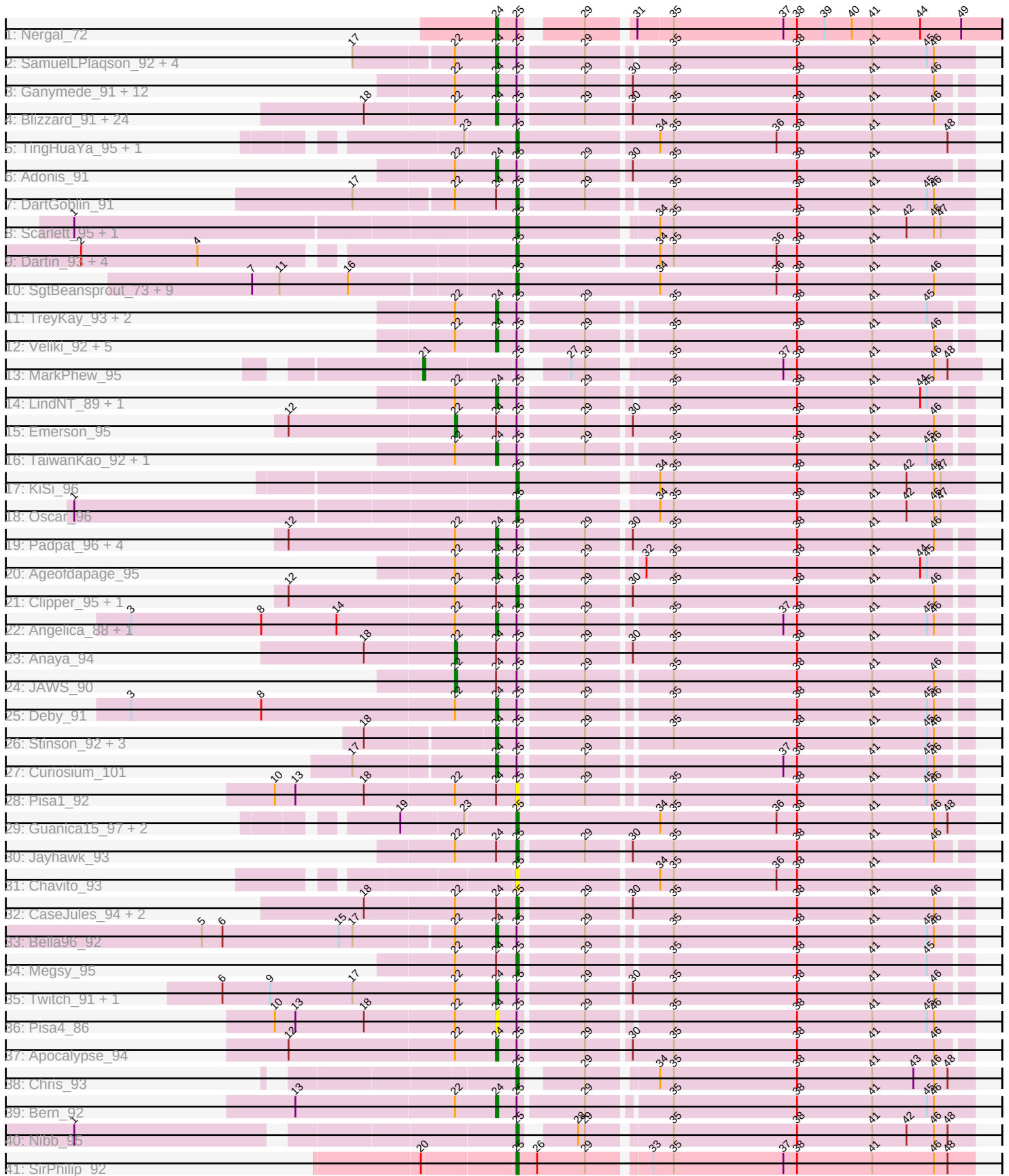




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 326844 Report

This analysis was run 09/05/26 on database version 662.

Pham number 326844 has 119 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Nergal_72
- Track 2 : SamuelILPlaqson_92, DrHayes_92, TiniBug_90, Anma_90, Urkel_92
- Track 3 : Ganymede_91, Mynx_92, Beezoo_94, YoureAdopted_90, QuincyRose_89, MeaningOfLife_93, Rapunzel97_93, TruffulaTree_93, Tiri_92, CheetoDust_91, BarrelRoll_91, Zavala_93, Slimphazie_93
- Track 4 : Blizzard_91, Belladonna_91, Homura_90, CallaLilly_91, Capricorn_91, Lunahalos_91, ShiaSurprise_93, Jarvi_91, Spock_91, Durfee_91, Rosmarinus_91, Geraldini_92, Piatt_90, Hyperbowlee_90, Llorens_91, Dalmuri_91, Boiii_91, Asayake_91, CREW_90, BGlluviae_90, BaghaKamala_90, Inky_91, Joy99_92, Topper_91, Jeckyll_91
- Track 5 : TingHuaYa_95, LastHope_97
- Track 6 : Adonis_91
- Track 7 : DartGoblin_91
- Track 8 : Scarlett_95, LeMond_95
- Track 9 : Dartin_93, Shaobing_92, McMater_93, Richo_93, Validus_98
- Track 10 : SgtBeansprout_73, Nikao_75, Torres_75, LilPharaoh_73, Teejan_74, Trice_72, Enkosi_74, Mdavu_73, Binglebops_72, Amelie_72
- Track 11 : TreyKay_93, Murucutumbu_91, Prithvi_93
- Track 12 : Veliki_92, Adephagia_90, HedwigODU_91, AlishaPH_84, ActinUp_92, Zabiza_87
- Track 13 : MarkPhew_95
- Track 14 : LindNT_89, LaterM_91
- Track 15 : Emerson_95
- Track 16 : TaiwanKao_92, CrimD_91
- Track 17 : KiSi_96
- Track 18 : Oscar_96
- Track 19 : Padpat_96, Tachez_91, Ramen_92, Atiba_92, Pokerus_91
- Track 20 : Ageofdapage_95
- Track 21 : Clipper_95, MacKat_87
- Track 22 : Angelica_88, Sulley_88
- Track 23 : Anaya_94
- Track 24 : JAWS_90
- Track 25 : Deby_91
- Track 26 : Stinson_92, Devera_97, Illumine_95, Dole_94
- Track 27 : Curiosium_101
- Track 28 : Pisa1_92
- Track 29 : Guanica15_97, Efra2_98, Yunkel11_96

- Track 30 : Jayhawk_93
- Track 31 : Chavito_93
- Track 32 : CaseJules_94, Padfoot_91, BEEST_91
- Track 33 : Bella96_92
- Track 34 : Megsy_95
- Track 35 : Twitch_91, Peel_91
- Track 36 : Pisa4_86
- Track 37 : Apocalypse_94
- Track 38 : Chris_93
- Track 39 : Bern_92
- Track 40 : Nibb_95
- Track 41 : SirPhilip_92

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 76 of the 112 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ActinUp_92, Adephagia_90, Adonis_91, Ageofdapage_95, AlishaPH_84, Angelica_88, Anma_90, Apocalypse_94, Asayake_91, Atiba_92, BGlluviae_90, BaghaKamala_90, BarrelRoll_91, Beezoo_94, Bella96_92, Belladonna_91, Bern_92, Blizzard_91, Boiii_91, CREW_90, CallaLilly_91, Capricorn_91, CheetoDust_91, CrimD_91, Curiosium_101, Dalmuri_91, Deby_91, Devera_97, Dole_94, DrHayes_92, Durfee_91, Ganymede_91, Geraldini_92, HedwigODU_91, Homura_90, Hyperbowlee_90, Illumine_95, Inky_91, Jarvi_91, Jeckyll_91, Joy99_92, LaterM_91, LindNT_89, Llorens_91, Lunahalos_91, MeaningOfLife_93, Murucutumbu_91, Mynx_92, Nergal_72, Padpat_96, Peel_91, Piatt_90, Pisa4_86, Pokerus_91, Prithvi_93, QuincyRose_89, Ramen_92, Rapunzel97_93, Rosmarinus_91, SamuelLPlaqson_92, ShiaSurprise_93, Slimphazie_93, Spock_91, Stinson_92, Sulley_88, Tachez_91, TaiwanKao_92, TiniBug_90, Tiri_92, Topper_91, TreyKay_93, TruffulaTree_93, Twitch_91, Urkel_92, Veliki_92, YoureAdopted_90, Zabiza_87, Zavala_93,

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

• Anaya_94, BEEST_91, CaseJules_94, Clipper_95, DartGoblin_91, Emerson_95, JAWS_90, Jayhawk_93, MacKat_87, Megsy_95, Padfoot_91, Pisa1_92,

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

• Amelie_72, Binglebops_72, Chavito_93, Chris_93, Dartin_93, Efra2_98, Enkosi_74, Guanica15_97, KiSi_96, LastHope_97, LeMond_95, LilPharaoh_73, MarkPhew_95, McMater_93, Mdavu_73, Nibb_95, Nikao_75, Oscar_96, Richo_93, Scarlett_95, SgtBeansprout_73, Shaobing_92, SirPhilip_92, Teejan_74, TingHuaYa_95, Torres_75, Trice_72, Validus_98, Yunkel11_96,

Summary by start number:

Start 21:

- Found in 1 of 119 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 112

- Called 100.0% of time when present
- Phage (with cluster) where this start called: MarkPhew_95 (K1),

Start 22:

- Found in 84 of 119 (70.6%) of genes in pham
- Manual Annotations of this start: 3 of 112
- Called 3.6% of time when present
- Phage (with cluster) where this start called: Anaya_94 (K1), Emerson_95 (K1), JAWS_90 (K1),

Start 24:

- Found in 90 of 119 (75.6%) of genes in pham
- Manual Annotations of this start: 76 of 112
- Called 86.7% of time when present
- Phage (with cluster) where this start called: ActinUp_92 (K1), Adephagia_90 (K1), Adonis_91 (K1), Ageofdapage_95 (K1), AlishaPH_84 (K1), Angelica_88 (K1), Anna_90 (K1), Apocalypse_94 (K1), Asayake_91 (K1), Atiba_92 (K1), BGlluviae_90 (K1), BaghaKamala_90 (K1), BarrelRoll_91 (K1), Beezoo_94 (K1), Bella96_92 (K1), Belladonna_91 (K1), Bern_92 (K1), Blizzard_91 (K1), Boiii_91 (K1), CREW_90 (K1), CallaLilly_91 (K1), Capricorn_91 (K1), CheetoDust_91 (K1), CrimD_91 (K1), Curiosium_101 (K1), Dalmuri_91 (K1), Deby_91 (K1), Devera_97 (K1), Dole_94 (K1), DrHayes_92 (K1), Durfee_91 (K1), Ganymede_91 (K1), Geraldini_92 (K1), HedwigODU_91 (K1), Homura_90 (K1), Hyperbowlee_90 (K1), Illumine_95 (K1), Inky_91 (K1), Jarvi_91 (K1), Jeckyll_91 (K1), Joy99_92 (K1), LaterM_91 (K1), LindNT_89 (K1), Llorens_91 (K1), Lunahalos_91 (K1), MeaningOfLife_93 (K1), Murucutumbu_91 (K1), Mynx_92 (K1), Nergal_72 (AG), Padpat_96 (K1), Peel_91 (K1), Piatt_90 (K1), Pisa4_86 (K1), Pokerus_91 (K1), Prithvi_93 (K1), QuincyRose_89 (K1), Ramen_92 (K1), Rapunzel97_93 (K1), Rosmarinus_91 (K1), SamuelLPlaqson_92 (K1), ShiaSurprise_93 (K1), Slimphazie_93 (K1), Spock_91 (K1), Stinson_92 (K1), Sulley_88 (K1), Tachez_91 (K1), TaiwanKao_92 (K1), TiniBug_90 (K1), Tiri_92 (K1), Topper_91 (K1), TreyKay_93 (K1), TruffulaTree_93 (K1), Twitch_91 (K1), Urkel_92 (K1), Veliki_92 (K1), YoureAdopted_90 (K1), Zabiza_87 (K1), Zavala_93 (K1),

Start 25:

- Found in 119 of 119 (100.0%) of genes in pham
- Manual Annotations of this start: 32 of 112
- Called 31.1% of time when present
- Phage (with cluster) where this start called: Amelie_72 (K1), BEEST_91 (K1), Binglebops_72 (K1), CaseJules_94 (K1), Chavito_93 (K1), Chris_93 (K1), Clipper_95 (K1), DartGoblin_91 (K1), Dartin_93 (K1), Efra2_98 (K1), Enkosi_74 (K1), Guanica15_97 (K1), Jayhawk_93 (K1), KiSi_96 (K1), LastHope_97 (K1), LeMond_95 (K1), LilPharaoh_73 (K1), MacKat_87 (K1), McMater_93 (K1), Mdavu_73 (K1), Megsy_95 (K1), Nibb_95 (K1), Nikao_75 (K1), Oscar_96 (K1), Padfoot_91 (K1), Pisa1_92 (K1), Richo_93 (K1), Scarlett_95 (K1), SgtBeansprout_73 (K1), Shaobing_92 (K1), SirPhilip_92 (K6), Teejan_74 (K1), TingHuaYa_95 (K1), Torres_75 (K1), Trice_72 (K1), Validus_98 (K1), Yunkel11_96 (K1),

Summary by clusters:

There are 3 clusters represented in this pham: 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 21 was manually annotated 1 time for cluster K1.
- Start number 22 was manually annotated 3 times for cluster K1.
- Start number 24 was manually annotated 75 times for cluster K1.
- Start number 25 was manually annotated 31 times for cluster K1.

Info for manual annotations of cluster K6:

- Start number 25 was manually annotated 1 time for cluster K6.

Gene Information:

Gene: ActinUp_92 Start: 57651, Stop: 57848, Start Num: 24

Candidate Starts for ActinUp_92:

(Start: 22 @57633 has 3 MA's), (Start: 24 @57651 has 76 MA's), (Start: 25 @57660 has 32 MA's), (29, 57687), (35, 57720), (38, 57774), (41, 57807), (46, 57834),

Gene: Adephagia_90 Start: 57495, Stop: 57692, Start Num: 24

Candidate Starts for Adephagia_90:

(Start: 22 @57477 has 3 MA's), (Start: 24 @57495 has 76 MA's), (Start: 25 @57504 has 32 MA's), (29, 57531), (35, 57564), (38, 57618), (41, 57651), (46, 57678),

Gene: Adonis_91 Start: 57877, Stop: 58077, Start Num: 24

Candidate Starts for Adonis_91:

(Start: 22 @57859 has 3 MA's), (Start: 24 @57877 has 76 MA's), (Start: 25 @57886 has 32 MA's), (29, 57913), (30, 57931), (35, 57949), (38, 58003), (41, 58036),

Gene: Ageofdapage_95 Start: 58498, Stop: 58695, Start Num: 24

Candidate Starts for Ageofdapage_95:

(Start: 22 @58480 has 3 MA's), (Start: 24 @58498 has 76 MA's), (Start: 25 @58507 has 32 MA's), (29, 58534), (32, 58555), (35, 58567), (38, 58621), (41, 58654), (44, 58675), (45, 58678),

Gene: AlishaPH_84 Start: 54883, Stop: 55080, Start Num: 24

Candidate Starts for AlishaPH_84:

(Start: 22 @54865 has 3 MA's), (Start: 24 @54883 has 76 MA's), (Start: 25 @54892 has 32 MA's), (29, 54919), (35, 54952), (38, 55006), (41, 55039), (46, 55066),

Gene: Amelie_72 Start: 53462, Stop: 53662, Start Num: 25

Candidate Starts for Amelie_72:

(7, 53351), (11, 53363), (16, 53393), (Start: 25 @53462 has 32 MA's), (34, 53525), (36, 53576), (38, 53585), (41, 53618), (46, 53645),

Gene: Anaya_94 Start: 58708, Stop: 58926, Start Num: 22

Candidate Starts for Anaya_94:

(18, 58669), (Start: 22 @58708 has 3 MA's), (Start: 24 @58726 has 76 MA's), (Start: 25 @58735 has 32 MA's), (29, 58762), (30, 58780), (35, 58798), (38, 58852), (41, 58885),

Gene: Angelica_88 Start: 57102, Stop: 57299, Start Num: 24

Candidate Starts for Angelica_88:

(3, 56943), (8, 57000), (14, 57033), (Start: 22 @57084 has 3 MA's), (Start: 24 @57102 has 76 MA's), (Start: 25 @57111 has 32 MA's), (29, 57138), (35, 57171), (37, 57219), (38, 57225), (41, 57258), (45, 57282), (46, 57285),

Gene: Anma_90 Start: 58057, Stop: 58257, Start Num: 24

Candidate Starts for Anma_90:

(17, 57997), (Start: 22 @58039 has 3 MA's), (Start: 24 @58057 has 76 MA's), (Start: 25 @58066 has 32 MA's), (29, 58093), (35, 58126), (38, 58180), (41, 58213), (45, 58237), (46, 58240),

Gene: Apocalypse_94 Start: 57857, Stop: 58057, Start Num: 24

Candidate Starts for Apocalypse_94:

(12, 57767), (Start: 22 @57839 has 3 MA's), (Start: 24 @57857 has 76 MA's), (Start: 25 @57866 has 32 MA's), (29, 57893), (30, 57911), (35, 57929), (38, 57983), (41, 58016), (46, 58043),

Gene: Asayake_91 Start: 57809, Stop: 58009, Start Num: 24

Candidate Starts for Asayake_91:

(18, 57752), (Start: 22 @57791 has 3 MA's), (Start: 24 @57809 has 76 MA's), (Start: 25 @57818 has 32 MA's), (29, 57845), (30, 57863), (35, 57881), (38, 57935), (41, 57968), (46, 57995),

Gene: Atiba_92 Start: 57460, Stop: 57660, Start Num: 24

Candidate Starts for Atiba_92:

(12, 57370), (Start: 22 @57442 has 3 MA's), (Start: 24 @57460 has 76 MA's), (Start: 25 @57469 has 32 MA's), (29, 57496), (30, 57514), (35, 57532), (38, 57586), (41, 57619), (46, 57646),

Gene: BEEST_91 Start: 57819, Stop: 58010, Start Num: 25

Candidate Starts for BEEST_91:

(18, 57753), (Start: 22 @57792 has 3 MA's), (Start: 24 @57810 has 76 MA's), (Start: 25 @57819 has 32 MA's), (29, 57846), (30, 57864), (35, 57882), (38, 57936), (41, 57969), (46, 57996),

Gene: BGlluviae_90 Start: 57201, Stop: 57401, Start Num: 24

Candidate Starts for BGlluviae_90:

(18, 57144), (Start: 22 @57183 has 3 MA's), (Start: 24 @57201 has 76 MA's), (Start: 25 @57210 has 32 MA's), (29, 57237), (30, 57255), (35, 57273), (38, 57327), (41, 57360), (46, 57387),

Gene: BaghaKamala_90 Start: 57037, Stop: 57237, Start Num: 24

Candidate Starts for BaghaKamala_90:

(18, 56980), (Start: 22 @57019 has 3 MA's), (Start: 24 @57037 has 76 MA's), (Start: 25 @57046 has 32 MA's), (29, 57073), (30, 57091), (35, 57109), (38, 57163), (41, 57196), (46, 57223),

Gene: BarrelRoll_91 Start: 57577, Stop: 57777, Start Num: 24

Candidate Starts for BarrelRoll_91:

(Start: 22 @57559 has 3 MA's), (Start: 24 @57577 has 76 MA's), (Start: 25 @57586 has 32 MA's), (29, 57613), (30, 57631), (35, 57649), (38, 57703), (41, 57736), (46, 57763),

Gene: Beezoo_94 Start: 58398, Stop: 58598, Start Num: 24

Candidate Starts for Beezoo_94:

(Start: 22 @58380 has 3 MA's), (Start: 24 @58398 has 76 MA's), (Start: 25 @58407 has 32 MA's), (29, 58434), (30, 58452), (35, 58470), (38, 58524), (41, 58557), (46, 58584),

Gene: Bella96_92 Start: 58255, Stop: 58452, Start Num: 24

Candidate Starts for Bella96_92:

(5, 58129), (6, 58138), (15, 58189), (17, 58195), (Start: 22 @58237 has 3 MA's), (Start: 24 @58255 has 76 MA's), (Start: 25 @58264 has 32 MA's), (29, 58291), (35, 58324), (38, 58378), (41, 58411), (45,

58435), (46, 58438),

Gene: Belladonna_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Belladonna_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: Bern_92 Start: 56250, Stop: 56450, Start Num: 24

Candidate Starts for Bern_92:

(13, 56163), (Start: 22 @56232 has 3 MA's), (Start: 24 @56250 has 76 MA's), (Start: 25 @56259 has 32 MA's), (29, 56286), (35, 56319), (38, 56373), (41, 56406), (45, 56430), (46, 56433),

Gene: Binglebops_72 Start: 53477, Stop: 53677, Start Num: 25

Candidate Starts for Binglebops_72:

(7, 53366), (11, 53378), (16, 53408), (Start: 25 @53477 has 32 MA's), (34, 53540), (36, 53591), (38, 53600), (41, 53633), (46, 53660),

Gene: Blizzard_91 Start: 57809, Stop: 58009, Start Num: 24

Candidate Starts for Blizzard_91:

(18, 57752), (Start: 22 @57791 has 3 MA's), (Start: 24 @57809 has 76 MA's), (Start: 25 @57818 has 32 MA's), (29, 57845), (30, 57863), (35, 57881), (38, 57935), (41, 57968), (46, 57995),

Gene: Boiiii_91 Start: 57811, Stop: 58011, Start Num: 24

Candidate Starts for Boiiii_91:

(18, 57754), (Start: 22 @57793 has 3 MA's), (Start: 24 @57811 has 76 MA's), (Start: 25 @57820 has 32 MA's), (29, 57847), (30, 57865), (35, 57883), (38, 57937), (41, 57970), (46, 57997),

Gene: CREW_90 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for CREW_90:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: CallaLilly_91 Start: 57535, Stop: 57735, Start Num: 24

Candidate Starts for CallaLilly_91:

(18, 57478), (Start: 22 @57517 has 3 MA's), (Start: 24 @57535 has 76 MA's), (Start: 25 @57544 has 32 MA's), (29, 57571), (30, 57589), (35, 57607), (38, 57661), (41, 57694), (46, 57721),

Gene: Capricorn_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Capricorn_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: CaseJules_94 Start: 57818, Stop: 58009, Start Num: 25

Candidate Starts for CaseJules_94:

(18, 57752), (Start: 22 @57791 has 3 MA's), (Start: 24 @57809 has 76 MA's), (Start: 25 @57818 has 32 MA's), (29, 57845), (30, 57863), (35, 57881), (38, 57935), (41, 57968), (46, 57995),

Gene: Chavito_93 Start: 59455, Stop: 59652, Start Num: 25

Candidate Starts for Chavito_93:

(Start: 25 @59455 has 32 MA's), (34, 59515), (35, 59521), (36, 59566), (38, 59575), (41, 59608),

Gene: CheetoDust_91 Start: 57207, Stop: 57407, Start Num: 24

Candidate Starts for CheetoDust_91:

(Start: 22 @57189 has 3 MA's), (Start: 24 @57207 has 76 MA's), (Start: 25 @57216 has 32 MA's), (29, 57243), (30, 57261), (35, 57279), (38, 57333), (41, 57366), (46, 57393),

Gene: Chris_93 Start: 58180, Stop: 58365, Start Num: 25

Candidate Starts for Chris_93:

(Start: 25 @58180 has 32 MA's), (29, 58201), (34, 58228), (35, 58234), (38, 58288), (41, 58321), (43, 58339), (46, 58348), (48, 58354),

Gene: Clipper_95 Start: 58301, Stop: 58492, Start Num: 25

Candidate Starts for Clipper_95:

(12, 58202), (Start: 22 @58274 has 3 MA's), (Start: 24 @58292 has 76 MA's), (Start: 25 @58301 has 32 MA's), (29, 58328), (30, 58346), (35, 58364), (38, 58418), (41, 58451), (46, 58478),

Gene: CrimD_91 Start: 57660, Stop: 57857, Start Num: 24

Candidate Starts for CrimD_91:

(Start: 22 @57642 has 3 MA's), (Start: 24 @57660 has 76 MA's), (Start: 25 @57669 has 32 MA's), (29, 57696), (35, 57729), (38, 57783), (41, 57816), (45, 57840), (46, 57843),

Gene: Curiosium_101 Start: 59707, Stop: 59904, Start Num: 24

Candidate Starts for Curiosium_101:

(17, 59647), (Start: 24 @59707 has 76 MA's), (Start: 25 @59716 has 32 MA's), (29, 59743), (37, 59824), (38, 59830), (41, 59863), (45, 59887), (46, 59890),

Gene: Dalmuri_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Dalmuri_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: DartGoblin_91 Start: 57927, Stop: 58118, Start Num: 25

Candidate Starts for DartGoblin_91:

(17, 57858), (Start: 22 @57900 has 3 MA's), (Start: 24 @57918 has 76 MA's), (Start: 25 @57927 has 32 MA's), (29, 57954), (35, 57987), (38, 58041), (41, 58074), (45, 58098), (46, 58101),

Gene: Dartin_93 Start: 59098, Stop: 59295, Start Num: 25

Candidate Starts for Dartin_93:

(2, 58921), (4, 58972), (Start: 25 @59098 has 32 MA's), (34, 59158), (35, 59164), (36, 59209), (38, 59218), (41, 59251),

Gene: Deby_91 Start: 58372, Stop: 58569, Start Num: 24

Candidate Starts for Deby_91:

(3, 58213), (8, 58270), (Start: 22 @58354 has 3 MA's), (Start: 24 @58372 has 76 MA's), (Start: 25 @58381 has 32 MA's), (29, 58408), (35, 58441), (38, 58495), (41, 58528), (45, 58552), (46, 58555),

Gene: Devera_97 Start: 58494, Stop: 58691, Start Num: 24

Candidate Starts for Devera_97:

(18, 58440), (Start: 24 @58494 has 76 MA's), (Start: 25 @58503 has 32 MA's), (29, 58530), (35, 58563), (38, 58617), (41, 58650), (45, 58674), (46, 58677),

Gene: Dole_94 Start: 58497, Stop: 58694, Start Num: 24

Candidate Starts for Dole_94:

(18, 58443), (Start: 24 @58497 has 76 MA's), (Start: 25 @58506 has 32 MA's), (29, 58533), (35, 58566), (38, 58620), (41, 58653), (45, 58677), (46, 58680),

Gene: DrHayes_92 Start: 58057, Stop: 58257, Start Num: 24

Candidate Starts for DrHayes_92:

(17, 57997), (Start: 22 @58039 has 3 MA's), (Start: 24 @58057 has 76 MA's), (Start: 25 @58066 has 32 MA's), (29, 58093), (35, 58126), (38, 58180), (41, 58213), (45, 58237), (46, 58240),

Gene: Durfee_91 Start: 57809, Stop: 58009, Start Num: 24

Candidate Starts for Durfee_91:

(18, 57752), (Start: 22 @57791 has 3 MA's), (Start: 24 @57809 has 76 MA's), (Start: 25 @57818 has 32 MA's), (29, 57845), (30, 57863), (35, 57881), (38, 57935), (41, 57968), (46, 57995),

Gene: Efra2_98 Start: 58876, Stop: 59076, Start Num: 25

Candidate Starts for Efra2_98:

(19, 58828), (23, 58855), (Start: 25 @58876 has 32 MA's), (34, 58939), (35, 58945), (36, 58990), (38, 58999), (41, 59032), (46, 59059), (48, 59065),

Gene: Emerson_95 Start: 58198, Stop: 58416, Start Num: 22

Candidate Starts for Emerson_95:

(12, 58126), (Start: 22 @58198 has 3 MA's), (Start: 24 @58216 has 76 MA's), (Start: 25 @58225 has 32 MA's), (29, 58252), (30, 58270), (35, 58288), (38, 58342), (41, 58375), (46, 58402),

Gene: Enkosi_74 Start: 56075, Stop: 56275, Start Num: 25

Candidate Starts for Enkosi_74:

(7, 55964), (11, 55976), (16, 56006), (Start: 25 @56075 has 32 MA's), (34, 56138), (36, 56189), (38, 56198), (41, 56231), (46, 56258),

Gene: Ganymede_91 Start: 57624, Stop: 57824, Start Num: 24

Candidate Starts for Ganymede_91:

(Start: 22 @57606 has 3 MA's), (Start: 24 @57624 has 76 MA's), (Start: 25 @57633 has 32 MA's), (29, 57660), (30, 57678), (35, 57696), (38, 57750), (41, 57783), (46, 57810),

Gene: Geraldini_92 Start: 57722, Stop: 57922, Start Num: 24

Candidate Starts for Geraldini_92:

(18, 57665), (Start: 22 @57704 has 3 MA's), (Start: 24 @57722 has 76 MA's), (Start: 25 @57731 has 32 MA's), (29, 57758), (30, 57776), (35, 57794), (38, 57848), (41, 57881), (46, 57908),

Gene: Guanica15_97 Start: 58565, Stop: 58765, Start Num: 25

Candidate Starts for Guanica15_97:

(19, 58517), (23, 58544), (Start: 25 @58565 has 32 MA's), (34, 58628), (35, 58634), (36, 58679), (38, 58688), (41, 58721), (46, 58748), (48, 58754),

Gene: HedwigODU_91 Start: 57651, Stop: 57848, Start Num: 24

Candidate Starts for HedwigODU_91:

(Start: 22 @57633 has 3 MA's), (Start: 24 @57651 has 76 MA's), (Start: 25 @57660 has 32 MA's), (29, 57687), (35, 57720), (38, 57774), (41, 57807), (46, 57834),

Gene: Homura_90 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Homura_90:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: Hyperbowlee_90 Start: 57809, Stop: 58009, Start Num: 24

Candidate Starts for Hyperbowlee_90:

(18, 57752), (Start: 22 @57791 has 3 MA's), (Start: 24 @57809 has 76 MA's), (Start: 25 @57818 has 32 MA's), (29, 57845), (30, 57863), (35, 57881), (38, 57935), (41, 57968), (46, 57995),

Gene: Illumine_95 Start: 58496, Stop: 58693, Start Num: 24

Candidate Starts for Illumine_95:

(18, 58442), (Start: 24 @58496 has 76 MA's), (Start: 25 @58505 has 32 MA's), (29, 58532), (35, 58565), (38, 58619), (41, 58652), (45, 58676), (46, 58679),

Gene: Inky_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Inky_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: JAWS_90 Start: 57580, Stop: 57795, Start Num: 22

Candidate Starts for JAWS_90:

(Start: 22 @57580 has 3 MA's), (Start: 24 @57598 has 76 MA's), (Start: 25 @57607 has 32 MA's), (29, 57634), (35, 57667), (38, 57721), (41, 57754), (46, 57781),

Gene: Jarvi_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Jarvi_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: Jayhawk_93 Start: 57646, Stop: 57837, Start Num: 25

Candidate Starts for Jayhawk_93:

(Start: 22 @57619 has 3 MA's), (Start: 24 @57637 has 76 MA's), (Start: 25 @57646 has 32 MA's), (29, 57673), (30, 57691), (35, 57709), (38, 57763), (41, 57796), (46, 57823),

Gene: Jeckyll_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Jeckyll_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: Joy99_92 Start: 57741, Stop: 57941, Start Num: 24

Candidate Starts for Joy99_92:

(18, 57684), (Start: 22 @57723 has 3 MA's), (Start: 24 @57741 has 76 MA's), (Start: 25 @57750 has 32 MA's), (29, 57777), (30, 57795), (35, 57813), (38, 57867), (41, 57900), (46, 57927),

Gene: KiSi_96 Start: 58596, Stop: 58790, Start Num: 25

Candidate Starts for KiSi_96:

(Start: 25 @58596 has 32 MA's), (34, 58653), (35, 58659), (38, 58713), (41, 58746), (42, 58761), (46, 58773), (47, 58776),

Gene: LastHope_97 Start: 58514, Stop: 58711, Start Num: 25

Candidate Starts for LastHope_97:

(23, 58493), (Start: 25 @58514 has 32 MA's), (34, 58574), (35, 58580), (36, 58625), (38, 58634), (41, 58667), (48, 58700),

Gene: LaterM_91 Start: 58027, Stop: 58224, Start Num: 24

Candidate Starts for LaterM_91:

(Start: 22 @58009 has 3 MA's), (Start: 24 @58027 has 76 MA's), (Start: 25 @58036 has 32 MA's), (29, 58063), (35, 58096), (38, 58150), (41, 58183), (44, 58204), (45, 58207),

Gene: LeMond_95 Start: 58553, Stop: 58747, Start Num: 25

Candidate Starts for LeMond_95:

(1, 58364), (Start: 25 @58553 has 32 MA's), (34, 58610), (35, 58616), (38, 58670), (41, 58703), (42, 58718), (46, 58730), (47, 58733),

Gene: LilPharaoh_73 Start: 53190, Stop: 53390, Start Num: 25

Candidate Starts for LilPharaoh_73:

(7, 53079), (11, 53091), (16, 53121), (Start: 25 @53190 has 32 MA's), (34, 53253), (36, 53304), (38, 53313), (41, 53346), (46, 53373),

Gene: LindNT_89 Start: 57914, Stop: 58111, Start Num: 24

Candidate Starts for LindNT_89:

(Start: 22 @57896 has 3 MA's), (Start: 24 @57914 has 76 MA's), (Start: 25 @57923 has 32 MA's), (29, 57950), (35, 57983), (38, 58037), (41, 58070), (44, 58091), (45, 58094),

Gene: Llorens_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Llorens_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: Lunahalos_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Lunahalos_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: MacKat_87 Start: 53185, Stop: 53376, Start Num: 25

Candidate Starts for MacKat_87:

(12, 53086), (Start: 22 @53158 has 3 MA's), (Start: 24 @53176 has 76 MA's), (Start: 25 @53185 has 32 MA's), (29, 53212), (30, 53230), (35, 53248), (38, 53302), (41, 53335), (46, 53362),

Gene: MarkPhew_95 Start: 58227, Stop: 58454, Start Num: 21

Candidate Starts for MarkPhew_95:

(Start: 21 @58227 has 1 MA's), (Start: 25 @58266 has 32 MA's), (27, 58281), (29, 58287), (35, 58320), (37, 58368), (38, 58374), (41, 58407), (46, 58434), (48, 58440),

Gene: McMater_93 Start: 59098, Stop: 59295, Start Num: 25

Candidate Starts for McMater_93:

(2, 58921), (4, 58972), (Start: 25 @59098 has 32 MA's), (34, 59158), (35, 59164), (36, 59209), (38, 59218), (41, 59251),

Gene: Mdavu_73 Start: 53466, Stop: 53666, Start Num: 25

Candidate Starts for Mdavu_73:

(7, 53355), (11, 53367), (16, 53397), (Start: 25 @53466 has 32 MA's), (34, 53529), (36, 53580), (38, 53589), (41, 53622), (46, 53649),

Gene: MeaningOfLife_93 Start: 58288, Stop: 58488, Start Num: 24

Candidate Starts for MeaningOfLife_93:

(Start: 22 @58270 has 3 MA's), (Start: 24 @58288 has 76 MA's), (Start: 25 @58297 has 32 MA's), (29, 58324), (30, 58342), (35, 58360), (38, 58414), (41, 58447), (46, 58474),

Gene: Megsy_95 Start: 57961, Stop: 58149, Start Num: 25

Candidate Starts for Megsy_95:

(Start: 22 @57934 has 3 MA's), (Start: 24 @57952 has 76 MA's), (Start: 25 @57961 has 32 MA's), (29, 57988), (35, 58021), (38, 58075), (41, 58108), (45, 58132),

Gene: Murucutumbu_91 Start: 58510, Stop: 58707, Start Num: 24

Candidate Starts for Murucutumbu_91:

(Start: 22 @58492 has 3 MA's), (Start: 24 @58510 has 76 MA's), (Start: 25 @58519 has 32 MA's), (29, 58546), (35, 58579), (38, 58633), (41, 58666), (45, 58690),

Gene: Mynx_92 Start: 57911, Stop: 58111, Start Num: 24

Candidate Starts for Mynx_92:

(Start: 22 @57893 has 3 MA's), (Start: 24 @57911 has 76 MA's), (Start: 25 @57920 has 32 MA's), (29, 57947), (30, 57965), (35, 57983), (38, 58037), (41, 58070), (46, 58097),

Gene: Nergal_72 Start: 49098, Stop: 49304, Start Num: 24

Candidate Starts for Nergal_72:

(Start: 24 @49098 has 76 MA's), (Start: 25 @49107 has 32 MA's), (29, 49128), (31, 49146), (35, 49161), (37, 49209), (38, 49215), (39, 49227), (40, 49239), (41, 49248), (44, 49269), (49, 49287),

Gene: Nibb_95 Start: 57973, Stop: 58158, Start Num: 25

Candidate Starts for Nibb_95:

(1, 57793), (Start: 25 @57973 has 32 MA's), (28, 57991), (29, 57994), (35, 58027), (38, 58081), (41, 58114), (42, 58129), (46, 58141), (48, 58147),

Gene: Nikao_75 Start: 56075, Stop: 56275, Start Num: 25

Candidate Starts for Nikao_75:

(7, 55964), (11, 55976), (16, 56006), (Start: 25 @56075 has 32 MA's), (34, 56138), (36, 56189), (38, 56198), (41, 56231), (46, 56258),

Gene: Oscar_96 Start: 58477, Stop: 58671, Start Num: 25

Candidate Starts for Oscar_96:

(1, 58288), (Start: 25 @58477 has 32 MA's), (34, 58534), (35, 58540), (38, 58594), (41, 58627), (42, 58642), (46, 58654), (47, 58657),

Gene: Padfoot_91 Start: 57818, Stop: 58009, Start Num: 25

Candidate Starts for Padfoot_91:

(18, 57752), (Start: 22 @57791 has 3 MA's), (Start: 24 @57809 has 76 MA's), (Start: 25 @57818 has 32 MA's), (29, 57845), (30, 57863), (35, 57881), (38, 57935), (41, 57968), (46, 57995),

Gene: Padpat_96 Start: 58216, Stop: 58416, Start Num: 24

Candidate Starts for Padpat_96:

(12, 58126), (Start: 22 @58198 has 3 MA's), (Start: 24 @58216 has 76 MA's), (Start: 25 @58225 has 32 MA's), (29, 58252), (30, 58270), (35, 58288), (38, 58342), (41, 58375), (46, 58402),

Gene: Peel_91 Start: 57615, Stop: 57815, Start Num: 24

Candidate Starts for Peel_91:

(6, 57495), (9, 57516), (17, 57552), (Start: 22 @57597 has 3 MA's), (Start: 24 @57615 has 76 MA's), (Start: 25 @57624 has 32 MA's), (29, 57651), (30, 57669), (35, 57687), (38, 57741), (41, 57774), (46, 57801),

Gene: Piatt_90 Start: 57809, Stop: 58009, Start Num: 24

Candidate Starts for Piatt_90:

(18, 57752), (Start: 22 @57791 has 3 MA's), (Start: 24 @57809 has 76 MA's), (Start: 25 @57818 has 32 MA's), (29, 57845), (30, 57863), (35, 57881), (38, 57935), (41, 57968), (46, 57995),

Gene: Pisa1_92 Start: 58335, Stop: 58526, Start Num: 25

Candidate Starts for Pisa1_92:

(10, 58230), (13, 58239), (18, 58269), (Start: 22 @58308 has 3 MA's), (Start: 24 @58326 has 76 MA's), (Start: 25 @58335 has 32 MA's), (29, 58362), (35, 58395), (38, 58449), (41, 58482), (45, 58506), (46, 58509),

Gene: Pisa4_86 Start: 53695, Stop: 53895, Start Num: 24

Candidate Starts for Pisa4_86:

(10, 53599), (13, 53608), (18, 53638), (Start: 22 @53677 has 3 MA's), (Start: 24 @53695 has 76 MA's), (Start: 25 @53704 has 32 MA's), (29, 53731), (35, 53764), (38, 53818), (41, 53851), (45, 53875), (46, 53878),

Gene: Pokerus_91 Start: 57621, Stop: 57821, Start Num: 24

Candidate Starts for Pokerus_91:

(12, 57531), (Start: 22 @57603 has 3 MA's), (Start: 24 @57621 has 76 MA's), (Start: 25 @57630 has 32 MA's), (29, 57657), (30, 57675), (35, 57693), (38, 57747), (41, 57780), (46, 57807),

Gene: Prithvi_93 Start: 58221, Stop: 58418, Start Num: 24

Candidate Starts for Prithvi_93:

(Start: 22 @58203 has 3 MA's), (Start: 24 @58221 has 76 MA's), (Start: 25 @58230 has 32 MA's), (29, 58257), (35, 58290), (38, 58344), (41, 58377), (45, 58401),

Gene: QuincyRose_89 Start: 57624, Stop: 57824, Start Num: 24

Candidate Starts for QuincyRose_89:

(Start: 22 @57606 has 3 MA's), (Start: 24 @57624 has 76 MA's), (Start: 25 @57633 has 32 MA's), (29, 57660), (30, 57678), (35, 57696), (38, 57750), (41, 57783), (46, 57810),

Gene: Ramen_92 Start: 57367, Stop: 57567, Start Num: 24

Candidate Starts for Ramen_92:

(12, 57277), (Start: 22 @57349 has 3 MA's), (Start: 24 @57367 has 76 MA's), (Start: 25 @57376 has 32 MA's), (29, 57403), (30, 57421), (35, 57439), (38, 57493), (41, 57526), (46, 57553),

Gene: Rapunzel97_93 Start: 57592, Stop: 57792, Start Num: 24

Candidate Starts for Rapunzel97_93:

(Start: 22 @57574 has 3 MA's), (Start: 24 @57592 has 76 MA's), (Start: 25 @57601 has 32 MA's), (29, 57628), (30, 57646), (35, 57664), (38, 57718), (41, 57751), (46, 57778),

Gene: Richo_93 Start: 59098, Stop: 59295, Start Num: 25

Candidate Starts for Richo_93:

(2, 58921), (4, 58972), (Start: 25 @59098 has 32 MA's), (34, 59158), (35, 59164), (36, 59209), (38, 59218), (41, 59251),

Gene: Rosmarinus_91 Start: 57600, Stop: 57800, Start Num: 24

Candidate Starts for Rosmarinus_91:

(18, 57543), (Start: 22 @57582 has 3 MA's), (Start: 24 @57600 has 76 MA's), (Start: 25 @57609 has 32 MA's), (29, 57636), (30, 57654), (35, 57672), (38, 57726), (41, 57759), (46, 57786),

Gene: SamuelLPlaqson_92 Start: 58057, Stop: 58257, Start Num: 24

Candidate Starts for SamuelLPlaqson_92:

(17, 57997), (Start: 22 @58039 has 3 MA's), (Start: 24 @58057 has 76 MA's), (Start: 25 @58066 has 32 MA's), (29, 58093), (35, 58126), (38, 58180), (41, 58213), (45, 58237), (46, 58240),

Gene: Scarlett_95 Start: 58346, Stop: 58540, Start Num: 25

Candidate Starts for Scarlett_95:

(1, 58157), (Start: 25 @58346 has 32 MA's), (34, 58403), (35, 58409), (38, 58463), (41, 58496), (42, 58511), (46, 58523), (47, 58526),

Gene: SgtBeansprout_73 Start: 53462, Stop: 53662, Start Num: 25

Candidate Starts for SgtBeansprout_73:

(7, 53351), (11, 53363), (16, 53393), (Start: 25 @53462 has 32 MA's), (34, 53525), (36, 53576), (38, 53585), (41, 53618), (46, 53645),

Gene: Shaobing_92 Start: 58740, Stop: 58937, Start Num: 25

Candidate Starts for Shaobing_92:

(2, 58563), (4, 58614), (Start: 25 @58740 has 32 MA's), (34, 58800), (35, 58806), (36, 58851), (38, 58860), (41, 58893),

Gene: ShiaSurprise_93 Start: 57809, Stop: 58009, Start Num: 24

Candidate Starts for ShiaSurprise_93:

(18, 57752), (Start: 22 @57791 has 3 MA's), (Start: 24 @57809 has 76 MA's), (Start: 25 @57818 has 32 MA's), (29, 57845), (30, 57863), (35, 57881), (38, 57935), (41, 57968), (46, 57995),

Gene: SirPhilip_92 Start: 58301, Stop: 58495, Start Num: 25

Candidate Starts for SirPhilip_92:

(20, 58262), (Start: 25 @58301 has 32 MA's), (26, 58310), (29, 58331), (33, 58355), (35, 58364), (37, 58412), (38, 58418), (41, 58451), (46, 58478), (48, 58484),

Gene: Slimphazie_93 Start: 58048, Stop: 58248, Start Num: 24

Candidate Starts for Slimphazie_93:

(Start: 22 @58030 has 3 MA's), (Start: 24 @58048 has 76 MA's), (Start: 25 @58057 has 32 MA's), (29, 58084), (30, 58102), (35, 58120), (38, 58174), (41, 58207), (46, 58234),

Gene: Spock_91 Start: 57613, Stop: 57813, Start Num: 24

Candidate Starts for Spock_91:

(18, 57556), (Start: 22 @57595 has 3 MA's), (Start: 24 @57613 has 76 MA's), (Start: 25 @57622 has 32 MA's), (29, 57649), (30, 57667), (35, 57685), (38, 57739), (41, 57772), (46, 57799),

Gene: Stinson_92 Start: 57794, Stop: 57991, Start Num: 24

Candidate Starts for Stinson_92:

(18, 57740), (Start: 24 @57794 has 76 MA's), (Start: 25 @57803 has 32 MA's), (29, 57830), (35, 57863), (38, 57917), (41, 57950), (45, 57974), (46, 57977),

Gene: Sulley_88 Start: 57378, Stop: 57575, Start Num: 24

Candidate Starts for Sulley_88:

(3, 57219), (8, 57276), (14, 57309), (Start: 22 @57360 has 3 MA's), (Start: 24 @57378 has 76 MA's), (Start: 25 @57387 has 32 MA's), (29, 57414), (35, 57447), (37, 57495), (38, 57501), (41, 57534), (45, 57558), (46, 57561),

Gene: Tachez_91 Start: 57460, Stop: 57660, Start Num: 24

Candidate Starts for Tachez_91:

(12, 57370), (Start: 22 @57442 has 3 MA's), (Start: 24 @57460 has 76 MA's), (Start: 25 @57469 has 32 MA's), (29, 57496), (30, 57514), (35, 57532), (38, 57586), (41, 57619), (46, 57646),

Gene: TaiwanKao_92 Start: 57861, Stop: 58058, Start Num: 24

Candidate Starts for TaiwanKao_92:

(Start: 22 @57843 has 3 MA's), (Start: 24 @57861 has 76 MA's), (Start: 25 @57870 has 32 MA's), (29, 57897), (35, 57930), (38, 57984), (41, 58017), (45, 58041), (46, 58044),

Gene: Teejan_74 Start: 56075, Stop: 56275, Start Num: 25

Candidate Starts for Teejan_74:

(7, 55964), (11, 55976), (16, 56006), (Start: 25 @56075 has 32 MA's), (34, 56138), (36, 56189), (38, 56198), (41, 56231), (46, 56258),

Gene: TingHuaYa_95 Start: 58843, Stop: 59040, Start Num: 25

Candidate Starts for TingHuaYa_95:

(23, 58822), (Start: 25 @58843 has 32 MA's), (34, 58903), (35, 58909), (36, 58954), (38, 58963), (41, 58996), (48, 59029),

Gene: TiniBug_90 Start: 58175, Stop: 58372, Start Num: 24

Candidate Starts for TiniBug_90:

(17, 58115), (Start: 22 @58157 has 3 MA's), (Start: 24 @58175 has 76 MA's), (Start: 25 @58184 has 32 MA's), (29, 58211), (35, 58244), (38, 58298), (41, 58331), (45, 58355), (46, 58358),

Gene: Tiri_92 Start: 57354, Stop: 57554, Start Num: 24

Candidate Starts for Tiri_92:

(Start: 22 @57336 has 3 MA's), (Start: 24 @57354 has 76 MA's), (Start: 25 @57363 has 32 MA's), (29, 57390), (30, 57408), (35, 57426), (38, 57480), (41, 57513), (46, 57540),

Gene: Topper_91 Start: 57612, Stop: 57812, Start Num: 24

Candidate Starts for Topper_91:

(18, 57555), (Start: 22 @57594 has 3 MA's), (Start: 24 @57612 has 76 MA's), (Start: 25 @57621 has 32 MA's), (29, 57648), (30, 57666), (35, 57684), (38, 57738), (41, 57771), (46, 57798),

Gene: Torres_75 Start: 56076, Stop: 56276, Start Num: 25

Candidate Starts for Torres_75:

(7, 55965), (11, 55977), (16, 56007), (Start: 25 @56076 has 32 MA's), (34, 56139), (36, 56190), (38, 56199), (41, 56232), (46, 56259),

Gene: TreyKay_93 Start: 58221, Stop: 58418, Start Num: 24

Candidate Starts for TreyKay_93:

(Start: 22 @58203 has 3 MA's), (Start: 24 @58221 has 76 MA's), (Start: 25 @58230 has 32 MA's), (29, 58257), (35, 58290), (38, 58344), (41, 58377), (45, 58401),

Gene: Trice_72 Start: 53463, Stop: 53663, Start Num: 25

Candidate Starts for Trice_72:

(7, 53352), (11, 53364), (16, 53394), (Start: 25 @53463 has 32 MA's), (34, 53526), (36, 53577), (38, 53586), (41, 53619), (46, 53646),

Gene: TruffulaTree_93 Start: 58014, Stop: 58214, Start Num: 24

Candidate Starts for TruffulaTree_93:

(Start: 22 @57996 has 3 MA's), (Start: 24 @58014 has 76 MA's), (Start: 25 @58023 has 32 MA's), (29, 58050), (30, 58068), (35, 58086), (38, 58140), (41, 58173), (46, 58200),

Gene: Twitch_91 Start: 57615, Stop: 57815, Start Num: 24

Candidate Starts for Twitch_91:

(6, 57495), (9, 57516), (17, 57552), (Start: 22 @57597 has 3 MA's), (Start: 24 @57615 has 76 MA's), (Start: 25 @57624 has 32 MA's), (29, 57651), (30, 57669), (35, 57687), (38, 57741), (41, 57774), (46, 57801),

Gene: Urkel_92 Start: 58057, Stop: 58257, Start Num: 24

Candidate Starts for Urkel_92:

(17, 57997), (Start: 22 @58039 has 3 MA's), (Start: 24 @58057 has 76 MA's), (Start: 25 @58066 has 32 MA's), (29, 58093), (35, 58126), (38, 58180), (41, 58213), (45, 58237), (46, 58240),

Gene: Validus_98 Start: 59635, Stop: 59832, Start Num: 25

Candidate Starts for Validus_98:

(2, 59458), (4, 59509), (Start: 25 @59635 has 32 MA's), (34, 59695), (35, 59701), (36, 59746), (38, 59755), (41, 59788),

Gene: Veliki_92 Start: 57583, Stop: 57780, Start Num: 24

Candidate Starts for Veliki_92:

(Start: 22 @57565 has 3 MA's), (Start: 24 @57583 has 76 MA's), (Start: 25 @57592 has 32 MA's), (29, 57619), (35, 57652), (38, 57706), (41, 57739), (46, 57766),

Gene: YoureAdopted_90 Start: 57409, Stop: 57609, Start Num: 24

Candidate Starts for YoureAdopted_90:

(Start: 22 @57391 has 3 MA's), (Start: 24 @57409 has 76 MA's), (Start: 25 @57418 has 32 MA's), (29, 57445), (30, 57463), (35, 57481), (38, 57535), (41, 57568), (46, 57595),

Gene: Yunkel11_96 Start: 58346, Stop: 58546, Start Num: 25

Candidate Starts for Yunkel11_96:

(19, 58298), (23, 58325), (Start: 25 @58346 has 32 MA's), (34, 58409), (35, 58415), (36, 58460), (38, 58469), (41, 58502), (46, 58529), (48, 58535),

Gene: Zabiza_87 Start: 53956, Stop: 54153, Start Num: 24

Candidate Starts for Zabiza_87:

(Start: 22 @53938 has 3 MA's), (Start: 24 @53956 has 76 MA's), (Start: 25 @53965 has 32 MA's), (29, 53992), (35, 54025), (38, 54079), (41, 54112), (46, 54139),

Gene: Zavala_93 Start: 57874, Stop: 58074, Start Num: 24

Candidate Starts for Zavala_93:

(Start: 22 @57856 has 3 MA's), (Start: 24 @57874 has 76 MA's), (Start: 25 @57883 has 32 MA's), (29, 57910), (30, 57928), (35, 57946), (38, 58000), (41, 58033), (46, 58060),