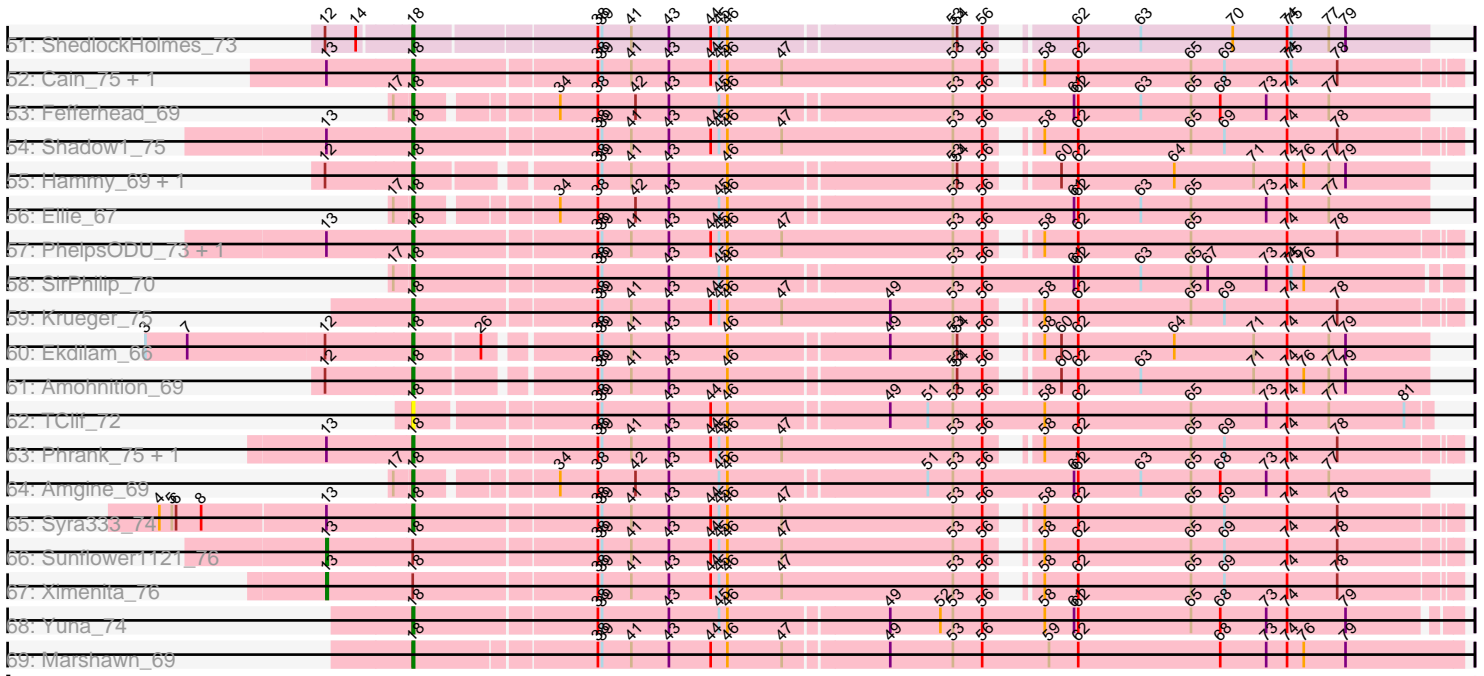


Pham 169788



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 169788 Report

This analysis was run 07/09/24 on database version 566.

Pham number 169788 has 145 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Nergal_62
- Track 2 : Rosmarinus_71, Twitch_71, Jeckyll_71, Emerson_73, Atiba_72, CaseJules_73, Padpat_74, Jarvi_71, Hyperbowlee_70, Adephagia_70, Blizzard_71, Homura_70, Boiii_71, Durfee_71, Piatt_70, Spock_71, ShiaSurprise_72, BEEST_71, Padfoot_71, Llorens_70, Joy99_71, Inky_71, Asayake_71, Capricorn_71, Dalmuri_71, Peel_71, Belladonna_71, CREW_70, AlishaPH_70, Tachez_71, BGIlluviae_71
- Track 3 : Validus_76
- Track 4 : Guanica15_75, Yunkel11_75, Efra2_76
- Track 5 : Anaya_74
- Track 6 : Nutello_58, Nikao_61, LilPharaoh_59, SgtBeansprout_59, Biglebops_58, Enkosi_60, Mdavu_59
- Track 7 : YoureAdopted_70, Beezoo_73, QuincyRose_68, Ganymede_70
- Track 8 : LaterM_70
- Track 9 : MeaningOfLife_72, Apocalypse_73
- Track 10 : JAWS_70
- Track 11 : Curiosium_75
- Track 12 : Veliki_72, Rapunzel97_73, BarrelRoll_71, Ramen_72, TruffulaTree_72, BaghaKamala_70, Zavala_74, Jayhawk_72, Slimphazie_72, Mynx_72
- Track 13 : Urkel_71, DrHayes_71, SamuelLPlaqson_71
- Track 14 : Megsy_73
- Track 15 : Devera_78, Dole_75, Illumine_76
- Track 16 : Lunahalos_71, Topper_71
- Track 17 : Zabiza_66, ActinUp_71, CheetoDust_70, HedwigODU_70, Geraldini_74
- Track 18 : Nibb_73
- Track 19 : Pokerus_71
- Track 20 : Ageofdapage_74
- Track 21 : Shaobing_72, Niklas_73, Peanam_73
- Track 22 : Prithvi_73, TreyKay_73, LindNT_69
- Track 23 : TiniBug_71
- Track 24 : MarkPhew_72
- Track 25 : TaiwanKao_72
- Track 26 : Bella96_72
- Track 27 : CrimD_72
- Track 28 : Deby_70
- Track 29 : Sulley_69
- Track 30 : Chris_72

- Track 31 : LastHope_75
- Track 32 : Stinson_71
- Track 33 : Scarlett_74, KiSi_74
- Track 34 : Murucutumbu_71
- Track 35 : Adonis_70
- Track 36 : LeMond_73, Oscar_73
- Track 37 : Tiri_71
- Track 38 : Angelica_69
- Track 39 : Amelie_58
- Track 40 : Mufasa_73, BoostSeason_73
- Track 41 : Strobilo_75, Marcoliusprime_73, DismalStressor_74
- Track 42 : Milly_74, DismalFunk_74, Findley_74
- Track 43 : TM4_72
- Track 44 : ZoeJ_73
- Track 45 : Pixie_70, TBond007_67
- Track 46 : TribbleTrouble_72
- Track 47 : Keshu_73
- Track 48 : Hurricane_71
- Track 49 : MacnCheese_73
- Track 50 : Pharb_70
- Track 51 : ShedlockHolmes_73
- Track 52 : Cain_75, Bryler_75
- Track 53 : Fefferhead_69
- Track 54 : Shadow1_75
- Track 55 : Hammy_69, DarthP_69
- Track 56 : Ellie_67
- Track 57 : PhelpsODU_73, Unicorn_73
- Track 58 : SirPhilip_70
- Track 59 : Krueger_75
- Track 60 : Ekdilam_66
- Track 61 : Amohnition_69
- Track 62 : TClif_72
- Track 63 : Phrank_75, Tierra_75
- Track 64 : Amgine_69
- Track 65 : Syra333_74
- Track 66 : Sunflower1121_76
- Track 67 : Ximenita_76
- Track 68 : Yuna_74
- Track 69 : Marshawn_69

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

The start number called the most often in the published annotations is 18, it was called in 123 of the 140 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ActinUp_71, Adephegia_70, Adonis_70, Ageofdapage_74, AlishaPH_70, Amgine_69, Amohnition_69, Anaya_74, Apocalypse_73, Asayake_71, Atiba_72, BEEST_71, BGlluviae_71, BaghaKamala_70, BarrelRoll_71, Beezoo_73, Bella96_72, Belladonna_71, Binglebops_58, Blizzard_71, Boiiii_71, Bryler_75,

CREW_70, Cain_75, Capricorn_71, CaseJules_73, CheetoDust_70, Chris_72, CrimD_72, Curiosium_75, Dalmuri_71, DarthP_69, Deby_70, Devera_78, Dole_75, DrHayes_71, Durfee_71, Efra2_76, Ekdilam_66, Ellie_67, Emerson_73, Enkosi_60, Fefferhead_69, Ganymede_70, Geraldini_74, Guanica15_75, Hammy_69, HedwigODU_70, Homura_70, Hurricane_71, Hyperbowlee_70, Illumine_76, Inky_71, Jarvi_71, Jayhawk_72, Jeckyll_71, Joy99_71, Keshu_73, KiSi_74, Krueger_75, LastHope_75, LaterM_70, LeMond_73, LilPharaoh_59, LindNT_69, Llorens_70, Lunahalos_71, MacnCheese_73, MarkPheW_72, Marshawn_69, Mdavu_59, MeaningOfLife_72, Megsy_73, Murucutumbu_71, Mynx_72, Nibb_73, Nikao_61, Niklas_73, Nutello_58, Oscar_73, Padfoot_71, Padpat_74, Peanam_73, Peel_71, Pharb_70, PhelpsODU_73, Phrank_75, Piatt_70, Pixie_70, Prithvi_73, QuincyRose_68, Ramen_72, Rapunzel97_73, Rosmarinus_71, SamuelLPlaqson_71, Scarlett_74, SgtBeansprout_59, Shadow1_75, Shaobing_72, ShedlockHolmes_73, ShiaSurprise_72, SirPhilip_70, Slimphazie_72, Spock_71, Stinson_71, Sulley_69, Syra333_74, TBond007_67, TClif_72, Tachez_71, TaiwanKao_72, Tierra_75, TiniBug_71, Tiri_71, Topper_71, TreyKay_73, TripleTrouble_72, TruffulaTree_72, Twitch_71, Unicorn_73, Urkel_71, Validus_76, Veliki_72, YoureAdopted_70, Yuna_74, Yunkel11_75, Zabiza_66, Zavala_74,

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

- Amelie_58, Angelica_69, JAWS_70, Pokerus_71, Sunflower1121_76, Ximenita_76,

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

- BoostSeason_73, DismalFunk_74, DismalStressor_74, Findley_74, Marcoliusprime_73, Milly_74, Mufasa_73, Nergal_62, Strobilo_75, TM4_72, ZoeJ_73,

Summary by start number:

Start 10:

- Found in 2 of 145 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BoostSeason_73 (K2), Mufasa_73 (K2),

Start 13:

- Found in 21 of 145 (14.5%) of genes in pham
- Manual Annotations of this start: 2 of 140
- Called 9.5% of time when present
- Phage (with cluster) where this start called: Sunflower1121_76 (K6), Ximenita_76 (K6),

Start 14:

- Found in 16 of 145 (11.0%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Amelie_58 (K1),

Start 16:

- Found in 83 of 145 (57.2%) of genes in pham
- Manual Annotations of this start: 3 of 140
- Called 3.6% of time when present
- Phage (with cluster) where this start called: Angelica_69 (K1), JAWS_70 (K1), Pokerus_71 (K1),

Start 18:

- Found in 134 of 145 (92.4%) of genes in pham
- Manual Annotations of this start: 123 of 140
- Called 95.5% of time when present
- Phage (with cluster) where this start called: ActinUp_71 (K1), Adephagia_70 (K1), Adonis_70 (K1), Ageofdapage_74 (K1), AlishaPH_70 (K1), Amgine_69 (K6), Amohntion_69 (K6), Anaya_74 (K1), Apocalypse_73 (K1), Asayake_71 (K1), Atiba_72 (K1), BEEST_71 (K1), BGlluviae_71 (K1), BaghaKamala_70 (K1), BarrelRoll_71 (K1), Beezoo_73 (K1), Bella96_72 (K1), Belladonna_71 (K1), Binglebops_58 (K1), Blizzard_71 (K1), Boiiii_71 (K1), Bryler_75 (K6), CREW_70 (K1), Cain_75 (K6), Capricorn_71 (K1), CaseJules_73 (K1), CheetoDust_70 (K1), Chris_72 (K1), CrimD_72 (K1), Curiosium_75 (K1), Dalmuri_71 (K1), DarthP_69 (K6), Deby_70 (K1), Devera_78 (K1), Dole_75 (K1), DrHayes_71 (K1), Durfee_71 (K1), Efra2_76 (K1), Ekdilam_66 (K6), Ellie_67 (K6), Emerson_73 (K1), Enkosi_60 (K1), Fefferhead_69 (K6), Ganymede_70 (K1), Geraldini_74 (K1), Guanica15_75 (K1), Hammy_69 (K6), HedwigODU_70 (K1), Homura_70 (K1), Hurricane_71 (K3), Hyperbowlee_70 (K1), Illumine_76 (K1), Inky_71 (K1), Jarvi_71 (K1), Jayhawk_72 (K1), Jeckyll_71 (K1), Joy99_71 (K1), Keshu_73 (K3), KiSi_74 (K1), Krueger_75 (K6), LastHope_75 (K1), LaterM_70 (K1), LeMond_73 (K1), LilPharaoh_59 (K1), LindNT_69 (K1), Llorens_70 (K1), Lunahalos_71 (K1), MacnCheese_73 (K3), MarkPhew_72 (K1), Marshawn_69 (K6), Mdavu_59 (K1), MeaningOfLife_72 (K1), Megsy_73 (K1), Murucutumbu_71 (K1), Mynx_72 (K1), Nibb_73 (K1), Nikao_61 (K1), Niklas_73 (K1), Nutello_58 (K1), Oscar_73 (K1), Padfoot_71 (K1), Padpat_74 (K1), Peanam_73 (K1), Peel_71 (K1), Pharb_70 (K3), PhelpsODU_73 (K6), Phrank_75 (K6), Piatt_70 (K1), Pixie_70 (K3), Prithvi_73 (K1), QuincyRose_68 (K1), Ramen_72 (K1), Rapunzel97_73 (K1), Rosmarinus_71 (K1), SamuelLPlaqson_71 (K1), Scarlett_74 (K1), SgtBeansprout_59 (K1), Shadow1_75 (K6), Shaobing_72 (K1), ShedlockHolmes_73 (K3), ShiaSurprise_72 (K1), SirPhilip_70 (K6), Slimphazie_72 (K1), Spock_71 (K1), Stinson_71 (K1), Sulley_69 (K1), Syra333_74 (K6), TBond007_67 (K3), TClif_72 (K6), Tachez_71 (K1), TaiwanKao_72 (K1), Tierra_75 (K6), TiniBug_71 (K1), Tiri_71 (K1), Topper_71 (K1), TreyKay_73 (K1), TribbleTrouble_72 (K3), TruffulaTree_72 (K1), Twitch_71 (K1), Unicorn_73 (K6), Urkel_71 (K1), Validus_76 (K1), Veliki_72 (K1), YoureAdopted_70 (K1), Yuna_74 (K6), Yunkel11_75 (K1), Zabiza_66 (K1), Zavala_74 (K1),

Start 20:

- Found in 1 of 145 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal_62 (AG),

Start 29:

- Found in 10 of 145 (6.9%) of genes in pham
- Manual Annotations of this start: 3 of 140
- Called 30.0% of time when present
- Phage (with cluster) where this start called: DismalStressor_74 (K2), Marcoliusprime_73 (K2), Strobilo_75 (K2),

Start 30:

- Found in 10 of 145 (6.9%) of genes in pham
- Manual Annotations of this start: 5 of 140
- Called 50.0% of time when present

- Phage (with cluster) where this start called: DismalFunk_74 (K2), Findley_74 (K2), Milly_74 (K2), TM4_72 (K2), ZoeJ_73 (K2),

Summary by clusters:

There are 5 clusters represented in this pham: K3, K2, K1, K6, AG,

Info for manual annotations of cluster AG:

- Start number 20 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 14 was manually annotated 1 time for cluster K1.
- Start number 16 was manually annotated 3 times for cluster K1.
- Start number 18 was manually annotated 96 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 10 was manually annotated 2 times for cluster K2.
- Start number 29 was manually annotated 3 times for cluster K2.
- Start number 30 was manually annotated 5 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 18 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K6:

- Start number 13 was manually annotated 2 times for cluster K6.
- Start number 18 was manually annotated 19 times for cluster K6.

Gene Information:

Gene: ActinUp_71 Start: 47382, Stop: 48080, Start Num: 18

Candidate Starts for ActinUp_71:

(Start: 16 @47370 has 3 MA's), (Start: 18 @47382 has 123 MA's), (28, 47424), (37, 47487), (38, 47496), (43, 47547), (44, 47577), (46, 47589), (53, 47742), (56, 47763), (62, 47808), (63, 47853), (65, 47889), (73, 47943), (74, 47958), (77, 47988), (81, 48042),

Gene: Adephagia_70 Start: 47419, Stop: 48117, Start Num: 18

Candidate Starts for Adephagia_70:

(Start: 16 @47407 has 3 MA's), (Start: 18 @47419 has 123 MA's), (28, 47461), (37, 47524), (38, 47533), (43, 47584), (44, 47614), (46, 47626), (53, 47779), (56, 47800), (62, 47845), (63, 47890), (65, 47926), (66, 47929), (73, 47980), (74, 47995), (77, 48025), (81, 48079),

Gene: Adonis_70 Start: 47654, Stop: 48352, Start Num: 18

Candidate Starts for Adonis_70:

(Start: 16 @47642 has 3 MA's), (Start: 18 @47654 has 123 MA's), (28, 47696), (37, 47759), (38, 47768), (43, 47819), (44, 47849), (46, 47861), (53, 48014), (56, 48035), (60, 48068), (62, 48080), (63, 48125), (65, 48161), (66, 48164), (73, 48215), (74, 48230), (77, 48260), (81, 48314),

Gene: Ageofdapage_74 Start: 48577, Stop: 49275, Start Num: 18

Candidate Starts for Ageofdapage_74:

(Start: 16 @48565 has 3 MA's), (Start: 18 @48577 has 123 MA's), (27, 48616), (28, 48619), (37, 48682), (38, 48691), (43, 48742), (44, 48772), (46, 48784), (53, 48937), (56, 48958), (62, 49003), (63,

49048), (65, 49084), (73, 49138), (74, 49153), (75, 49156), (77, 49183), (81, 49237),

Gene: AlishaPH_70 Start: 47680, Stop: 48378, Start Num: 18

Candidate Starts for AlishaPH_70:

(Start: 16 @47668 has 3 MA's), (Start: 18 @47680 has 123 MA's), (28, 47722), (37, 47785), (38, 47794), (43, 47845), (44, 47875), (46, 47887), (53, 48040), (56, 48061), (62, 48106), (63, 48151), (65, 48187), (66, 48190), (73, 48241), (74, 48256), (77, 48286), (81, 48340),

Gene: Amelie_58 Start: 44586, Stop: 45335, Start Num: 14

Candidate Starts for Amelie_58:

(Start: 13 @44565 has 2 MA's), (Start: 14 @44586 has 1 MA's), (Start: 18 @44625 has 123 MA's), (37, 44742), (38, 44751), (40, 44760), (43, 44802), (44, 44832), (46, 44844), (48, 44934), (51, 44979), (53, 44997), (56, 45018), (57, 45021), (60, 45051), (61, 45060), (62, 45063), (63, 45108), (64, 45132), (65, 45144), (67, 45156), (68, 45165), (73, 45198), (74, 45213), (75, 45216), (77, 45243), (79, 45255), (82, 45318),

Gene: Amgine_69 Start: 48229, Stop: 48930, Start Num: 18

Candidate Starts for Amgine_69:

(17, 48217), (Start: 18 @48229 has 123 MA's), (34, 48316), (38, 48343), (42, 48370), (43, 48394), (45, 48430), (46, 48436), (51, 48571), (53, 48589), (56, 48610), (61, 48676), (62, 48679), (63, 48724), (65, 48760), (68, 48781), (73, 48814), (74, 48829), (77, 48859),

Gene: Amohndition_69 Start: 47768, Stop: 48445, Start Num: 18

Candidate Starts for Amohndition_69:

(12, 47708), (Start: 18 @47768 has 123 MA's), (38, 47882), (39, 47885), (41, 47906), (43, 47933), (46, 47975), (53, 48128), (54, 48131), (56, 48149), (60, 48182), (62, 48194), (63, 48239), (71, 48320), (74, 48344), (76, 48356), (77, 48374), (79, 48386),

Gene: Anaya_74 Start: 48358, Stop: 49056, Start Num: 18

Candidate Starts for Anaya_74:

(Start: 16 @48346 has 3 MA's), (Start: 18 @48358 has 123 MA's), (28, 48400), (37, 48463), (38, 48472), (43, 48523), (44, 48553), (46, 48565), (53, 48718), (56, 48739), (60, 48772), (62, 48784), (63, 48829), (65, 48865), (73, 48919), (74, 48934), (77, 48964),

Gene: Angelica_69 Start: 47327, Stop: 48037, Start Num: 16

Candidate Starts for Angelica_69:

(Start: 16 @47327 has 3 MA's), (Start: 18 @47339 has 123 MA's), (28, 47381), (37, 47444), (38, 47453), (43, 47504), (44, 47534), (46, 47546), (53, 47699), (55, 47714), (56, 47720), (62, 47765), (63, 47810), (65, 47846), (73, 47900), (74, 47915), (75, 47918), (77, 47945), (81, 47999),

Gene: Apocalypse_73 Start: 48102, Stop: 48800, Start Num: 18

Candidate Starts for Apocalypse_73:

(Start: 16 @48090 has 3 MA's), (Start: 18 @48102 has 123 MA's), (28, 48144), (37, 48207), (38, 48216), (43, 48267), (44, 48297), (46, 48309), (53, 48462), (56, 48483), (62, 48528), (63, 48573), (65, 48609), (73, 48663), (74, 48678), (77, 48708), (81, 48762), (83, 48786),

Gene: Asayake_71 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for Asayake_71:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: Atiba_72 Start: 47382, Stop: 48080, Start Num: 18

Candidate Starts for Atiba_72:

(Start: 16 @47370 has 3 MA's), (Start: 18 @47382 has 123 MA's), (28, 47424), (37, 47487), (38, 47496), (43, 47547), (44, 47577), (46, 47589), (53, 47742), (56, 47763), (62, 47808), (63, 47853), (65, 47889), (66, 47892), (73, 47943), (74, 47958), (77, 47988), (81, 48042),

Gene: BEEST_71 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for BEEST_71:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: BGlluviae_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for BGlluviae_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: BaghaKamala_70 Start: 46968, Stop: 47666, Start Num: 18

Candidate Starts for BaghaKamala_70:

(Start: 16 @46956 has 3 MA's), (Start: 18 @46968 has 123 MA's), (28, 47010), (37, 47073), (38, 47082), (43, 47133), (44, 47163), (46, 47175), (53, 47328), (56, 47349), (62, 47394), (63, 47439), (65, 47475), (66, 47478), (73, 47529), (74, 47544), (77, 47574), (81, 47628), (83, 47652),

Gene: BarrelRoll_71 Start: 47820, Stop: 48518, Start Num: 18

Candidate Starts for BarrelRoll_71:

(Start: 16 @47808 has 3 MA's), (Start: 18 @47820 has 123 MA's), (28, 47862), (37, 47925), (38, 47934), (43, 47985), (44, 48015), (46, 48027), (53, 48180), (56, 48201), (62, 48246), (63, 48291), (65, 48327), (66, 48330), (73, 48381), (74, 48396), (77, 48426), (81, 48480), (83, 48504),

Gene: Beezoo_73 Start: 48316, Stop: 49014, Start Num: 18

Candidate Starts for Beezoo_73:

(Start: 16 @48304 has 3 MA's), (Start: 18 @48316 has 123 MA's), (28, 48358), (37, 48421), (38, 48430), (43, 48481), (44, 48511), (46, 48523), (53, 48676), (55, 48691), (56, 48697), (62, 48742), (63, 48787), (65, 48823), (66, 48826), (73, 48877), (74, 48892), (77, 48922), (81, 48976), (83, 49000),

Gene: Bella96_72 Start: 47878, Stop: 48576, Start Num: 18

Candidate Starts for Bella96_72:

(Start: 16 @47866 has 3 MA's), (Start: 18 @47878 has 123 MA's), (28, 47920), (37, 47983), (38, 47992), (43, 48043), (44, 48073), (46, 48085), (53, 48238), (55, 48253), (56, 48259), (62, 48304), (65, 48385), (68, 48406), (73, 48439), (74, 48454), (77, 48484), (81, 48538),

Gene: Belladonna_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Belladonna_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: Biglebops_58 Start: 44625, Stop: 45335, Start Num: 18

Candidate Starts for Biglebops_58:

(Start: 13 @44565 has 2 MA's), (Start: 14 @44586 has 1 MA's), (Start: 18 @44625 has 123 MA's), (37, 44742), (38, 44751), (40, 44760), (43, 44802), (44, 44832), (46, 44844), (48, 44934), (51, 44979), (53, 44997), (56, 45018), (57, 45021), (60, 45051), (61, 45060), (62, 45063), (63, 45108), (64, 45132), (65, 45144), (67, 45156), (68, 45165), (73, 45198), (74, 45213), (75, 45216), (77, 45243), (79, 45255),

(82, 45318),

Gene: Blizzard_71 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for Blizzard_71:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: Boiiii_71 Start: 47736, Stop: 48434, Start Num: 18

Candidate Starts for Boiiii_71:

(Start: 16 @47724 has 3 MA's), (Start: 18 @47736 has 123 MA's), (28, 47778), (37, 47841), (38, 47850), (43, 47901), (44, 47931), (46, 47943), (53, 48096), (56, 48117), (62, 48162), (63, 48207), (65, 48243), (66, 48246), (73, 48297), (74, 48312), (77, 48342), (81, 48396),

Gene: BoostSeason_73 Start: 49181, Stop: 49957, Start Num: 10

Candidate Starts for BoostSeason_73:

(Start: 10 @49181 has 2 MA's), (15, 49250), (Start: 29 @49316 has 3 MA's), (Start: 30 @49322 has 5 MA's), (32, 49340), (37, 49376), (38, 49385), (43, 49436), (44, 49466), (46, 49478), (54, 49616), (56, 49634), (60, 49667), (62, 49679), (63, 49724), (69, 49784), (73, 49814), (74, 49829), (84, 49946), (85, 49949),

Gene: Bryler_75 Start: 47287, Stop: 48000, Start Num: 18

Candidate Starts for Bryler_75:

(Start: 13 @47227 has 2 MA's), (Start: 18 @47287 has 123 MA's), (38, 47413), (39, 47416), (41, 47437), (43, 47464), (44, 47494), (45, 47500), (46, 47506), (47, 47545), (53, 47668), (56, 47689), (58, 47710), (62, 47734), (65, 47815), (69, 47839), (74, 47884), (75, 47887), (78, 47920),

Gene: CREW_70 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for CREW_70:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: Cain_75 Start: 47275, Stop: 47988, Start Num: 18

Candidate Starts for Cain_75:

(Start: 13 @47215 has 2 MA's), (Start: 18 @47275 has 123 MA's), (38, 47401), (39, 47404), (41, 47425), (43, 47452), (44, 47482), (45, 47488), (46, 47494), (47, 47533), (53, 47656), (56, 47677), (58, 47698), (62, 47722), (65, 47803), (69, 47827), (74, 47872), (75, 47875), (78, 47908),

Gene: Capricorn_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Capricorn_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: CaseJules_73 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for CaseJules_73:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: CheetoDust_70 Start: 47015, Stop: 47713, Start Num: 18

Candidate Starts for CheetoDust_70:

(Start: 16 @47003 has 3 MA's), (Start: 18 @47015 has 123 MA's), (28, 47057), (37, 47120), (38, 47129), (43, 47180), (44, 47210), (46, 47222), (53, 47375), (56, 47396), (62, 47441), (63, 47486), (65, 47522), (73, 47576), (74, 47591), (77, 47621), (81, 47675),

Gene: Chris_72 Start: 48292, Stop: 49011, Start Num: 18

Candidate Starts for Chris_72:

(17, 48280), (Start: 18 @48292 has 123 MA's), (22, 48319), (37, 48400), (38, 48409), (39, 48412), (43, 48460), (44, 48490), (45, 48496), (46, 48502), (53, 48655), (54, 48658), (55, 48670), (56, 48676), (60, 48733), (62, 48745), (73, 48880), (74, 48895), (76, 48907), (77, 48925),

Gene: CrimD_72 Start: 48328, Stop: 49023, Start Num: 18

Candidate Starts for CrimD_72:

(Start: 18 @48328 has 123 MA's), (28, 48370), (37, 48433), (38, 48442), (43, 48493), (44, 48523), (46, 48535), (53, 48688), (56, 48709), (62, 48754), (65, 48835), (66, 48838), (67, 48847), (73, 48889), (74, 48904), (79, 48946), (81, 48988),

Gene: Curiosium_75 Start: 47009, Stop: 47707, Start Num: 18

Candidate Starts for Curiosium_75:

(Start: 18 @47009 has 123 MA's), (28, 47051), (36, 47111), (38, 47123), (43, 47174), (44, 47204), (45, 47210), (46, 47216), (47, 47255), (51, 47351), (53, 47369), (56, 47390), (62, 47435), (65, 47516), (73, 47570), (74, 47585), (75, 47588), (76, 47597), (77, 47615),

Gene: Dalmuri_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Dalmuri_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: DARTH_P_69 Start: 47625, Stop: 48302, Start Num: 18

Candidate Starts for DARTH_P_69:

(12, 47565), (Start: 18 @47625 has 123 MA's), (38, 47739), (39, 47742), (41, 47763), (43, 47790), (46, 47832), (53, 47985), (54, 47988), (56, 48006), (60, 48039), (62, 48051), (64, 48120), (71, 48177), (74, 48201), (76, 48213), (77, 48231), (79, 48243),

Gene: Deby_70 Start: 47787, Stop: 48485, Start Num: 18

Candidate Starts for Deby_70:

(Start: 16 @47775 has 3 MA's), (Start: 18 @47787 has 123 MA's), (28, 47829), (37, 47892), (38, 47901), (43, 47952), (44, 47982), (46, 47994), (53, 48147), (55, 48162), (56, 48168), (62, 48213), (63, 48258), (65, 48294), (66, 48297), (73, 48348), (74, 48363), (75, 48366), (77, 48393), (81, 48447), (83, 48471),

Gene: Devera_78 Start: 49128, Stop: 49826, Start Num: 18

Candidate Starts for Devera_78:

(Start: 16 @49116 has 3 MA's), (Start: 18 @49128 has 123 MA's), (28, 49170), (37, 49233), (38, 49242), (43, 49293), (44, 49323), (46, 49335), (53, 49488), (56, 49509), (62, 49554), (65, 49635), (73, 49689), (74, 49704), (77, 49734), (81, 49788),

Gene: DismalFunk_74 Start: 49851, Stop: 50486, Start Num: 30

Candidate Starts for DismalFunk_74:

(Start: 29 @49845 has 3 MA's), (Start: 30 @49851 has 5 MA's), (32, 49869), (37, 49905), (38, 49914), (43, 49965), (44, 49995), (46, 50007), (50, 50118), (54, 50145), (56, 50163), (60, 50196), (62, 50208), (63, 50253), (69, 50313), (74, 50358), (84, 50475), (85, 50478),

Gene: DismalStressor_74 Start: 49845, Stop: 50486, Start Num: 29

Candidate Starts for DismalStressor_74:

(Start: 29 @49845 has 3 MA's), (Start: 30 @49851 has 5 MA's), (32, 49869), (37, 49905), (38, 49914), (43, 49965), (44, 49995), (46, 50007), (50, 50118), (54, 50145), (56, 50163), (60, 50196), (62, 50208), (63, 50253), (69, 50313), (74, 50358), (84, 50475), (85, 50478),

Gene: Dole_75 Start: 49131, Stop: 49829, Start Num: 18

Candidate Starts for Dole_75:

(Start: 16 @49119 has 3 MA's), (Start: 18 @49131 has 123 MA's), (28, 49173), (37, 49236), (38, 49245), (43, 49296), (44, 49326), (46, 49338), (53, 49491), (56, 49512), (62, 49557), (65, 49638), (73, 49692), (74, 49707), (77, 49737), (81, 49791),

Gene: DrHayes_71 Start: 48032, Stop: 48730, Start Num: 18

Candidate Starts for DrHayes_71:

(Start: 16 @48020 has 3 MA's), (Start: 18 @48032 has 123 MA's), (28, 48074), (37, 48137), (38, 48146), (43, 48197), (44, 48227), (46, 48239), (53, 48392), (55, 48407), (56, 48413), (60, 48446), (62, 48458), (65, 48539), (68, 48560), (73, 48593), (74, 48608), (77, 48638), (81, 48692),

Gene: Durfee_71 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for Durfee_71:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: Efra2_76 Start: 47875, Stop: 48570, Start Num: 18

Candidate Starts for Efra2_76:

(Start: 16 @47863 has 3 MA's), (Start: 18 @47875 has 123 MA's), (28, 47917), (37, 47980), (38, 47989), (43, 48040), (44, 48070), (46, 48082), (53, 48235), (56, 48256), (62, 48301), (63, 48346), (65, 48382), (73, 48436),

Gene: Ekdilam_66 Start: 47818, Stop: 48495, Start Num: 18

Candidate Starts for Ekdilam_66:

(3, 47632), (7, 47662), (12, 47758), (Start: 18 @47818 has 123 MA's), (26, 47863), (38, 47932), (39, 47935), (41, 47956), (43, 47983), (46, 48025), (49, 48133), (53, 48178), (54, 48181), (56, 48199), (58, 48220), (60, 48232), (62, 48244), (64, 48313), (71, 48370), (74, 48394), (77, 48424), (79, 48436),

Gene: Ellie_67 Start: 47252, Stop: 47953, Start Num: 18

Candidate Starts for Ellie_67:

(17, 47240), (Start: 18 @47252 has 123 MA's), (34, 47339), (38, 47366), (42, 47393), (43, 47417), (45, 47453), (46, 47459), (53, 47612), (56, 47633), (61, 47699), (62, 47702), (63, 47747), (65, 47783), (73, 47837), (74, 47852), (77, 47882),

Gene: Emerson_73 Start: 47854, Stop: 48552, Start Num: 18

Candidate Starts for Emerson_73:

(Start: 16 @47842 has 3 MA's), (Start: 18 @47854 has 123 MA's), (28, 47896), (37, 47959), (38, 47968), (43, 48019), (44, 48049), (46, 48061), (53, 48214), (56, 48235), (62, 48280), (63, 48325), (65, 48361), (66, 48364), (73, 48415), (74, 48430), (77, 48460), (81, 48514),

Gene: Enkosi_60 Start: 47238, Stop: 47948, Start Num: 18

Candidate Starts for Enkosi_60:

(Start: 13 @47178 has 2 MA's), (Start: 14 @47199 has 1 MA's), (Start: 18 @47238 has 123 MA's), (37, 47355), (38, 47364), (40, 47373), (43, 47415), (44, 47445), (46, 47457), (48, 47547), (51, 47592), (53, 47610), (56, 47631), (57, 47634), (60, 47664), (61, 47673), (62, 47676), (63, 47721), (64, 47745),

(65, 47757), (67, 47769), (68, 47778), (73, 47811), (74, 47826), (75, 47829), (77, 47856), (79, 47868), (82, 47931),

Gene: Fefferhead_69 Start: 47160, Stop: 47861, Start Num: 18

Candidate Starts for Fefferhead_69:

(17, 47148), (Start: 18 @47160 has 123 MA's), (34, 47247), (38, 47274), (42, 47301), (43, 47325), (45, 47361), (46, 47367), (53, 47520), (56, 47541), (61, 47607), (62, 47610), (63, 47655), (65, 47691), (68, 47712), (73, 47745), (74, 47760), (77, 47790),

Gene: Findley_74 Start: 49869, Stop: 50504, Start Num: 30

Candidate Starts for Findley_74:

(Start: 29 @49863 has 3 MA's), (Start: 30 @49869 has 5 MA's), (32, 49887), (37, 49923), (38, 49932), (43, 49983), (44, 50013), (46, 50025), (50, 50136), (54, 50163), (56, 50181), (60, 50214), (62, 50226), (63, 50271), (69, 50331), (74, 50376), (84, 50493), (85, 50496),

Gene: Ganymede_70 Start: 47744, Stop: 48442, Start Num: 18

Candidate Starts for Ganymede_70:

(Start: 16 @47732 has 3 MA's), (Start: 18 @47744 has 123 MA's), (28, 47786), (37, 47849), (38, 47858), (43, 47909), (44, 47939), (46, 47951), (53, 48104), (55, 48119), (56, 48125), (62, 48170), (63, 48215), (65, 48251), (66, 48254), (73, 48305), (74, 48320), (77, 48350), (81, 48404), (83, 48428),

Gene: Geraldini_74 Start: 48415, Stop: 49113, Start Num: 18

Candidate Starts for Geraldini_74:

(Start: 16 @48403 has 3 MA's), (Start: 18 @48415 has 123 MA's), (28, 48457), (37, 48520), (38, 48529), (43, 48580), (44, 48610), (46, 48622), (53, 48775), (56, 48796), (62, 48841), (63, 48886), (65, 48922), (73, 48976), (74, 48991), (77, 49021), (81, 49075),

Gene: Guanica15_75 Start: 47621, Stop: 48316, Start Num: 18

Candidate Starts for Guanica15_75:

(Start: 16 @47609 has 3 MA's), (Start: 18 @47621 has 123 MA's), (28, 47663), (37, 47726), (38, 47735), (43, 47786), (44, 47816), (46, 47828), (53, 47981), (56, 48002), (62, 48047), (63, 48092), (65, 48128), (73, 48182),

Gene: Hammy_69 Start: 47610, Stop: 48287, Start Num: 18

Candidate Starts for Hammy_69:

(12, 47550), (Start: 18 @47610 has 123 MA's), (38, 47724), (39, 47727), (41, 47748), (43, 47775), (46, 47817), (53, 47970), (54, 47973), (56, 47991), (60, 48024), (62, 48036), (64, 48105), (71, 48162), (74, 48186), (76, 48198), (77, 48216), (79, 48228),

Gene: HedwigODU_70 Start: 47382, Stop: 48080, Start Num: 18

Candidate Starts for HedwigODU_70:

(Start: 16 @47370 has 3 MA's), (Start: 18 @47382 has 123 MA's), (28, 47424), (37, 47487), (38, 47496), (43, 47547), (44, 47577), (46, 47589), (53, 47742), (56, 47763), (62, 47808), (63, 47853), (65, 47889), (73, 47943), (74, 47958), (77, 47988), (81, 48042),

Gene: Homura_70 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Homura_70:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: Hurricane_71 Start: 47719, Stop: 48405, Start Num: 18

Candidate Starts for Hurricane_71:

(9, 47590), (12, 47665), (Start: 14 @47686 has 1 MA's), (Start: 18 @47719 has 123 MA's), (38, 47842), (39, 47845), (41, 47866), (43, 47893), (44, 47923), (45, 47929), (46, 47935), (53, 48088), (54, 48091), (56, 48109), (61, 48151), (62, 48154), (63, 48199), (65, 48235), (74, 48304), (75, 48307), (77, 48334), (79, 48346),

Gene: Hyperbowlee_70 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for Hyperbowlee_70:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: Illumine_76 Start: 49130, Stop: 49828, Start Num: 18

Candidate Starts for Illumine_76:

(Start: 16 @49118 has 3 MA's), (Start: 18 @49130 has 123 MA's), (28, 49172), (37, 49235), (38, 49244), (43, 49295), (44, 49325), (46, 49337), (53, 49490), (56, 49511), (62, 49556), (65, 49637), (73, 49691), (74, 49706), (77, 49736), (81, 49790),

Gene: Inky_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Inky_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: JAWS_70 Start: 47568, Stop: 48278, Start Num: 16

Candidate Starts for JAWS_70:

(Start: 16 @47568 has 3 MA's), (Start: 18 @47580 has 123 MA's), (28, 47622), (37, 47685), (38, 47694), (43, 47745), (44, 47775), (46, 47787), (53, 47940), (56, 47961), (62, 48006), (63, 48051), (65, 48087), (66, 48090), (73, 48141), (74, 48156), (77, 48186), (81, 48240), (83, 48264),

Gene: Jarvi_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Jarvi_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: Jayhawk_72 Start: 47880, Stop: 48578, Start Num: 18

Candidate Starts for Jayhawk_72:

(Start: 16 @47868 has 3 MA's), (Start: 18 @47880 has 123 MA's), (28, 47922), (37, 47985), (38, 47994), (43, 48045), (44, 48075), (46, 48087), (53, 48240), (56, 48261), (62, 48306), (63, 48351), (65, 48387), (66, 48390), (73, 48441), (74, 48456), (77, 48486), (81, 48540), (83, 48564),

Gene: Jeckyll_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Jeckyll_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: Joy99_71 Start: 47466, Stop: 48164, Start Num: 18

Candidate Starts for Joy99_71:

(Start: 16 @47454 has 3 MA's), (Start: 18 @47466 has 123 MA's), (28, 47508), (37, 47571), (38, 47580), (43, 47631), (44, 47661), (46, 47673), (53, 47826), (56, 47847), (62, 47892), (63, 47937), (65, 47973), (66, 47976), (73, 48027), (74, 48042), (77, 48072), (81, 48126),

Gene: Keshu_73 Start: 47865, Stop: 48551, Start Num: 18

Candidate Starts for Keshu_73:

(12, 47811), (Start: 14 @47832 has 1 MA's), (Start: 18 @47865 has 123 MA's), (38, 47988), (39, 47991), (41, 48012), (43, 48039), (44, 48069), (45, 48075), (46, 48081), (53, 48234), (54, 48237), (56, 48255), (62, 48300), (74, 48450), (77, 48480), (79, 48492),

Gene: KiSi_74 Start: 48283, Stop: 49002, Start Num: 18

Candidate Starts for KiSi_74:

(17, 48271), (Start: 18 @48283 has 123 MA's), (22, 48310), (38, 48400), (39, 48403), (43, 48451), (44, 48481), (45, 48487), (46, 48493), (48, 48583), (53, 48646), (54, 48649), (56, 48667), (61, 48733), (62, 48736), (73, 48871), (74, 48886), (76, 48898), (77, 48916),

Gene: Krueger_75 Start: 47413, Stop: 48126, Start Num: 18

Candidate Starts for Krueger_75:

(Start: 18 @47413 has 123 MA's), (38, 47539), (39, 47542), (41, 47563), (43, 47590), (44, 47620), (45, 47626), (46, 47632), (47, 47671), (49, 47749), (53, 47794), (56, 47815), (58, 47836), (62, 47860), (65, 47941), (69, 47965), (74, 48010), (78, 48046),

Gene: LastHope_75 Start: 46731, Stop: 47426, Start Num: 18

Candidate Starts for LastHope_75:

(Start: 16 @46719 has 3 MA's), (Start: 18 @46731 has 123 MA's), (28, 46773), (37, 46836), (38, 46845), (43, 46896), (44, 46926), (46, 46938), (53, 47091), (55, 47106), (56, 47112), (62, 47157), (63, 47202), (68, 47259), (73, 47292), (74, 47307), (81, 47391),

Gene: LaterM_70 Start: 47995, Stop: 48693, Start Num: 18

Candidate Starts for LaterM_70:

(Start: 16 @47983 has 3 MA's), (Start: 18 @47995 has 123 MA's), (27, 48034), (28, 48037), (37, 48100), (38, 48109), (43, 48160), (44, 48190), (46, 48202), (53, 48355), (55, 48370), (56, 48376), (62, 48421), (63, 48466), (65, 48502), (73, 48556), (74, 48571), (77, 48601), (81, 48655),

Gene: LeMond_73 Start: 47887, Stop: 48606, Start Num: 18

Candidate Starts for LeMond_73:

(17, 47875), (Start: 18 @47887 has 123 MA's), (38, 48004), (39, 48007), (43, 48055), (44, 48085), (45, 48091), (46, 48097), (48, 48187), (53, 48250), (54, 48253), (56, 48271), (61, 48337), (62, 48340), (73, 48475), (74, 48490), (76, 48502), (77, 48520),

Gene: LilPharaoh_59 Start: 44353, Stop: 45063, Start Num: 18

Candidate Starts for LilPharaoh_59:

(Start: 13 @44293 has 2 MA's), (Start: 14 @44314 has 1 MA's), (Start: 18 @44353 has 123 MA's), (37, 44470), (38, 44479), (40, 44488), (43, 44530), (44, 44560), (46, 44572), (48, 44662), (51, 44707), (53, 44725), (56, 44746), (57, 44749), (60, 44779), (61, 44788), (62, 44791), (63, 44836), (64, 44860), (65, 44872), (67, 44884), (68, 44893), (73, 44926), (74, 44941), (75, 44944), (77, 44971), (79, 44983), (82, 45046),

Gene: LindNT_69 Start: 47792, Stop: 48487, Start Num: 18

Candidate Starts for LindNT_69:

(Start: 16 @47780 has 3 MA's), (Start: 18 @47792 has 123 MA's), (28, 47834), (37, 47897), (38, 47906), (43, 47957), (44, 47987), (46, 47999), (53, 48152), (56, 48173), (62, 48218), (65, 48299), (66, 48302), (67, 48311), (73, 48353), (74, 48368), (79, 48410), (81, 48452),

Gene: Llorens_70 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Llorens_70:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (81, 48197),

Gene: Lunahalos_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Lunahalos_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (80, 48158), (81, 48197),

Gene: MacnCheese_73 Start: 48347, Stop: 49009, Start Num: 18

Candidate Starts for MacnCheese_73:

(1, 48092), (2, 48122), (3, 48164), (7, 48194), (Start: 13 @48293 has 2 MA's), (Start: 14 @48314 has 1 MA's), (Start: 18 @48347 has 123 MA's), (36, 48434), (38, 48446), (39, 48449), (41, 48470), (43, 48497), (44, 48527), (45, 48533), (46, 48539), (53, 48692), (55, 48707), (56, 48713), (62, 48758), (74, 48908), (75, 48911), (76, 48920), (77, 48938), (79, 48950),

Gene: Marcoliusprime_73 Start: 49845, Stop: 50486, Start Num: 29

Candidate Starts for Marcoliusprime_73:

(Start: 29 @49845 has 3 MA's), (Start: 30 @49851 has 5 MA's), (32, 49869), (37, 49905), (38, 49914), (43, 49965), (44, 49995), (46, 50007), (50, 50118), (54, 50145), (56, 50163), (60, 50196), (62, 50208), (63, 50253), (69, 50313), (74, 50358), (84, 50475), (85, 50478),

Gene: MarkPhew_72 Start: 47392, Stop: 48111, Start Num: 18

Candidate Starts for MarkPhew_72:

(11, 47305), (Start: 18 @47392 has 123 MA's), (22, 47419), (24, 47422), (38, 47509), (39, 47512), (43, 47560), (44, 47590), (45, 47596), (46, 47602), (53, 47755), (54, 47758), (56, 47776), (61, 47842), (62, 47845), (73, 47980), (74, 47995), (76, 48007), (77, 48025),

Gene: Marshawn_69 Start: 47761, Stop: 48495, Start Num: 18

Candidate Starts for Marshawn_69:

(Start: 18 @47761 has 123 MA's), (38, 47884), (39, 47887), (41, 47908), (43, 47935), (44, 47965), (46, 47977), (47, 48016), (49, 48085), (53, 48130), (56, 48151), (59, 48199), (62, 48220), (68, 48322), (73, 48355), (74, 48370), (76, 48382), (79, 48412),

Gene: Mdavu_59 Start: 44614, Stop: 45324, Start Num: 18

Candidate Starts for Mdavu_59:

(Start: 13 @44554 has 2 MA's), (Start: 14 @44575 has 1 MA's), (Start: 18 @44614 has 123 MA's), (37, 44731), (38, 44740), (40, 44749), (43, 44791), (44, 44821), (46, 44833), (48, 44923), (51, 44968), (53, 44986), (56, 45007), (57, 45010), (60, 45040), (61, 45049), (62, 45052), (63, 45097), (64, 45121), (65, 45133), (67, 45145), (68, 45154), (73, 45187), (74, 45202), (75, 45205), (77, 45232), (79, 45244), (82, 45307),

Gene: MeaningOfLife_72 Start: 48289, Stop: 48987, Start Num: 18

Candidate Starts for MeaningOfLife_72:

(Start: 16 @48277 has 3 MA's), (Start: 18 @48289 has 123 MA's), (28, 48331), (37, 48394), (38, 48403), (43, 48454), (44, 48484), (46, 48496), (53, 48649), (56, 48670), (62, 48715), (63, 48760), (65, 48796), (73, 48850), (74, 48865), (77, 48895), (81, 48949), (83, 48973),

Gene: Megsy_73 Start: 47714, Stop: 48412, Start Num: 18

Candidate Starts for Megsy_73:

(Start: 16 @47702 has 3 MA's), (Start: 18 @47714 has 123 MA's), (27, 47753), (28, 47756), (37, 47819), (38, 47828), (43, 47879), (44, 47909), (46, 47921), (53, 48074), (55, 48089), (56, 48095), (57,

48098), (62, 48140), (65, 48221), (66, 48224), (73, 48275), (74, 48290), (77, 48320), (81, 48374),

Gene: Milly_74 Start: 49842, Stop: 50477, Start Num: 30

Candidate Starts for Milly_74:

(Start: 29 @49836 has 3 MA's), (Start: 30 @49842 has 5 MA's), (32, 49860), (37, 49896), (38, 49905), (43, 49956), (44, 49986), (46, 49998), (50, 50109), (54, 50136), (56, 50154), (60, 50187), (62, 50199), (63, 50244), (69, 50304), (74, 50349), (84, 50466), (85, 50469),

Gene: Mufasa_73 Start: 49168, Stop: 49944, Start Num: 10

Candidate Starts for Mufasa_73:

(Start: 10 @49168 has 2 MA's), (15, 49237), (Start: 29 @49303 has 3 MA's), (Start: 30 @49309 has 5 MA's), (32, 49327), (37, 49363), (38, 49372), (43, 49423), (44, 49453), (46, 49465), (54, 49603), (56, 49621), (60, 49654), (62, 49666), (63, 49711), (69, 49771), (73, 49801), (74, 49816), (84, 49933), (85, 49936),

Gene: Murucutumbu_71 Start: 48570, Stop: 49268, Start Num: 18

Candidate Starts for Murucutumbu_71:

(Start: 16 @48558 has 3 MA's), (Start: 18 @48570 has 123 MA's), (28, 48612), (37, 48675), (38, 48684), (43, 48735), (44, 48765), (46, 48777), (53, 48930), (55, 48945), (56, 48951), (62, 48996), (65, 49077), (67, 49089), (73, 49131), (74, 49146), (77, 49176), (81, 49230),

Gene: Mynx_72 Start: 48149, Stop: 48847, Start Num: 18

Candidate Starts for Mynx_72:

(Start: 16 @48137 has 3 MA's), (Start: 18 @48149 has 123 MA's), (28, 48191), (37, 48254), (38, 48263), (43, 48314), (44, 48344), (46, 48356), (53, 48509), (56, 48530), (62, 48575), (63, 48620), (65, 48656), (66, 48659), (73, 48710), (74, 48725), (77, 48755), (81, 48809), (83, 48833),

Gene: Nergal_62 Start: 43829, Stop: 44509, Start Num: 20

Candidate Starts for Nergal_62:

(19, 43826), (Start: 20 @43829 has 1 MA's), (21, 43835), (25, 43856), (33, 43907), (35, 43913), (37, 43928), (38, 43937), (43, 43988), (44, 44018), (46, 44030), (49, 44120), (51, 44147), (52, 44156), (53, 44165), (56, 44186), (61, 44228), (62, 44231), (63, 44276), (69, 44336), (74, 44381), (77, 44411), (84, 44498),

Gene: Nibb_73 Start: 47588, Stop: 48307, Start Num: 18

Candidate Starts for Nibb_73:

(Start: 18 @47588 has 123 MA's), (22, 47615), (38, 47705), (39, 47708), (43, 47756), (44, 47786), (45, 47792), (46, 47798), (53, 47951), (54, 47954), (56, 47972), (61, 48038), (62, 48041), (73, 48176), (74, 48191), (76, 48203), (77, 48221),

Gene: Nikao_61 Start: 47238, Stop: 47948, Start Num: 18

Candidate Starts for Nikao_61:

(Start: 13 @47178 has 2 MA's), (Start: 14 @47199 has 1 MA's), (Start: 18 @47238 has 123 MA's), (37, 47355), (38, 47364), (40, 47373), (43, 47415), (44, 47445), (46, 47457), (48, 47547), (51, 47592), (53, 47610), (56, 47631), (57, 47634), (60, 47664), (61, 47673), (62, 47676), (63, 47721), (64, 47745), (65, 47757), (67, 47769), (68, 47778), (73, 47811), (74, 47826), (75, 47829), (77, 47856), (79, 47868), (82, 47931),

Gene: Niklas_73 Start: 47847, Stop: 48551, Start Num: 18

Candidate Starts for Niklas_73:

(Start: 18 @47847 has 123 MA's), (37, 47958), (38, 47967), (42, 47994), (43, 48018), (44, 48048), (45, 48054), (46, 48060), (49, 48168), (53, 48213), (56, 48234), (61, 48276), (62, 48279), (63, 48324), (65, 48360), (68, 48381), (73, 48414), (74, 48429),

Gene: Nutello_58 Start: 44625, Stop: 45335, Start Num: 18

Candidate Starts for Nutello_58:

(Start: 13 @44565 has 2 MA's), (Start: 14 @44586 has 1 MA's), (Start: 18 @44625 has 123 MA's), (37, 44742), (38, 44751), (40, 44760), (43, 44802), (44, 44832), (46, 44844), (48, 44934), (51, 44979), (53, 44997), (56, 45018), (57, 45021), (60, 45051), (61, 45060), (62, 45063), (63, 45108), (64, 45132), (65, 45144), (67, 45156), (68, 45165), (73, 45198), (74, 45213), (75, 45216), (77, 45243), (79, 45255), (82, 45318),

Gene: Oscar_73 Start: 47807, Stop: 48526, Start Num: 18

Candidate Starts for Oscar_73:

(17, 47795), (Start: 18 @47807 has 123 MA's), (38, 47924), (39, 47927), (43, 47975), (44, 48005), (45, 48011), (46, 48017), (48, 48107), (53, 48170), (54, 48173), (56, 48191), (61, 48257), (62, 48260), (73, 48395), (74, 48410), (76, 48422), (77, 48440),

Gene: Padfoot_71 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for Padfoot_71:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: Padpat_74 Start: 47854, Stop: 48552, Start Num: 18

Candidate Starts for Padpat_74:

(Start: 16 @47842 has 3 MA's), (Start: 18 @47854 has 123 MA's), (28, 47896), (37, 47959), (38, 47968), (43, 48019), (44, 48049), (46, 48061), (53, 48214), (56, 48235), (62, 48280), (63, 48325), (65, 48361), (66, 48364), (73, 48415), (74, 48430), (77, 48460), (81, 48514),

Gene: Peanam_73 Start: 47805, Stop: 48509, Start Num: 18

Candidate Starts for Peanam_73:

(Start: 18 @47805 has 123 MA's), (37, 47916), (38, 47925), (42, 47952), (43, 47976), (44, 48006), (45, 48012), (46, 48018), (49, 48126), (53, 48171), (56, 48192), (61, 48234), (62, 48237), (63, 48282), (65, 48318), (68, 48339), (73, 48372), (74, 48387),

Gene: Peel_71 Start: 47539, Stop: 48237, Start Num: 18

Candidate Starts for Peel_71:

(Start: 16 @47527 has 3 MA's), (Start: 18 @47539 has 123 MA's), (28, 47581), (37, 47644), (38, 47653), (43, 47704), (44, 47734), (46, 47746), (53, 47899), (56, 47920), (62, 47965), (63, 48010), (65, 48046), (66, 48049), (73, 48100), (74, 48115), (77, 48145), (81, 48199),

Gene: Pharb_70 Start: 47078, Stop: 47764, Start Num: 18

Candidate Starts for Pharb_70:

(Start: 13 @47024 has 2 MA's), (Start: 14 @47045 has 1 MA's), (Start: 18 @47078 has 123 MA's), (23, 47111), (31, 47144), (38, 47201), (39, 47204), (41, 47225), (43, 47252), (44, 47282), (45, 47288), (46, 47294), (53, 47447), (55, 47462), (56, 47468), (61, 47510), (62, 47513), (63, 47558), (64, 47582), (65, 47594), (68, 47615), (71, 47639), (72, 47642), (74, 47663), (75, 47666), (77, 47693), (79, 47705),

Gene: PhelpsODU_73 Start: 47199, Stop: 47912, Start Num: 18

Candidate Starts for PhelpsODU_73:

(Start: 13 @47139 has 2 MA's), (Start: 18 @47199 has 123 MA's), (38, 47325), (39, 47328), (41, 47349), (43, 47376), (44, 47406), (45, 47412), (46, 47418), (47, 47457), (53, 47580), (56, 47601), (58, 47622), (62, 47646), (65, 47727), (74, 47796), (78, 47832),

Gene: Phrank_75 Start: 47262, Stop: 47975, Start Num: 18

Candidate Starts for Phrank_75:

(Start: 13 @47202 has 2 MA's), (Start: 18 @47262 has 123 MA's), (38, 47388), (39, 47391), (41, 47412), (43, 47439), (44, 47469), (45, 47475), (46, 47481), (47, 47520), (53, 47643), (56, 47664), (58, 47685), (62, 47709), (65, 47790), (69, 47814), (74, 47859), (78, 47895),

Gene: Piatt_70 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for Piatt_70:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: Pixie_70 Start: 47286, Stop: 47972, Start Num: 18

Candidate Starts for Pixie_70:

(12, 47232), (Start: 14 @47253 has 1 MA's), (Start: 18 @47286 has 123 MA's), (38, 47409), (39, 47412), (41, 47433), (43, 47460), (44, 47490), (45, 47496), (46, 47502), (53, 47655), (54, 47658), (56, 47676), (62, 47721), (63, 47766), (74, 47871), (75, 47874), (77, 47901), (79, 47913),

Gene: Pokerus_71 Start: 47851, Stop: 48561, Start Num: 16

Candidate Starts for Pokerus_71:

(Start: 16 @47851 has 3 MA's), (Start: 18 @47863 has 123 MA's), (28, 47905), (37, 47968), (38, 47977), (43, 48028), (44, 48058), (46, 48070), (53, 48223), (55, 48238), (56, 48244), (62, 48289), (63, 48334), (65, 48370), (73, 48424), (74, 48439), (77, 48469), (81, 48523), (83, 48547),

Gene: Prithvi_73 Start: 47792, Stop: 48487, Start Num: 18

Candidate Starts for Prithvi_73:

(Start: 16 @47780 has 3 MA's), (Start: 18 @47792 has 123 MA's), (28, 47834), (37, 47897), (38, 47906), (43, 47957), (44, 47987), (46, 47999), (53, 48152), (56, 48173), (62, 48218), (65, 48299), (66, 48302), (67, 48311), (73, 48353), (74, 48368), (79, 48410), (81, 48452),

Gene: QuincyRose_68 Start: 47744, Stop: 48442, Start Num: 18

Candidate Starts for QuincyRose_68:

(Start: 16 @47732 has 3 MA's), (Start: 18 @47744 has 123 MA's), (28, 47786), (37, 47849), (38, 47858), (43, 47909), (44, 47939), (46, 47951), (53, 48104), (55, 48119), (56, 48125), (62, 48170), (63, 48215), (65, 48251), (66, 48254), (73, 48305), (74, 48320), (77, 48350), (81, 48404), (83, 48428),

Gene: Ramen_72 Start: 47384, Stop: 48082, Start Num: 18

Candidate Starts for Ramen_72:

(Start: 16 @47372 has 3 MA's), (Start: 18 @47384 has 123 MA's), (28, 47426), (37, 47489), (38, 47498), (43, 47549), (44, 47579), (46, 47591), (53, 47744), (56, 47765), (62, 47810), (63, 47855), (65, 47891), (66, 47894), (73, 47945), (74, 47960), (77, 47990), (81, 48044), (83, 48068),

Gene: Rapunzel97_73 Start: 47835, Stop: 48533, Start Num: 18

Candidate Starts for Rapunzel97_73:

(Start: 16 @47823 has 3 MA's), (Start: 18 @47835 has 123 MA's), (28, 47877), (37, 47940), (38, 47949), (43, 48000), (44, 48030), (46, 48042), (53, 48195), (56, 48216), (62, 48261), (63, 48306), (65, 48342), (66, 48345), (73, 48396), (74, 48411), (77, 48441), (81, 48495), (83, 48519),

Gene: Rosmarinus_71 Start: 47525, Stop: 48223, Start Num: 18

Candidate Starts for Rosmarinus_71:

(Start: 16 @47513 has 3 MA's), (Start: 18 @47525 has 123 MA's), (28, 47567), (37, 47630), (38, 47639), (43, 47690), (44, 47720), (46, 47732), (53, 47885), (56, 47906), (62, 47951), (63, 47996), (65, 48032), (66, 48035), (73, 48086), (74, 48101), (77, 48131), (81, 48185),

Gene: SamuelLPlaqson_71 Start: 48032, Stop: 48730, Start Num: 18

Candidate Starts for SamuelLPlaqson_71:

(Start: 16 @48020 has 3 MA's), (Start: 18 @48032 has 123 MA's), (28, 48074), (37, 48137), (38, 48146), (43, 48197), (44, 48227), (46, 48239), (53, 48392), (55, 48407), (56, 48413), (60, 48446), (62, 48458), (65, 48539), (68, 48560), (73, 48593), (74, 48608), (77, 48638), (81, 48692),

Gene: Scarlett_74 Start: 48143, Stop: 48862, Start Num: 18

Candidate Starts for Scarlett_74:

(17, 48131), (Start: 18 @48143 has 123 MA's), (22, 48170), (38, 48260), (39, 48263), (43, 48311), (44, 48341), (45, 48347), (46, 48353), (48, 48443), (53, 48506), (54, 48509), (56, 48527), (61, 48593), (62, 48596), (73, 48731), (74, 48746), (76, 48758), (77, 48776),

Gene: SgtBeansprout_59 Start: 44625, Stop: 45335, Start Num: 18

Candidate Starts for SgtBeansprout_59:

(Start: 13 @44565 has 2 MA's), (Start: 14 @44586 has 1 MA's), (Start: 18 @44625 has 123 MA's), (37, 44742), (38, 44751), (40, 44760), (43, 44802), (44, 44832), (46, 44844), (48, 44934), (51, 44979), (53, 44997), (56, 45018), (57, 45021), (60, 45051), (61, 45060), (62, 45063), (63, 45108), (64, 45132), (65, 45144), (67, 45156), (68, 45165), (73, 45198), (74, 45213), (75, 45216), (77, 45243), (79, 45255), (82, 45318),

Gene: Shadow1_75 Start: 47559, Stop: 48272, Start Num: 18

Candidate Starts for Shadow1_75:

(Start: 13 @47499 has 2 MA's), (Start: 18 @47559 has 123 MA's), (38, 47685), (39, 47688), (41, 47709), (43, 47736), (44, 47766), (45, 47772), (46, 47778), (47, 47817), (53, 47940), (56, 47961), (58, 47982), (62, 48006), (65, 48087), (69, 48111), (74, 48156), (78, 48192),

Gene: Shaobing_72 Start: 47822, Stop: 48526, Start Num: 18

Candidate Starts for Shaobing_72:

(Start: 18 @47822 has 123 MA's), (37, 47933), (38, 47942), (42, 47969), (43, 47993), (44, 48023), (45, 48029), (46, 48035), (49, 48143), (53, 48188), (56, 48209), (61, 48251), (62, 48254), (63, 48299), (65, 48335), (68, 48356), (73, 48389), (74, 48404),

Gene: ShedlockHolmes_73 Start: 47799, Stop: 48485, Start Num: 18

Candidate Starts for ShedlockHolmes_73:

(12, 47745), (Start: 14 @47766 has 1 MA's), (Start: 18 @47799 has 123 MA's), (38, 47922), (39, 47925), (41, 47946), (43, 47973), (44, 48003), (45, 48009), (46, 48015), (53, 48168), (54, 48171), (56, 48189), (62, 48234), (63, 48279), (70, 48345), (74, 48384), (75, 48387), (77, 48414), (79, 48426),

Gene: ShiaSurprise_72 Start: 47734, Stop: 48432, Start Num: 18

Candidate Starts for ShiaSurprise_72:

(Start: 16 @47722 has 3 MA's), (Start: 18 @47734 has 123 MA's), (28, 47776), (37, 47839), (38, 47848), (43, 47899), (44, 47929), (46, 47941), (53, 48094), (56, 48115), (62, 48160), (63, 48205), (65, 48241), (66, 48244), (73, 48295), (74, 48310), (77, 48340), (81, 48394),

Gene: SirPhilip_70 Start: 47940, Stop: 48668, Start Num: 18

Candidate Starts for SirPhilip_70:

(17, 47928), (Start: 18 @47940 has 123 MA's), (38, 48066), (39, 48069), (43, 48117), (45, 48153), (46, 48159), (53, 48312), (56, 48333), (61, 48399), (62, 48402), (63, 48447), (65, 48483), (67, 48495), (73, 48537), (74, 48552), (75, 48555), (76, 48564),

Gene: Slimphazie_72 Start: 47835, Stop: 48533, Start Num: 18

Candidate Starts for Slimphazie_72:

(Start: 16 @47823 has 3 MA's), (Start: 18 @47835 has 123 MA's), (28, 47877), (37, 47940), (38, 47949), (43, 48000), (44, 48030), (46, 48042), (53, 48195), (56, 48216), (62, 48261), (63, 48306), (65, 48342), (66, 48345), (73, 48396), (74, 48411), (77, 48441), (81, 48495), (83, 48519),

Gene: Spock_71 Start: 47538, Stop: 48236, Start Num: 18

Candidate Starts for Spock_71:

(Start: 16 @47526 has 3 MA's), (Start: 18 @47538 has 123 MA's), (28, 47580), (37, 47643), (38, 47652), (43, 47703), (44, 47733), (46, 47745), (53, 47898), (56, 47919), (62, 47964), (63, 48009), (65, 48045), (66, 48048), (73, 48099), (74, 48114), (77, 48144), (81, 48198),

Gene: Stinson_71 Start: 47930, Stop: 48628, Start Num: 18

Candidate Starts for Stinson_71:

(Start: 16 @47918 has 3 MA's), (Start: 18 @47930 has 123 MA's), (27, 47969), (28, 47972), (37, 48035), (38, 48044), (43, 48095), (44, 48125), (46, 48137), (53, 48290), (55, 48305), (56, 48311), (62, 48356), (63, 48401), (65, 48437), (73, 48491), (75, 48509), (77, 48536), (81, 48590),

Gene: Strobilo_75 Start: 49842, Stop: 50483, Start Num: 29

Candidate Starts for Strobilo_75:

(Start: 29 @49842 has 3 MA's), (Start: 30 @49848 has 5 MA's), (32, 49866), (37, 49902), (38, 49911), (43, 49962), (44, 49992), (46, 50004), (50, 50115), (54, 50142), (56, 50160), (60, 50193), (62, 50205), (63, 50250), (69, 50310), (74, 50355), (84, 50472), (85, 50475),

Gene: Sulley_69 Start: 47365, Stop: 48063, Start Num: 18

Candidate Starts for Sulley_69:

(Start: 16 @47353 has 3 MA's), (Start: 18 @47365 has 123 MA's), (28, 47407), (37, 47470), (38, 47479), (43, 47530), (44, 47560), (46, 47572), (53, 47725), (55, 47740), (56, 47746), (62, 47791), (63, 47836), (65, 47872), (73, 47926), (74, 47941), (75, 47944), (77, 47971), (81, 48025),

Gene: Sunflower1121_76 Start: 47645, Stop: 48418, Start Num: 13

Candidate Starts for Sunflower1121_76:

(Start: 13 @47645 has 2 MA's), (Start: 18 @47705 has 123 MA's), (38, 47831), (39, 47834), (41, 47855), (43, 47882), (44, 47912), (45, 47918), (46, 47924), (47, 47963), (53, 48086), (56, 48107), (58, 48128), (62, 48152), (65, 48233), (69, 48257), (74, 48302), (78, 48338),

Gene: Syra333_74 Start: 47424, Stop: 48137, Start Num: 18

Candidate Starts for Syra333_74:

(4, 47247), (5, 47256), (6, 47259), (8, 47277), (Start: 13 @47364 has 2 MA's), (Start: 18 @47424 has 123 MA's), (38, 47550), (39, 47553), (41, 47574), (43, 47601), (44, 47631), (45, 47637), (46, 47643), (47, 47682), (53, 47805), (56, 47826), (58, 47847), (62, 47871), (65, 47952), (69, 47976), (74, 48021), (78, 48057),

Gene: TBond007_67 Start: 47285, Stop: 47971, Start Num: 18

Candidate Starts for TBond007_67:

(12, 47231), (Start: 14 @47252 has 1 MA's), (Start: 18 @47285 has 123 MA's), (38, 47408), (39, 47411), (41, 47432), (43, 47459), (44, 47489), (45, 47495), (46, 47501), (53, 47654), (54, 47657), (56, 47675), (62, 47720), (63, 47765), (74, 47870), (75, 47873), (77, 47900), (79, 47912),

Gene: TClif_72 Start: 47378, Stop: 48085, Start Num: 18

Candidate Starts for TClif_72:

(Start: 18 @47378 has 123 MA's), (38, 47498), (39, 47501), (43, 47549), (44, 47579), (46, 47591), (49, 47699), (51, 47726), (53, 47744), (56, 47765), (58, 47810), (62, 47834), (65, 47915), (73, 47969), (74, 47984), (77, 48014), (81, 48068),

Gene: TM4_72 Start: 44414, Stop: 45055, Start Num: 30

Candidate Starts for TM4_72:

(Start: 29 @44408 has 3 MA's), (Start: 30 @44414 has 5 MA's), (32, 44432), (37, 44468), (38, 44477), (43, 44528), (44, 44558), (46, 44570), (50, 44681), (56, 44726), (60, 44759), (62, 44771), (63, 44816), (69, 44876), (73, 44906), (74, 44921), (85, 45047),

Gene: Tachez_71 Start: 47382, Stop: 48080, Start Num: 18

Candidate Starts for Tachez_71:

(Start: 16 @47370 has 3 MA's), (Start: 18 @47382 has 123 MA's), (28, 47424), (37, 47487), (38, 47496), (43, 47547), (44, 47577), (46, 47589), (53, 47742), (56, 47763), (62, 47808), (63, 47853), (65, 47889), (66, 47892), (73, 47943), (74, 47958), (77, 47988), (81, 48042),

Gene: TaiwanKao_72 Start: 47837, Stop: 48532, Start Num: 18

Candidate Starts for TaiwanKao_72:

(Start: 16 @47825 has 3 MA's), (Start: 18 @47837 has 123 MA's), (27, 47876), (28, 47879), (37, 47942), (38, 47951), (43, 48002), (44, 48032), (46, 48044), (53, 48197), (55, 48212), (56, 48218), (57, 48221), (62, 48263), (63, 48308), (65, 48344), (73, 48398), (74, 48413), (77, 48443), (81, 48497),

Gene: Tierra_75 Start: 48073, Stop: 48786, Start Num: 18

Candidate Starts for Tierra_75:

(Start: 13 @48013 has 2 MA's), (Start: 18 @48073 has 123 MA's), (38, 48199), (39, 48202), (41, 48223), (43, 48250), (44, 48280), (45, 48286), (46, 48292), (47, 48331), (53, 48454), (56, 48475), (58, 48496), (62, 48520), (65, 48601), (69, 48625), (74, 48670), (78, 48706),

Gene: TiniBug_71 Start: 48032, Stop: 48730, Start Num: 18

Candidate Starts for TiniBug_71:

(Start: 16 @48020 has 3 MA's), (Start: 18 @48032 has 123 MA's), (28, 48074), (37, 48137), (38, 48146), (43, 48197), (44, 48227), (46, 48239), (53, 48392), (56, 48413), (62, 48458), (65, 48539), (68, 48560), (73, 48593), (74, 48608), (77, 48638), (81, 48692),

Gene: Tiri_71 Start: 47438, Stop: 48136, Start Num: 18

Candidate Starts for Tiri_71:

(Start: 16 @47426 has 3 MA's), (Start: 18 @47438 has 123 MA's), (28, 47480), (37, 47543), (38, 47552), (43, 47603), (44, 47633), (46, 47645), (53, 47798), (56, 47819), (60, 47852), (62, 47864), (63, 47909), (65, 47945), (66, 47948), (73, 47999), (74, 48014), (77, 48044), (81, 48098), (83, 48122),

Gene: Topper_71 Start: 47537, Stop: 48235, Start Num: 18

Candidate Starts for Topper_71:

(Start: 16 @47525 has 3 MA's), (Start: 18 @47537 has 123 MA's), (28, 47579), (37, 47642), (38, 47651), (43, 47702), (44, 47732), (46, 47744), (53, 47897), (56, 47918), (62, 47963), (63, 48008), (65, 48044), (66, 48047), (73, 48098), (74, 48113), (77, 48143), (80, 48158), (81, 48197),

Gene: TreyKay_73 Start: 47792, Stop: 48487, Start Num: 18

Candidate Starts for TreyKay_73:

(Start: 16 @47780 has 3 MA's), (Start: 18 @47792 has 123 MA's), (28, 47834), (37, 47897), (38, 47906), (43, 47957), (44, 47987), (46, 47999), (53, 48152), (56, 48173), (62, 48218), (65, 48299), (66, 48302), (67, 48311), (73, 48353), (74, 48368), (79, 48410), (81, 48452),

Gene: TribbleTrouble_72 Start: 48259, Stop: 48948, Start Num: 18

Candidate Starts for TribbleTrouble_72:

(Start: 13 @48205 has 2 MA's), (Start: 14 @48226 has 1 MA's), (Start: 18 @48259 has 123 MA's), (34, 48358), (38, 48385), (39, 48388), (41, 48409), (43, 48436), (44, 48466), (45, 48472), (46, 48478), (53, 48631), (56, 48652), (62, 48697), (63, 48742), (74, 48847), (75, 48850), (77, 48877), (79, 48889),

Gene: TruffulaTree_72 Start: 47831, Stop: 48529, Start Num: 18

Candidate Starts for TruffulaTree_72:

(Start: 16 @47819 has 3 MA's), (Start: 18 @47831 has 123 MA's), (28, 47873), (37, 47936), (38, 47945), (43, 47996), (44, 48026), (46, 48038), (53, 48191), (56, 48212), (62, 48257), (63, 48302), (65, 48338), (66, 48341), (73, 48392), (74, 48407), (77, 48437), (81, 48491), (83, 48515),

Gene: Twitch_71 Start: 47539, Stop: 48237, Start Num: 18

Candidate Starts for Twitch_71:

(Start: 16 @47527 has 3 MA's), (Start: 18 @47539 has 123 MA's), (28, 47581), (37, 47644), (38, 47653), (43, 47704), (44, 47734), (46, 47746), (53, 47899), (56, 47920), (62, 47965), (63, 48010), (65, 48046), (66, 48049), (73, 48100), (74, 48115), (77, 48145), (81, 48199),

Gene: Unicorn_73 Start: 47199, Stop: 47912, Start Num: 18

Candidate Starts for Unicorn_73:

(Start: 13 @47139 has 2 MA's), (Start: 18 @47199 has 123 MA's), (38, 47325), (39, 47328), (41, 47349), (43, 47376), (44, 47406), (45, 47412), (46, 47418), (47, 47457), (53, 47580), (56, 47601), (58, 47622), (62, 47646), (65, 47727), (74, 47796), (78, 47832),

Gene: Urkel_71 Start: 48032, Stop: 48730, Start Num: 18

Candidate Starts for Urkel_71:

(Start: 16 @48020 has 3 MA's), (Start: 18 @48032 has 123 MA's), (28, 48074), (37, 48137), (38, 48146), (43, 48197), (44, 48227), (46, 48239), (53, 48392), (55, 48407), (56, 48413), (60, 48446), (62, 48458), (65, 48539), (68, 48560), (73, 48593), (74, 48608), (77, 48638), (81, 48692),

Gene: Validus_76 Start: 48363, Stop: 49091, Start Num: 18

Candidate Starts for Validus_76:

(Start: 18 @48363 has 123 MA's), (37, 48474), (38, 48483), (43, 48534), (44, 48564), (45, 48570), (46, 48576), (47, 48615), (53, 48729), (58, 48795), (61, 48816), (62, 48819), (63, 48864), (65, 48900), (68, 48921), (74, 48969), (77, 48999),

Gene: Veliki_72 Start: 47571, Stop: 48269, Start Num: 18

Candidate Starts for Veliki_72:

(Start: 16 @47559 has 3 MA's), (Start: 18 @47571 has 123 MA's), (28, 47613), (37, 47676), (38, 47685), (43, 47736), (44, 47766), (46, 47778), (53, 47931), (56, 47952), (62, 47997), (63, 48042), (65, 48078), (66, 48081), (73, 48132), (74, 48147), (77, 48177), (81, 48231), (83, 48255),

Gene: Ximenita_76 Start: 47688, Stop: 48461, Start Num: 13

Candidate Starts for Ximenita_76:

(Start: 13 @47688 has 2 MA's), (Start: 18 @47748 has 123 MA's), (38, 47874), (39, 47877), (41, 47898), (43, 47925), (44, 47955), (45, 47961), (46, 47967), (47, 48006), (53, 48129), (56, 48150), (58, 48171), (62, 48195), (65, 48276), (69, 48300), (74, 48345), (78, 48381),

Gene: YoureAdopted_70 Start: 47701, Stop: 48399, Start Num: 18

Candidate Starts for YoureAdopted_70:

(Start: 16 @47689 has 3 MA's), (Start: 18 @47701 has 123 MA's), (28, 47743), (37, 47806), (38, 47815), (43, 47866), (44, 47896), (46, 47908), (53, 48061), (55, 48076), (56, 48082), (62, 48127), (63, 48172), (65, 48208), (66, 48211), (73, 48262), (74, 48277), (77, 48307), (81, 48361), (83, 48385),

Gene: Yuna_74 Start: 48850, Stop: 49575, Start Num: 18

Candidate Starts for Yuna_74:

(Start: 18 @48850 has 123 MA's), (38, 48976), (39, 48979), (43, 49027), (45, 49063), (46, 49069), (49, 49177), (52, 49213), (53, 49222), (56, 49243), (58, 49288), (61, 49309), (62, 49312), (65, 49393), (68,

49414), (73, 49447), (74, 49462), (79, 49504),

Gene: Yunkel11_75 Start: 47626, Stop: 48321, Start Num: 18

Candidate Starts for Yunkel11_75:

(Start: 16 @47614 has 3 MA's), (Start: 18 @47626 has 123 MA's), (28, 47668), (37, 47731), (38, 47740), (43, 47791), (44, 47821), (46, 47833), (53, 47986), (56, 48007), (62, 48052), (63, 48097), (65, 48133), (73, 48187),

Gene: Zabiza_66 Start: 43687, Stop: 44385, Start Num: 18

Candidate Starts for Zabiza_66:

(Start: 16 @43675 has 3 MA's), (Start: 18 @43687 has 123 MA's), (28, 43729), (37, 43792), (38, 43801), (43, 43852), (44, 43882), (46, 43894), (53, 44047), (56, 44068), (62, 44113), (63, 44158), (65, 44194), (73, 44248), (74, 44263), (77, 44293), (81, 44347),

Gene: Zavala_74 Start: 48109, Stop: 48807, Start Num: 18

Candidate Starts for Zavala_74:

(Start: 16 @48097 has 3 MA's), (Start: 18 @48109 has 123 MA's), (28, 48151), (37, 48214), (38, 48223), (43, 48274), (44, 48304), (46, 48316), (53, 48469), (56, 48490), (62, 48535), (63, 48580), (65, 48616), (66, 48619), (73, 48670), (74, 48685), (77, 48715), (81, 48769), (83, 48793),

Gene: ZoeJ_73 Start: 49283, Stop: 49918, Start Num: 30

Candidate Starts for ZoeJ_73:

(Start: 29 @49277 has 3 MA's), (Start: 30 @49283 has 5 MA's), (32, 49301), (37, 49337), (38, 49346), (43, 49397), (44, 49427), (46, 49439), (54, 49577), (56, 49595), (60, 49628), (62, 49640), (63, 49685), (69, 49745), (73, 49775), (74, 49790), (84, 49907), (85, 49910),