishaPH_59, Amgine_58, Amohnition_59, Anaya_61, Angelica_59, Apocalypse_62, Asayake_59, Atiba_60, BEEST_59, BGIluviae_59, BaghaKamala_58, BarrelRoll_59, Beezoo_61, Bella96_60, Belladonna_59, Blizzard_59, Boiiii_59, Bryler_61, CREW_59, Cain_61, CallaLilly_61, Capricorn_59, CaseJules_61, CheetoDust_58, Chris_61, CrimD_60, Curiosium_63, Dalmuri_59, DarthP_59, Dartin_61, Deby_59, Devera_66, Dole_64, DrHayes_60, Durfee_59, Efra2_63, Ekdilam_57, Ellie_55, Fefferhead_57, Ganymede_60, Geraldini_62, Guanica15_62, Hammy_59, HedwigODU_59, Homura_59, Hurricane_59, Hyperbowlee_59, Illumine_64, Inky_59, JAWS_59, Jarvi_59, Jayhawk_60, Jeckyll_59, Joy99_59, Keshu_61, KiSi_64, LastHope_62,

LeMond_63, LindNT_58, Llorens_59, Lunahalos_59, MarkPhew_62, McMater_61, MeaningOfLife_60, Megsy_61, Murucutumbu_60, Mynx_60, Nergal_53, Nibb_61, Niklas_61, November_59, Oscar_63, Padfoot_59, Padpat_61, Peanam_61, Peel_59, Pharb_58, PhelpsODU_59, Phrank_61, Piatt_59, Pixie_58, Pokerus_58, Prithvi_60, QuincyRose_58, Ramen_60, Rapunzel97_60, Richo_61, Rosmarinus_59, SamuelLPlaqsom_60, Scarlett_64, Shadow1_63, Shaobing_61, ShedlockHolmes_60, ShiaSurprise_60, SirPhilip_60, Slimphazie_59, Spock_59, Stinson_60, Sulley_59, Sunflower1121_64, TBond007_57, TClif_60, Tachez_59, Tierra_61, TiniBug_60, Tiri_60, Topper_59, TreyKay_60, TribbleTrouble_58, TruffulaTree_59, Twitch_59, Unicorn_59, Urkel_60, Validus_63, Veliki_60, Ximenita_64, YoureAdopted_58, Yuna_64, Yunkel11_62, Zabiza_54, Zavala_61,

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

- Bern_60, Clipper_63, Emerson_60, MacKat_54, TaiwanKao_61, TingHuaYa_61,

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

- MacnCheese_61,

Summary by start number:

Start 24:

- Found in 131 of 132 (99.2%) of genes in pham
- Manual Annotations of this start: 120 of 122
- Called 95.4% of time when present
- Phage (with cluster) where this start called: ActinUp_59 (K1), Adephagia_59 (K1), Adonis_59 (K1), Ageofdapage_62 (K1), AlishaPH_59 (K1), Amgine_58 (K6), Amohntion_59 (K6), Anaya_61 (K1), Angelica_59 (K1), Apocalypse_62 (K1), Asayake_59 (K1), Atiba_60 (K1), BEEST_59 (K1), BGIluviae_59 (K1), BaghaKamala_58 (K1), BarrelRoll_59 (K1), Beezoo_61 (K1), Bella96_60 (K1), Belladonna_59 (K1), Blizzard_59 (K1), Boiii_59 (K1), Bryler_61 (K6), CREW_59 (K1), Cain_61 (K6), CallaLilly_61 (K1), Capricorn_59 (K1), CaseJules_61 (K1), CheetoDust_58 (K1), Chris_61 (K1), CrimD_60 (K1), Curiosium_63 (K1), Dalmuri_59 (K1), DarthP_59 (K6), Dartin_61 (K1), Deby_59 (K1), Devera_66 (K1), Dole_64 (K1), DrHayes_60 (K1), Durfee_59 (K1), Efra2_63 (K1), Ekdilam_57 (K6), Ellie_55 (K6), Fefferhead_57 (K6), Ganymede_60 (K1), Geraldini_62 (K1), Guanica15_62 (K1), Hammy_59 (K6), HedwigODU_59 (K1), Homura_59 (K1), Hurricane_59 (K3), Hyperbowlee_59 (K1), Illumine_64 (K1), Inky_59 (K1), JAWS_59 (K1), Jarvi_59 (K1), Jayhawk_60 (K1), Jeckyll_59 (K1), Joy99_59 (K1), Keshu_61 (K3), KiSi_64 (K1), LastHope_62 (K1), LeMond_63 (K1), LindNT_58 (K1), Llorens_59 (K1), Lunahalos_59 (K1), MarkPhew_62 (K1), McMater_61 (K1), MeaningOfLife_60 (K1), Megsy_61 (K1), Murucutumbu_60 (K1), Mynx_60 (K1), Nergal_53 (AG), Nibb_61 (K1), Niklas_61 (K1), November_59 (K6), Oscar_63 (K1), Padfoot_59 (K1), Padpat_61 (K1), Peanam_61 (K1), Peel_59 (K1), Pharb_58 (K3), PhelpsODU_59 (K6), Phrank_61 (K6), Piatt_59 (K1), Pixie_58 (K3), Pokerus_58 (K1), Prithvi_60 (K1), QuincyRose_58 (K1), Ramen_60 (K1), Rapunzel97_60 (K1), Richo_61 (K1), Rosmarinus_59 (K1), SamuelLPlaqsom_60 (K1), Scarlett_64 (K1), Shadow1_63 (K6), Shaobing_61 (K1), ShedlockHolmes_60 (K3), ShiaSurprise_60 (K1), SirPhilip_60 (K6), Slimphazie_59 (K1), Spock_59 (K1), Stinson_60 (K1), Sulley_59 (K1), Sunflower1121_64 (K6), TBond007_57 (K3), TClif_60 (K6), Tachez_59 (K1), Tierra_61 (K6), TiniBug_60 (K1), Tiri_60 (K1), Topper_59 (K1), TreyKay_60 (K1), TribbleTrouble_58 (K3), TruffulaTree_59 (K1), Twitch_59 (K1), Unicorn_59 (K6), Urkel_60 (K1), Validus_63 (K1), Veliki_60 (K1), Ximenita_64 (K6), YoureAdopted_58 (K1), Yuna_64 (K6), Yunkel11_62 (K1), Zabiza_54 (K1), Zavala_61 (K1),

Start 25:

- Found in 1 of 132 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MacnCheese_61 (K3),

Start 26:

- Found in 87 of 132 (65.9%) of genes in pham
- No Manual Annotations of this start.
- Called 2.3% of time when present
- Phage (with cluster) where this start called: TaiwanKao_61 (K1), TingHuaYa_61 (K1),

Start 30:

- Found in 20 of 132 (15.2%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Bern_60 (K1), Clipper_63 (K1), Emerson_60 (K1), MacKat_54 (K1),

Summary by clusters:

There are 4 clusters represented in this pham: K3, K1, K6, AG,

Info for manual annotations of cluster AG:

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

Info for manual annotations of cluster K1:

- Start number 24 was manually annotated 93 times for cluster K1.
- Start number 30 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K3:

- Start number 24 was manually annotated 7 times for cluster K3.
- Start number 25 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K6:

- Start number 24 was manually annotated 19 times for cluster K6.

Gene Information:

Gene: ActinUp_59 Start: 40802, Stop: 41128, Start Num: 24

Candidate Starts for ActinUp_59:

(19, 40685), (Start: 24 @40802 has 120 MA's), (26, 40820), (35, 40859), (46, 40895), (49, 40907), (50, 40928), (52, 40934),

Gene: Adephagia_59 Start: 40803, Stop: 41135, Start Num: 24

Candidate Starts for Adephagia_59:

(19, 40686), (Start: 24 @40803 has 120 MA's), (26, 40821), (29, 40836), (32, 40848), (42, 40878), (49, 40914), (50, 40935),

Gene: Adonis_59 Start: 41050, Stop: 41370, Start Num: 24
Candidate Starts for Adonis_59:
(Start: 24 @41050 has 120 MA's), (26, 41068), (29, 41083), (31, 41089), (42, 41113), (49, 41149), (50, 41170),

Gene: Ageofdapage_62 Start: 41791, Stop: 42111, Start Num: 24
Candidate Starts for Ageofdapage_62:
(Start: 24 @41791 has 120 MA's), (26, 41809), (29, 41824), (46, 41878), (49, 41890), (50, 41911), (58, 41977), (62, 41992),

Gene: AlishaPH_59 Start: 41064, Stop: 41396, Start Num: 24
Candidate Starts for AlishaPH_59:
(19, 40947), (Start: 24 @41064 has 120 MA's), (26, 41082), (29, 41097), (32, 41109), (42, 41139), (49, 41175), (50, 41196),

Gene: Amgine_58 Start: 41663, Stop: 41959, Start Num: 24
Candidate Starts for Amgine_58:
(8, 41345), (9, 41363), (15, 41468), (21, 41624), (Start: 24 @41663 has 120 MA's), (26, 41675), (29, 41690), (46, 41729), (47, 41732), (49, 41741), (50, 41762), (51, 41765), (54, 41795), (59, 41828),

Gene: Amohnition_59 Start: 41255, Stop: 41578, Start Num: 24
Candidate Starts for Amohnition_59:
(13, 41027), (15, 41060), (Start: 24 @41255 has 120 MA's), (50, 41372), (52, 41378), (77, 41564),

Gene: Anaya_61 Start: 41319, Stop: 41651, Start Num: 24
Candidate Starts for Anaya_61:
(19, 41202), (Start: 24 @41319 has 120 MA's), (26, 41337), (29, 41352), (32, 41364), (42, 41394), (49, 41430), (50, 41451),

Gene: Angelica_59 Start: 40958, Stop: 41278, Start Num: 24
Candidate Starts for Angelica_59:
(19, 40841), (Start: 24 @40958 has 120 MA's), (26, 40976), (29, 40991), (31, 40997), (42, 41021), (49, 41057), (50, 41078),

Gene: Apocalypse_62 Start: 41727, Stop: 42047, Start Num: 24
Candidate Starts for Apocalypse_62:
(19, 41610), (Start: 24 @41727 has 120 MA's), (26, 41745), (29, 41760), (31, 41766), (42, 41790), (49, 41826),

Gene: Asayake_59 Start: 41118, Stop: 41450, Start Num: 24
Candidate Starts for Asayake_59:
(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: Atiba_60 Start: 40766, Stop: 41098, Start Num: 24
Candidate Starts for Atiba_60:
(19, 40649), (Start: 24 @40766 has 120 MA's), (26, 40784), (29, 40799), (32, 40811), (42, 40841), (49, 40877), (50, 40898),

Gene: BEEST_59 Start: 41118, Stop: 41450, Start Num: 24
Candidate Starts for BEEST_59:
(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: BGlluviae_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for BGlluviae_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: BaghaKamala_58 Start: 40159, Stop: 40479, Start Num: 24

Candidate Starts for BaghaKamala_58:

(Start: 24 @40159 has 120 MA's), (26, 40177), (28, 40183), (Start: 30 @40195 has 1 MA's), (31, 40198), (46, 40246), (50, 40279), (54, 40315), (60, 40354), (64, 40378), (69, 40423), (74, 40456),

Gene: BarrelRoll_59 Start: 40782, Stop: 41102, Start Num: 24

Candidate Starts for BarrelRoll_59:

(Start: 24 @40782 has 120 MA's), (28, 40806), (31, 40821), (46, 40869), (50, 40902), (54, 40938), (64, 41001), (69, 41046), (74, 41079),

Gene: Beezoo_61 Start: 41766, Stop: 42086, Start Num: 24

Candidate Starts for Beezoo_61:

(Start: 24 @41766 has 120 MA's), (26, 41784), (29, 41799), (31, 41805), (42, 41829), (50, 41886),

Gene: Bella96_60 Start: 41547, Stop: 41867, Start Num: 24

Candidate Starts for Bella96_60:

(10, 41217), (16, 41331), (17, 41412), (19, 41430), (Start: 24 @41547 has 120 MA's), (28, 41571), (31, 41586), (33, 41595), (46, 41634), (50, 41667), (54, 41703), (60, 41742), (64, 41766),

Gene: Belladonna_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Belladonna_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: Bern_60 Start: 39785, Stop: 40069, Start Num: 30

Candidate Starts for Bern_60:

(Start: 24 @39749 has 120 MA's), (26, 39767), (28, 39773), (Start: 30 @39785 has 1 MA's), (31, 39788), (46, 39836), (50, 39869), (54, 39905), (60, 39944), (64, 39968), (69, 40013), (74, 40046),

Gene: Blizzard_59 Start: 41118, Stop: 41450, Start Num: 24

Candidate Starts for Blizzard_59:

(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: Boiiii_59 Start: 41120, Stop: 41452, Start Num: 24

Candidate Starts for Boiiii_59:

(19, 41003), (Start: 24 @41120 has 120 MA's), (26, 41138), (29, 41153), (32, 41165), (42, 41195), (49, 41231), (50, 41252),

Gene: Bryler_61 Start: 40039, Stop: 40365, Start Num: 24

Candidate Starts for Bryler_61:

(Start: 24 @40039 has 120 MA's), (34, 40090), (37, 40102), (47, 40141), (65, 40270), (78, 40354),

Gene: CREW_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for CREW_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: Cain_61 Start: 40027, Stop: 40353, Start Num: 24

Candidate Starts for Cain_61:

(Start: 24 @40027 has 120 MA's), (34, 40078), (37, 40090), (47, 40129), (65, 40258), (78, 40342),

Gene: CallaLilly_61 Start: 40844, Stop: 41176, Start Num: 24

Candidate Starts for CallaLilly_61:

(19, 40727), (Start: 24 @40844 has 120 MA's), (26, 40862), (29, 40877), (32, 40889), (42, 40919), (49, 40955), (50, 40976),

Gene: Capricorn_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Capricorn_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: CaseJules_61 Start: 41118, Stop: 41450, Start Num: 24

Candidate Starts for CaseJules_61:

(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: CheetoDust_58 Start: 40203, Stop: 40523, Start Num: 24

Candidate Starts for CheetoDust_58:

(Start: 24 @40203 has 120 MA's), (26, 40221), (28, 40227), (Start: 30 @40239 has 1 MA's), (31, 40242), (46, 40290), (50, 40323), (54, 40359), (60, 40398), (64, 40422), (69, 40467), (74, 40500),

Gene: Chris_61 Start: 41524, Stop: 41868, Start Num: 24

Candidate Starts for Chris_61:

(3, 41107), (12, 41224), (14, 41299), (Start: 24 @41524 has 120 MA's), (27, 41551), (49, 41644), (50, 41665), (51, 41668), (61, 41749), (64, 41770), (75, 41848), (76, 41854),

Gene: Clipper_63 Start: 41417, Stop: 41701, Start Num: 30

Candidate Starts for Clipper_63:

(19, 41264), (Start: 24 @41381 has 120 MA's), (26, 41399), (28, 41405), (Start: 30 @41417 has 1 MA's), (31, 41420), (46, 41468), (50, 41501), (54, 41537), (60, 41576), (64, 41600), (69, 41645), (74, 41678),

Gene: CrimD_60 Start: 41339, Stop: 41659, Start Num: 24

Candidate Starts for CrimD_60:

(19, 41222), (Start: 24 @41339 has 120 MA's), (26, 41357), (28, 41363), (Start: 30 @41375 has 1 MA's), (31, 41378), (46, 41426), (50, 41459), (64, 41558), (69, 41603), (74, 41636),

Gene: Curiosium_63 Start: 40449, Stop: 40775, Start Num: 24

Candidate Starts for Curiosium_63:

(20, 40344), (Start: 24 @40449 has 120 MA's), (28, 40473), (31, 40488), (40, 40512), (46, 40542), (50, 40575), (54, 40611), (55, 40620), (60, 40650), (66, 40686), (69, 40719),

Gene: Dalmuri_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Dalmuri_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: DarthP_59 Start: 41139, Stop: 41435, Start Num: 24

Candidate Starts for DarthP_59:

(13, 40911), (15, 40944), (Start: 24 @41139 has 120 MA's), (28, 41157), (31, 41172), (46, 41208), (49, 41220), (50, 41241), (52, 41247), (69, 41382), (73, 41415),

Gene: Dartin_61 Start: 41185, Stop: 41520, Start Num: 24

Candidate Starts for Dartin_61:

(Start: 24 @41185 has 120 MA's), (29, 41218), (Start: 30 @41221 has 1 MA's), (44, 41263), (46, 41281), (51, 41317), (54, 41350), (55, 41359), (61, 41392), (75, 41491),

Gene: Deby_59 Start: 40980, Stop: 41300, Start Num: 24

Candidate Starts for Deby_59:

(Start: 24 @40980 has 120 MA's), (26, 40998), (28, 41004), (31, 41019), (46, 41067), (50, 41100), (54, 41136), (60, 41175), (64, 41199), (69, 41244), (74, 41277),

Gene: Devera_66 Start: 42342, Stop: 42668, Start Num: 24

Candidate Starts for Devera_66:

(20, 42237), (Start: 24 @42342 has 120 MA's), (28, 42366), (31, 42381), (46, 42435), (50, 42468), (54, 42504), (64, 42567), (69, 42612), (74, 42645),

Gene: Dole_64 Start: 42345, Stop: 42671, Start Num: 24

Candidate Starts for Dole_64:

(20, 42240), (Start: 24 @42345 has 120 MA's), (28, 42369), (31, 42384), (46, 42438), (50, 42471), (54, 42507), (64, 42570), (69, 42615), (74, 42648),

Gene: DrHayes_60 Start: 41702, Stop: 42022, Start Num: 24

Candidate Starts for DrHayes_60:

(17, 41567), (19, 41585), (Start: 24 @41702 has 120 MA's), (26, 41720), (31, 41741), (46, 41789), (50, 41822), (54, 41858), (60, 41897), (64, 41921),

Gene: Durfee_59 Start: 41118, Stop: 41450, Start Num: 24

Candidate Starts for Durfee_59:

(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: Efra2_63 Start: 40878, Stop: 41210, Start Num: 24

Candidate Starts for Efra2_63:

(17, 40743), (19, 40761), (Start: 24 @40878 has 120 MA's), (31, 40917), (39, 40941), (46, 40974), (50, 41007), (54, 41043), (60, 41082),

Gene: Ekdilam_57 Start: 41139, Stop: 41465, Start Num: 24

Candidate Starts for Ekdilam_57:

(15, 40944), (Start: 24 @41139 has 120 MA's), (28, 41157), (29, 41166), (31, 41172), (46, 41232), (49, 41244), (52, 41271), (73, 41442), (78, 41454),

Gene: Ellie_55 Start: 40492, Stop: 40803, Start Num: 24

Candidate Starts for Ellie_55:

(15, 40297), (21, 40453), (Start: 24 @40492 has 120 MA's), (28, 40510), (29, 40519), (49, 40588), (52, 40615), (62, 40687), (63, 40690), (69, 40750),

Gene: Emerson_60 Start: 40835, Stop: 41119, Start Num: 30

Candidate Starts for Emerson_60:

(19, 40682), (Start: 24 @40799 has 120 MA's), (26, 40817), (28, 40823), (Start: 30 @40835 has 1 MA's), (46, 40886), (50, 40919), (54, 40955), (60, 40994), (64, 41018), (69, 41063), (74, 41096),

Gene: Fefferhead_57 Start: 40439, Stop: 40738, Start Num: 24

Candidate Starts for Fefferhead_57:

(8, 40121), (9, 40139), (15, 40244), (Start: 24 @40439 has 120 MA's), (26, 40454), (29, 40469), (46, 40508), (47, 40511), (49, 40520), (50, 40541), (51, 40544), (54, 40574), (59, 40607),

Gene: Ganymede_60 Start: 41182, Stop: 41514, Start Num: 24

Candidate Starts for Ganymede_60:

(Start: 24 @41182 has 120 MA's), (26, 41200), (29, 41215), (32, 41227), (42, 41257), (49, 41293), (50, 41314),

Gene: Geraldini_62 Start: 41848, Stop: 42168, Start Num: 24

Candidate Starts for Geraldini_62:

(19, 41731), (Start: 24 @41848 has 120 MA's), (26, 41866), (28, 41872), (Start: 30 @41884 has 1 MA's), (31, 41887), (50, 41968), (54, 42004), (64, 42067), (69, 42112), (70, 42118), (74, 42145),

Gene: Guanica15_62 Start: 40619, Stop: 40951, Start Num: 24

Candidate Starts for Guanica15_62:

(17, 40484), (19, 40502), (Start: 24 @40619 has 120 MA's), (26, 40637), (31, 40658), (39, 40682), (46, 40715), (50, 40748), (54, 40784), (60, 40823),

Gene: Hammy_59 Start: 41127, Stop: 41423, Start Num: 24

Candidate Starts for Hammy_59:

(Start: 24 @41127 has 120 MA's), (28, 41145), (31, 41160), (46, 41196), (49, 41208), (50, 41229), (52, 41235), (73, 41403),

Gene: HedwigODU_59 Start: 40802, Stop: 41128, Start Num: 24

Candidate Starts for HedwigODU_59:

(19, 40685), (Start: 24 @40802 has 120 MA's), (26, 40820), (35, 40859), (46, 40895), (49, 40907), (50, 40928), (52, 40934),

Gene: Homura_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Homura_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: Hurricane_59 Start: 41071, Stop: 41379, Start Num: 24

Candidate Starts for Hurricane_59:

(5, 40678), (11, 40753), (15, 40852), (17, 40942), (19, 40960), (Start: 24 @41071 has 120 MA's), (26, 41089), (31, 41110), (46, 41140), (49, 41152), (50, 41173), (52, 41179), (54, 41215), (62, 41260), (78, 41368),

Gene: Hyperbowlee_59 Start: 41118, Stop: 41450, Start Num: 24

Candidate Starts for Hyperbowlee_59:

(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: Illumine_64 Start: 42344, Stop: 42670, Start Num: 24

Candidate Starts for Illumine_64:

(20, 42239), (Start: 24 @42344 has 120 MA's), (28, 42368), (31, 42383), (46, 42437), (50, 42470), (54, 42506), (64, 42569), (69, 42614), (74, 42647),

Gene: Inky_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Inky_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: JAWS_59 Start: 40788, Stop: 41108, Start Num: 24

Candidate Starts for JAWS_59:

(19, 40671), (Start: 24 @40788 has 120 MA's), (26, 40806), (28, 40812), (Start: 30 @40824 has 1 MA's), (31, 40827), (46, 40875), (50, 40908), (54, 40944), (64, 41007), (69, 41052), (74, 41085),

Gene: Jarvi_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Jarvi_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: Jayhawk_60 Start: 40797, Stop: 41123, Start Num: 24

Candidate Starts for Jayhawk_60:

(19, 40680), (Start: 24 @40797 has 120 MA's), (26, 40815), (35, 40854), (46, 40890), (49, 40902), (50, 40923), (52, 40929),

Gene: Jeckyll_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Jeckyll_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: Joy99_59 Start: 40850, Stop: 41182, Start Num: 24

Candidate Starts for Joy99_59:

(19, 40733), (Start: 24 @40850 has 120 MA's), (26, 40868), (29, 40883), (32, 40895), (42, 40925), (49, 40961), (50, 40982),

Gene: Keshu_61 Start: 41169, Stop: 41477, Start Num: 24

Candidate Starts for Keshu_61:

(5, 40776), (15, 40950), (17, 41040), (19, 41058), (Start: 24 @41169 has 120 MA's), (26, 41187), (31, 41208), (49, 41250), (51, 41274), (52, 41277), (54, 41313), (57, 41334), (63, 41361), (78, 41466),

Gene: KiSi_64 Start: 41902, Stop: 42237, Start Num: 24

Candidate Starts for KiSi_64:

(Start: 24 @41902 has 120 MA's), (49, 42010), (52, 42037), (53, 42043), (61, 42115), (64, 42136), (71, 42202), (75, 42214), (76, 42220),

Gene: LastHope_62 Start: 39964, Stop: 40290, Start Num: 24

Candidate Starts for LastHope_62:

(17, 39829), (19, 39847), (Start: 24 @39964 has 120 MA's), (26, 39982), (29, 39997), (35, 40021), (36, 40024), (46, 40057), (49, 40069), (50, 40090), (52, 40096), (60, 40165),

Gene: LeMond_63 Start: 41533, Stop: 41868, Start Num: 24

Candidate Starts for LeMond_63:

(14, 41305), (Start: 24 @41533 has 120 MA's), (49, 41641), (52, 41668), (53, 41674), (61, 41746), (64, 41767), (71, 41833), (75, 41845), (76, 41851),

Gene: LindNT_58 Start: 41005, Stop: 41325, Start Num: 24

Candidate Starts for LindNT_58:

(19, 40888), (Start: 24 @41005 has 120 MA's), (26, 41023), (28, 41029), (31, 41044), (46, 41092), (50, 41125), (54, 41161), (64, 41224), (69, 41269), (74, 41302),

Gene: Llorens_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Llorens_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: Lunahalos_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Lunahalos_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: MacKat_54 Start: 36301, Stop: 36585, Start Num: 30

Candidate Starts for MacKat_54:

(19, 36148), (Start: 24 @36265 has 120 MA's), (26, 36283), (28, 36289), (Start: 30 @36301 has 1 MA's), (31, 36304), (46, 36352), (50, 36385), (54, 36421), (60, 36460), (64, 36484), (69, 36529), (74, 36562),

Gene: MacnCheese_61 Start: 41660, Stop: 41977, Start Num: 25

Candidate Starts for MacnCheese_61:

(17, 41522), (18, 41534), (23, 41645), (Start: 25 @41660 has 1 MA's), (28, 41678), (49, 41759), (50, 41780), (60, 41855), (74, 41957),

Gene: MarkPhew_62 Start: 41206, Stop: 41514, Start Num: 24

Candidate Starts for MarkPhew_62:

(3, 40810), (4, 40825), (7, 40879), (14, 41002), (Start: 24 @41206 has 120 MA's), (28, 41224), (29, 41233), (31, 41239), (46, 41284), (49, 41296), (52, 41323), (54, 41353), (75, 41494),

Gene: McMater_61 Start: 41185, Stop: 41520, Start Num: 24

Candidate Starts for McMater_61:

(Start: 24 @41185 has 120 MA's), (29, 41218), (Start: 30 @41221 has 1 MA's), (44, 41263), (46, 41281), (51, 41317), (54, 41350), (55, 41359), (61, 41392), (75, 41491),

Gene: MeaningOfLife_60 Start: 41676, Stop: 41996, Start Num: 24

Candidate Starts for MeaningOfLife_60:

(19, 41559), (Start: 24 @41676 has 120 MA's), (26, 41694), (29, 41709), (31, 41715), (42, 41739), (49, 41775), (50, 41796),

Gene: Megsy_61 Start: 41070, Stop: 41396, Start Num: 24

Candidate Starts for Megsy_61:

(Start: 24 @41070 has 120 MA's), (26, 41088), (31, 41109), (35, 41127), (46, 41163), (49, 41175), (50, 41196), (52, 41202), (60, 41271),

Gene: Murucutumbu_60 Start: 41776, Stop: 42096, Start Num: 24

Candidate Starts for Murucutumbu_60:

(Start: 24 @41776 has 120 MA's), (26, 41794), (28, 41800), (31, 41815), (46, 41863), (54, 41932), (64, 41995), (67, 42010), (69, 42040), (74, 42073),

Gene: Mynx_60 Start: 41118, Stop: 41438, Start Num: 24

Candidate Starts for Mynx_60:

(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (28, 41142), (Start: 30 @41154 has 1 MA's), (31, 41157), (46, 41205), (50, 41238), (54, 41274), (64, 41337), (69, 41382), (74, 41415),

Gene: Nergal_53 Start: 37748, Stop: 38059, Start Num: 24

Candidate Starts for Nergal_53:

(22, 37706), (Start: 24 @37748 has 120 MA's), (47, 37820), (49, 37832), (50, 37853), (54, 37889), (66, 37964),

Gene: Nibb_61 Start: 40886, Stop: 41206, Start Num: 24

Candidate Starts for Nibb_61:

(2, 40433), (3, 40505), (4, 40520), (7, 40574), (14, 40697), (Start: 24 @40886 has 120 MA's), (28, 40904), (29, 40913), (31, 40919), (46, 40979), (49, 40991), (50, 41012), (52, 41018), (56, 41057), (59, 41078), (60, 41084), (64, 41108), (75, 41186), (79, 41198),

Gene: Niklas_61 Start: 41246, Stop: 41581, Start Num: 24

Candidate Starts for Niklas_61:

(Start: 24 @41246 has 120 MA's), (29, 41279), (Start: 30 @41282 has 1 MA's), (44, 41324), (46, 41342), (51, 41378), (54, 41411), (55, 41420), (61, 41453), (75, 41552),

Gene: November_59 Start: 41013, Stop: 41309, Start Num: 24

Candidate Starts for November_59:

(Start: 24 @41013 has 120 MA's), (28, 41031), (31, 41046), (46, 41082), (49, 41094), (50, 41115), (52, 41121), (73, 41289),

Gene: Oscar_63 Start: 41441, Stop: 41785, Start Num: 24

Candidate Starts for Oscar_63:

(14, 41210), (Start: 24 @41441 has 120 MA's), (34, 41504), (38, 41507), (43, 41522), (47, 41546), (49, 41558), (52, 41585), (53, 41591), (61, 41663), (64, 41684), (75, 41762), (76, 41768),

Gene: Padfoot_59 Start: 41118, Stop: 41450, Start Num: 24

Candidate Starts for Padfoot_59:

(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: Padpat_61 Start: 40799, Stop: 41119, Start Num: 24

Candidate Starts for Padpat_61:

(19, 40682), (Start: 24 @40799 has 120 MA's), (26, 40817), (28, 40823), (Start: 30 @40835 has 1 MA's), (46, 40886), (50, 40919), (54, 40955), (60, 40994), (64, 41018), (69, 41063), (74, 41096),

Gene: Peanam_61 Start: 41204, Stop: 41539, Start Num: 24

Candidate Starts for Peanam_61:

(Start: 24 @41204 has 120 MA's), (29, 41237), (Start: 30 @41240 has 1 MA's), (44, 41282), (46, 41300), (51, 41336), (54, 41369), (55, 41378), (61, 41411), (75, 41510),

Gene: Peel_59 Start: 40923, Stop: 41255, Start Num: 24

Candidate Starts for Peel_59:

(19, 40806), (Start: 24 @40923 has 120 MA's), (26, 40941), (29, 40956), (32, 40968), (42, 40998), (49, 41034), (50, 41055),

Gene: Pharb_58 Start: 40273, Stop: 40581, Start Num: 24

Candidate Starts for Pharb_58:

(17, 40144), (19, 40162), (Start: 24 @40273 has 120 MA's), (26, 40291), (31, 40312), (46, 40342), (49, 40354), (50, 40375), (52, 40381), (64, 40480), (78, 40570),

Gene: PhelpsODU_59 Start: 39956, Stop: 40282, Start Num: 24

Candidate Starts for PhelpsODU_59:

(Start: 24 @39956 has 120 MA's), (32, 39998), (49, 40067), (50, 40088), (55, 40130), (78, 40271),

Gene: Phrank_61 Start: 40017, Stop: 40343, Start Num: 24
Candidate Starts for Phrank_61:
(Start: 24 @40017 has 120 MA's), (34, 40068), (37, 40080), (47, 40119), (65, 40248), (78, 40332),

Gene: Piatt_59 Start: 41118, Stop: 41450, Start Num: 24
Candidate Starts for Piatt_59:
(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: Pixie_58 Start: 40609, Stop: 40917, Start Num: 24
Candidate Starts for Pixie_58:
(5, 40216), (15, 40390), (17, 40480), (19, 40498), (Start: 24 @40609 has 120 MA's), (26, 40627), (31, 40648), (46, 40678), (49, 40690), (50, 40711), (52, 40717), (54, 40753), (62, 40798), (63, 40801), (78, 40906),

Gene: Pokerus_58 Start: 40848, Stop: 41168, Start Num: 24
Candidate Starts for Pokerus_58:
(Start: 24 @40848 has 120 MA's), (28, 40872), (31, 40887), (46, 40935), (50, 40968), (54, 41004), (64, 41067), (69, 41112), (74, 41145),

Gene: Prithvi_60 Start: 41005, Stop: 41325, Start Num: 24
Candidate Starts for Prithvi_60:
(19, 40888), (Start: 24 @41005 has 120 MA's), (26, 41023), (28, 41029), (31, 41044), (46, 41092), (50, 41125), (54, 41161), (64, 41224), (69, 41269), (74, 41302),

Gene: QuincyRose_58 Start: 41182, Stop: 41514, Start Num: 24
Candidate Starts for QuincyRose_58:
(Start: 24 @41182 has 120 MA's), (26, 41200), (29, 41215), (32, 41227), (42, 41257), (49, 41293), (50, 41314),

Gene: Ramen_60 Start: 40804, Stop: 41130, Start Num: 24
Candidate Starts for Ramen_60:
(19, 40687), (Start: 24 @40804 has 120 MA's), (26, 40822), (35, 40861), (46, 40897), (49, 40909), (50, 40930), (52, 40936),

Gene: Rapunzel97_60 Start: 40797, Stop: 41117, Start Num: 24
Candidate Starts for Rapunzel97_60:
(Start: 24 @40797 has 120 MA's), (28, 40821), (31, 40836), (46, 40884), (50, 40917), (54, 40953), (64, 41016), (69, 41061), (74, 41094),

Gene: Richo_61 Start: 41185, Stop: 41520, Start Num: 24
Candidate Starts for Richo_61:
(Start: 24 @41185 has 120 MA's), (29, 41218), (Start: 30 @41221 has 1 MA's), (44, 41263), (46, 41281), (51, 41317), (54, 41350), (55, 41359), (61, 41392), (75, 41491),

Gene: Rosmarinus_59 Start: 40909, Stop: 41241, Start Num: 24
Candidate Starts for Rosmarinus_59:
(19, 40792), (Start: 24 @40909 has 120 MA's), (26, 40927), (29, 40942), (32, 40954), (42, 40984), (49, 41020), (50, 41041),

Gene: SamuelLPlaqson_60 Start: 41702, Stop: 42022, Start Num: 24
Candidate Starts for SamuelLPlaqson_60:

(17, 41567), (19, 41585), (Start: 24 @41702 has 120 MA's), (26, 41720), (31, 41741), (46, 41789), (50, 41822), (54, 41858), (60, 41897), (64, 41921),

Gene: Scarlett_64 Start: 41780, Stop: 42115, Start Num: 24

Candidate Starts for Scarlett_64:

(Start: 24 @41780 has 120 MA's), (49, 41888), (52, 41915), (53, 41921), (61, 41993), (64, 42014), (71, 42080), (75, 42092), (76, 42098),

Gene: Shadow1_63 Start: 40864, Stop: 41187, Start Num: 24

Candidate Starts for Shadow1_63:

(Start: 24 @40864 has 120 MA's), (34, 40912), (37, 40924), (47, 40963), (52, 40999), (60, 41065), (65, 41092), (78, 41176),

Gene: Shaobing_61 Start: 41222, Stop: 41557, Start Num: 24

Candidate Starts for Shaobing_61:

(Start: 24 @41222 has 120 MA's), (29, 41255), (Start: 30 @41258 has 1 MA's), (44, 41300), (46, 41318), (51, 41354), (54, 41387), (55, 41396), (61, 41429), (75, 41528),

Gene: ShedlockHolmes_60 Start: 41128, Stop: 41436, Start Num: 24

Candidate Starts for ShedlockHolmes_60:

(1, 40486), (15, 40909), (17, 40999), (19, 41017), (Start: 24 @41128 has 120 MA's), (26, 41146), (31, 41167), (46, 41197), (49, 41209), (50, 41230), (52, 41236), (54, 41272), (62, 41317), (63, 41320), (68, 41365), (78, 41425),

Gene: ShiaSurprise_60 Start: 41118, Stop: 41450, Start Num: 24

Candidate Starts for ShiaSurprise_60:

(19, 41001), (Start: 24 @41118 has 120 MA's), (26, 41136), (29, 41151), (32, 41163), (42, 41193), (49, 41229), (50, 41250),

Gene: SirPhilip_60 Start: 41537, Stop: 41830, Start Num: 24

Candidate Starts for SirPhilip_60:

(Start: 24 @41537 has 120 MA's), (28, 41555), (29, 41564), (45, 41597), (49, 41612), (50, 41633), (51, 41636), (52, 41639), (54, 41666), (58, 41696),

Gene: Slimphazie_59 Start: 40797, Stop: 41117, Start Num: 24

Candidate Starts for Slimphazie_59:

(Start: 24 @40797 has 120 MA's), (28, 40821), (31, 40836), (46, 40884), (50, 40917), (54, 40953), (64, 41016), (69, 41061), (74, 41094),

Gene: Spock_59 Start: 40922, Stop: 41254, Start Num: 24

Candidate Starts for Spock_59:

(19, 40805), (Start: 24 @40922 has 120 MA's), (26, 40940), (29, 40955), (32, 40967), (42, 40997), (49, 41033), (50, 41054),

Gene: Stinson_60 Start: 41299, Stop: 41619, Start Num: 24

Candidate Starts for Stinson_60:

(17, 41164), (19, 41182), (Start: 24 @41299 has 120 MA's), (26, 41317), (29, 41332), (46, 41386), (49, 41398), (50, 41419), (60, 41494),

Gene: Sulley_59 Start: 40973, Stop: 41305, Start Num: 24

Candidate Starts for Sulley_59:

(Start: 24 @40973 has 120 MA's), (26, 40991), (29, 41006), (32, 41018), (42, 41048), (49, 41084), (50, 41105),

Gene: Sunflower1121_64 Start: 41010, Stop: 41333, Start Num: 24

Candidate Starts for Sunflower1121_64:

(Start: 24 @41010 has 120 MA's), (34, 41058), (37, 41070), (47, 41109), (52, 41145), (60, 41211), (65, 41238),

Gene: TBond007_57 Start: 40608, Stop: 40916, Start Num: 24

Candidate Starts for TBond007_57:

(5, 40215), (15, 40389), (17, 40479), (19, 40497), (Start: 24 @40608 has 120 MA's), (26, 40626), (31, 40647), (46, 40677), (49, 40689), (50, 40710), (52, 40716), (54, 40752), (62, 40797), (63, 40800), (78, 40905),

Gene: TClif_60 Start: 40675, Stop: 40983, Start Num: 24

Candidate Starts for TClif_60:

(Start: 24 @40675 has 120 MA's), (26, 40693), (31, 40714), (49, 40756), (52, 40783), (64, 40882), (78, 40972),

Gene: Tachez_59 Start: 40766, Stop: 41098, Start Num: 24

Candidate Starts for Tachez_59:

(19, 40649), (Start: 24 @40766 has 120 MA's), (26, 40784), (29, 40799), (32, 40811), (42, 40841), (49, 40877), (50, 40898),

Gene: TaiwanKao_61 Start: 41085, Stop: 41387, Start Num: 26

Candidate Starts for TaiwanKao_61:

(19, 40950), (Start: 24 @41067 has 120 MA's), (26, 41085), (28, 41091), (Start: 30 @41103 has 1 MA's), (31, 41106), (46, 41154), (50, 41187), (64, 41286), (69, 41331), (74, 41364),

Gene: Tierra_61 Start: 40828, Stop: 41154, Start Num: 24

Candidate Starts for Tierra_61:

(Start: 24 @40828 has 120 MA's), (34, 40879), (37, 40891), (47, 40930), (65, 41059), (78, 41143),

Gene: TingHuaYa_61 Start: 40144, Stop: 40458, Start Num: 26

Candidate Starts for TingHuaYa_61:

(17, 39991), (19, 40009), (Start: 24 @40126 has 120 MA's), (26, 40144), (31, 40165), (39, 40189), (46, 40222), (50, 40255), (54, 40291), (60, 40330), (74, 40432),

Gene: TiniBug_60 Start: 41698, Stop: 42018, Start Num: 24

Candidate Starts for TiniBug_60:

(17, 41563), (19, 41581), (Start: 24 @41698 has 120 MA's), (26, 41716), (31, 41737), (46, 41785), (50, 41818), (54, 41854), (60, 41893), (64, 41917),

Gene: Tiri_60 Start: 41087, Stop: 41413, Start Num: 24

Candidate Starts for Tiri_60:

(Start: 24 @41087 has 120 MA's), (26, 41105), (35, 41144), (46, 41180), (49, 41192), (50, 41213), (52, 41219),

Gene: Topper_59 Start: 40921, Stop: 41253, Start Num: 24

Candidate Starts for Topper_59:

(19, 40804), (Start: 24 @40921 has 120 MA's), (26, 40939), (29, 40954), (32, 40966), (42, 40996), (49, 41032), (50, 41053),

Gene: TreyKay_60 Start: 41005, Stop: 41325, Start Num: 24

Candidate Starts for TreyKay_60:

(19, 40888), (Start: 24 @41005 has 120 MA's), (26, 41023), (28, 41029), (31, 41044), (46, 41092), (50, 41125), (54, 41161), (64, 41224), (69, 41269), (74, 41302),

Gene: TribbleTrouble_58 Start: 41084, Stop: 41362, Start Num: 24

Candidate Starts for TribbleTrouble_58:

(17, 40955), (Start: 24 @41084 has 120 MA's), (29, 41111), (48, 41138), (49, 41144), (50, 41165), (52, 41171), (54, 41198),

Gene: TruffulaTree_59 Start: 40793, Stop: 41113, Start Num: 24

Candidate Starts for TruffulaTree_59:

(Start: 24 @40793 has 120 MA's), (28, 40817), (31, 40832), (46, 40880), (50, 40913), (54, 40949), (64, 41012), (69, 41057), (74, 41090),

Gene: Twitch_59 Start: 40923, Stop: 41255, Start Num: 24

Candidate Starts for Twitch_59:

(19, 40806), (Start: 24 @40923 has 120 MA's), (26, 40941), (29, 40956), (32, 40968), (42, 40998), (49, 41034), (50, 41055),

Gene: Unicorn_59 Start: 39956, Stop: 40282, Start Num: 24

Candidate Starts for Unicorn_59:

(Start: 24 @39956 has 120 MA's), (32, 39998), (49, 40067), (50, 40088), (55, 40130), (78, 40271),

Gene: Urkel_60 Start: 41702, Stop: 42022, Start Num: 24

Candidate Starts for Urkel_60:

(17, 41567), (19, 41585), (Start: 24 @41702 has 120 MA's), (26, 41720), (31, 41741), (46, 41789), (50, 41822), (54, 41858), (60, 41897), (64, 41921),

Gene: Validus_63 Start: 41564, Stop: 41896, Start Num: 24

Candidate Starts for Validus_63:

(6, 41195), (7, 41201), (Start: 24 @41564 has 120 MA's), (26, 41582), (29, 41597), (31, 41603), (41, 41633), (46, 41663), (49, 41675), (50, 41696), (54, 41732), (60, 41771), (62, 41777), (64, 41795),

Gene: Veliki_60 Start: 40779, Stop: 41099, Start Num: 24

Candidate Starts for Veliki_60:

(19, 40662), (Start: 24 @40779 has 120 MA's), (26, 40797), (28, 40803), (Start: 30 @40815 has 1 MA's), (31, 40818), (46, 40866), (50, 40899), (54, 40935), (64, 40998), (69, 41043), (74, 41076),

Gene: Ximenita_64 Start: 41028, Stop: 41351, Start Num: 24

Candidate Starts for Ximenita_64:

(Start: 24 @41028 has 120 MA's), (34, 41076), (37, 41088), (47, 41127), (52, 41163), (60, 41229), (65, 41256), (78, 41340),

Gene: YoureAdopted_58 Start: 40922, Stop: 41242, Start Num: 24

Candidate Starts for YoureAdopted_58:

(Start: 24 @40922 has 120 MA's), (28, 40946), (31, 40961), (46, 41009), (50, 41042), (54, 41078), (64, 41141), (74, 41219),

Gene: Yuna_64 Start: 42123, Stop: 42446, Start Num: 24

Candidate Starts for Yuna_64:

(Start: 24 @42123 has 120 MA's), (28, 42141), (29, 42150), (32, 42162), (46, 42210), (50, 42243), (52, 42249), (72, 42420), (78, 42435),

Gene: Yunkel11_62 Start: 40618, Stop: 40950, Start Num: 24

Candidate Starts for Yunkel11_62:

(17, 40483), (19, 40501), (Start: 24 @40618 has 120 MA's), (26, 40636), (31, 40657), (39, 40681), (46, 40714), (50, 40747), (54, 40783), (60, 40822),

Gene: Zabiza_54 Start: 37107, Stop: 37433, Start Num: 24

Candidate Starts for Zabiza_54:

(19, 36990), (Start: 24 @37107 has 120 MA's), (26, 37125), (35, 37164), (46, 37200), (49, 37212), (50, 37233), (52, 37239),

Gene: Zavala_61 Start: 41078, Stop: 41398, Start Num: 24

Candidate Starts for Zavala_61:

(19, 40961), (Start: 24 @41078 has 120 MA's), (26, 41096), (28, 41102), (Start: 30 @41114 has 1 MA's), (31, 41117), (46, 41165), (50, 41198), (54, 41234), (64, 41297), (69, 41342), (74, 41375),