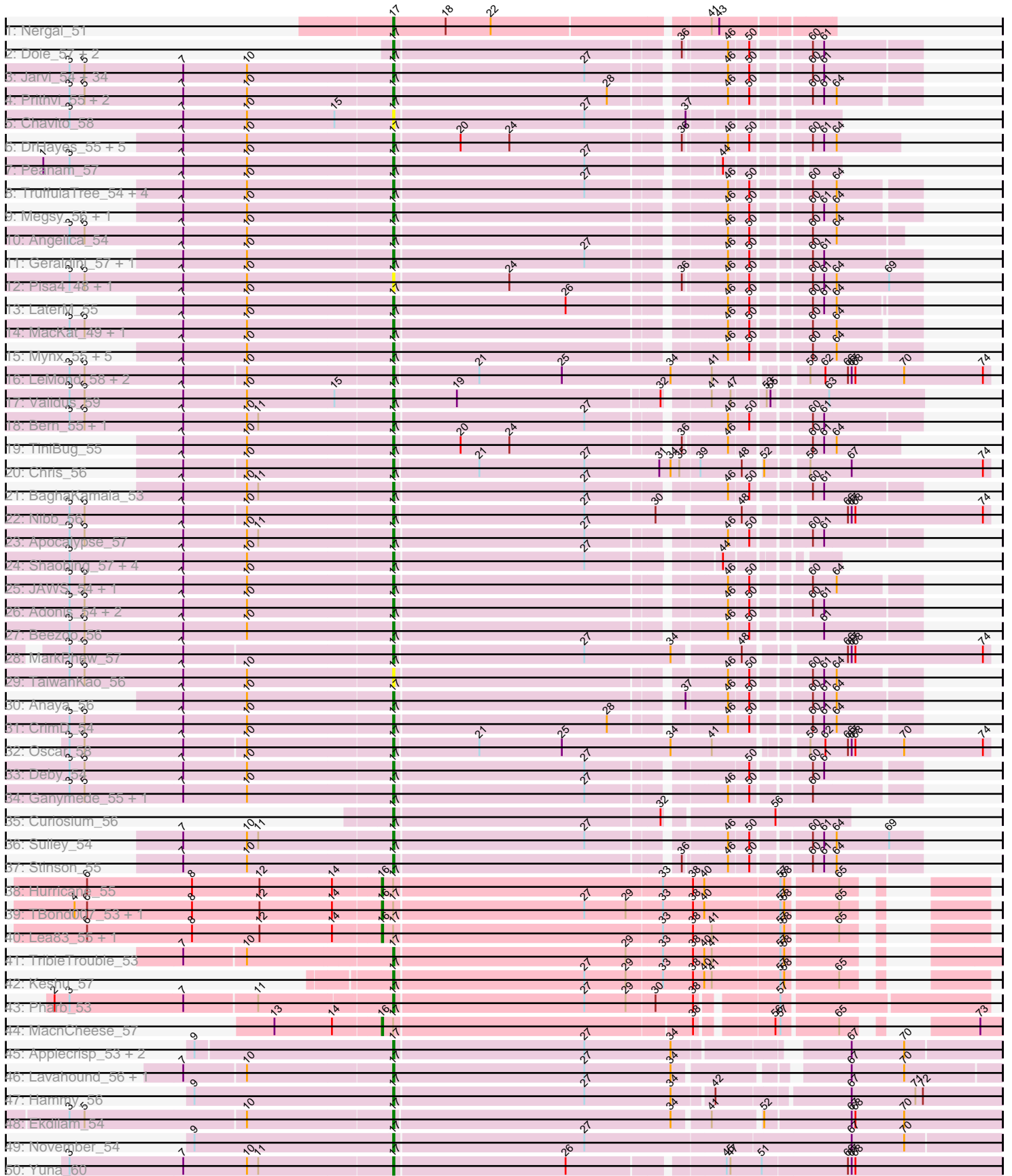


Pham 294538



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 294538 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294538 has 126 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Nergal_51
- Track 2 : Dole_57, Illumine_57, Devera_59
- Track 3 : Jarvi_54, Rosmarinus_54, CREW_54, Boiiii_54, Topper_54, Dalmuri_54, BGIlluviae_54, Tiri_55, Hyperbowlee_54, Asayake_54, Jeckyll_54, Peel_54, AlishaPH_54, Atiba_55, BEEST_54, Joy99_54, Inky_54, Lunahalos_54, Capricorn_54, Blizzard_54, Belladonna_54, CallaLilly_54, Durfee_54, Adephagia_54, Tachez_54, Homura_54, Padpat_56, Spock_54, Twitch_54, Emerson_55, ShiaSurprise_55, Piatt_54, Padfoot_54, Llorens_54, CaseJules_56
- Track 4 : Prithvi_55, LindNT_53, TreyKay_55
- Track 5 : Chavito_58
- Track 6 : DrHayes_55, Bella96_55, Anma_56, Urkel_55, DartGoblin_57, SamuelLPlaqson_55
- Track 7 : Peanam_57
- Track 8 : TruffulaTree_54, Slimphazie_54, Rapunzel97_55, Jayhawk_55, BarrelRoll_54
- Track 9 : Megsy_56, Murucutumbu_55
- Track 10 : Angelica_54
- Track 11 : Geraldini_57, Pokerus_53
- Track 12 : Pisa4_48, Pisa1_54
- Track 13 : LaterM_55
- Track 14 : MacKat_49, Clipper_57
- Track 15 : Mynx_55, ActinUp_54, Zavala_56, Zabiza_49, HedwigODU_54, Ramen_55
- Track 16 : LeMond_58, Scarlett_58, KiSi_58
- Track 17 : Validus_59
- Track 18 : Bern_55, CheetoDust_53
- Track 19 : TiniBug_55
- Track 20 : Chris_56
- Track 21 : BaghaKamala_53
- Track 22 : Nibb_56
- Track 23 : Apocalypse_57
- Track 24 : Shaobing_57, Dartin_57, Richo_57, McMater_57, Niklas_57
- Track 25 : JAWS_54, Veliki_55
- Track 26 : Adonis_54, MeaningOfLife_55, YoureAdopted_53
- Track 27 : Beezoo_56
- Track 28 : MarkPhew_57
- Track 29 : TaiwanKao_56

- Track 30 : Anaya_56
- Track 31 : CrimD_54
- Track 32 : Oscar_58
- Track 33 : Deby_54
- Track 34 : Ganymede_55, QuincyRose_53
- Track 35 : Curiosium_56
- Track 36 : Sulley_54
- Track 37 : Stinson_55
- Track 38 : Hurricane_55
- Track 39 : TBond007_53, Pixie_54
- Track 40 : Lea83_55, ShedlockHolmes_56
- Track 41 : TribbleTrouble_53
- Track 42 : Keshu_57
- Track 43 : Pharb_53
- Track 44 : MacnCheese_57
- Track 45 : Applecrisp_53, Fefferhead_54, Ellie_52
- Track 46 : Lavahound_56, Amgine_55
- Track 47 : Hammy_56
- Track 48 : Ekdilam_54
- Track 49 : November_54
- Track 50 : Yuna_60
- Track 51 : SirPhilip_56
- Track 52 : Marshawn_56
- Track 53 : DarthP_56, Amohnition_56

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

The start number called the most often in the published annotations is 17, it was called in 110 of the 116 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_54, Adephegia_54, Adonis_54, AlishaPH_54, Amgine_55, Amohnition_56, Anaya_56, Angelica_54, Anma_56, Apocalypse_57, Applecrisp_53, Asayake_54, Atiba_55, BEEST_54, BGIlluviae_54, BaghaKamala_53, BarrelRoll_54, Beezoo_56, Bella96_55, Belladonna_54, Bern_55, Blizzard_54, Boiiii_54, CREW_54, CallaLilly_54, Capricorn_54, CaseJules_56, Chavito_58, CheetoDust_53, Chris_56, Clipper_57, CrimD_54, Curiosium_56, Dalmuri_54, DartGoblin_57, DarthP_56, Dartin_57, Deby_54, Devera_59, Dole_57, DrHayes_55, Durfee_54, Ekdilam_54, Ellie_52, Emerson_55, Fefferhead_54, Ganymede_55, Geraldini_57, Hammy_56, HedwigODU_54, Homura_54, Hyperbowlee_54, Illumine_57, Inky_54, JAWS_54, Jarvi_54, Jayhawk_55, Jeckyll_54, Joy99_54, Keshu_57, KiSi_58, LaterM_55, Lavahound_56, LeMond_58, LindNT_53, Llorens_54, Lunahalos_54, MacKat_49, MarkPhew_57, Marshawn_56, McMater_57, MeaningOfLife_55, Megsy_56, Murucutumbu_55, Mynx_55, Nergal_51, Nibb_56, Niklas_57, November_54, Oscar_58, Padfoot_54, Padpat_56, Peanam_57, Peel_54, Pharb_53, Piatt_54, Pisa1_54, Pisa4_48, Pokerus_53, Prithvi_55, QuincyRose_53, Ramen_55, Rapunzel97_55, Richo_57, Rosmarinus_54, SamuelLPlaqson_55, Scarlett_58, Shaobing_57, ShiaSurprise_55, SirPhilip_56, Slimphazie_54, Spock_54, Stinson_55, Sulley_54, Tachez_54, TaiwanKao_56, TiniBug_55, Tiri_55, Topper_54, TreyKay_55, TribbleTrouble_53, TruffulaTree_54, Twitch_54, Urkel_55, Validus_59, Veliki_55,

YoureAdopted_53, Yuna_60, Zabiza_49, Zavala_56,

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

- Hurricane_55, Lea83_55, MacnCheese_57, Pixie_54, ShedlockHolmes_56, TBond007_53,

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

-

Summary by start number:

Start 16:

- Found in 6 of 126 (4.8%) of genes in pham
- Manual Annotations of this start: 6 of 116
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hurricane_55 (K3), Lea83_55 (K3), MacnCheese_57 (K3), Pixie_54 (K3), ShedlockHolmes_56 (K3), TBond007_53 (K3),

Start 17:

- Found in 126 of 126 (100.0%) of genes in pham
- Manual Annotations of this start: 110 of 116
- Called 95.2% of time when present
- Phage (with cluster) where this start called: ActinUp_54 (K1), Adephegia_54 (K1), Adonis_54 (K1), AlishaPH_54 (K1), Amgine_55 (K6), Amohntion_56 (K6), Anaya_56 (K1), Angelica_54 (K1), Anma_56 (K1), Apocalypse_57 (K1), Applecrisp_53 (K6), Asayake_54 (K1), Atiba_55 (K1), BEEST_54 (K1), BGIlluviae_54 (K1), BaghaKamala_53 (K1), BarrelRoll_54 (K1), Beezoo_56 (K1), Bella96_55 (K1), Belladonna_54 (K1), Bern_55 (K1), Blizzard_54 (K1), Boiiii_54 (K1), CREW_54 (K1), CallaLilly_54 (K1), Capricorn_54 (K1), CaseJules_56 (K1), Chavito_58 (K1), CheetoDust_53 (K1), Chris_56 (K1), Clipper_57 (K1), CrimD_54 (K1), Curiosium_56 (K1), Dalmuri_54 (K1), DartGoblin_57 (K1), DARTH_56 (K6), Dartin_57 (K1), Deby_54 (K1), Devera_59 (K1), Dole_57 (K1), DrHayes_55 (K1), Durfee_54 (K1), Ekdilam_54 (K6), Ellie_52 (K6), Emerson_55 (K1), Fefferhead_54 (K6), Ganymede_55 (K1), Geraldini_57 (K1), Hammy_56 (K6), HedwigODU_54 (K1), Homura_54 (K1), Hyperbowlee_54 (K1), Illumine_57 (K1), Inky_54 (K1), JAWS_54 (K1), Jarvi_54 (K1), Jayhawk_55 (K1), Jeckyll_54 (K1), Joy99_54 (K1), Keshu_57 (K3), KiSi_58 (K1), LaterM_55 (K1), Lavahound_56 (K6), LeMond_58 (K1), LindNT_53 (K1), Llorens_54 (K1), Lunahalos_54 (K1), MacKat_49 (K1), MarkPhew_57 (K1), Marshawn_56 (K6), McMater_57 (K1), MeaningOfLife_55 (K1), Megsy_56 (K1), Murucutumbu_55 (K1), Mynx_55 (K1), Nergal_51 (AG), Nibb_56 (K1), Niklas_57 (K1), November_54 (K6), Oscar_58 (K1), Padfoot_54 (K1), Padpat_56 (K1), Peanam_57 (K1), Peel_54 (K1), Pharb_53 (K3), Piatt_54 (K1), Pisa1_54 (K1), Pisa4_48 (K1), Pokerus_53 (K1), Prithvi_55 (K1), QuincyRose_53 (K1), Ramen_55 (K1), Rapunzel97_55 (K1), Richo_57 (K1), Rosmarinus_54 (K1), SamuelLPlaqson_55 (K1), Scarlett_58 (K1), Shaobing_57 (K1), ShiaSurprise_55 (K1), SirPhilip_56 (K6), Slimphazie_54 (K1), Spock_54 (K1), Stinson_55 (K1), Sulley_54 (K1), Tachez_54 (K1), TaiwanKao_56 (K1), TiniBug_55 (K1), Tiri_55 (K1), Topper_54 (K1), TreyKay_55 (K1), TribbleTrouble_53 (K3), TruffulaTree_54 (K1), Twitch_54 (K1), Urkel_55 (K1), Validus_59 (K1), Veliki_55 (K1), YoureAdopted_53 (K1), Yuna_60 (K6), Zabiza_49 (K1), Zavala_56 (K1),

Summary by clusters:

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

Info for manual annotations of cluster AG:

- Start number 17 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 17 was manually annotated 94 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 16 was manually annotated 6 times for cluster K3.

- Start number 17 was manually annotated 3 times for cluster K3.

Info for manual annotations of cluster K6:

- Start number 17 was manually annotated 12 times for cluster K6.

Gene Information:

Gene: ActinUp_54 Start: 39118, Stop: 39498, Start Num: 17

Candidate Starts for ActinUp_54:

(7, 38953), (10, 39004), (Start: 17 @39118 has 110 MA's), (46, 39364), (50, 39379), (60, 39418), (64, 39436),

Gene: Adephagia_54 Start: 39115, Stop: 39498, Start Num: 17

Candidate Starts for Adephagia_54:

(3, 38860), (5, 38872), (7, 38950), (10, 39001), (Start: 17 @39115 has 110 MA's), (27, 39265), (46, 39361), (50, 39376), (60, 39415), (61, 39424),

Gene: Adonis_54 Start: 39359, Stop: 39742, Start Num: 17

Candidate Starts for Adonis_54:

(3, 39104), (5, 39116), (7, 39194), (10, 39245), (Start: 17 @39359 has 110 MA's), (46, 39605), (50, 39620), (60, 39659), (61, 39668),

Gene: AlishaPH_54 Start: 39376, Stop: 39759, Start Num: 17

Candidate Starts for AlishaPH_54:

(3, 39121), (5, 39133), (7, 39211), (10, 39262), (Start: 17 @39376 has 110 MA's), (27, 39526), (46, 39622), (50, 39637), (60, 39676), (61, 39685),

Gene: Amgine_55 Start: 40361, Stop: 40816, Start Num: 17

Candidate Starts for Amgine_55:

(7, 40199), (10, 40247), (Start: 17 @40361 has 110 MA's), (27, 40514), (34, 40583), (67, 40700), (70, 40742),

Gene: Amohnition_56 Start: 39941, Stop: 40408, Start Num: 17

Candidate Starts for Amohnition_56:

(9, 39785), (Start: 17 @39941 has 110 MA's), (27, 40091), (34, 40160), (67, 40289), (71, 40340), (72, 40346),

Gene: Anaya_56 Start: 39634, Stop: 40017, Start Num: 17

Candidate Starts for Anaya_56:

(7, 39469), (10, 39520), (Start: 17 @39634 has 110 MA's), (37, 39850), (46, 39880), (50, 39895), (60, 39934), (61, 39943), (64, 39952),

Gene: Angelica_54 Start: 39265, Stop: 39633, Start Num: 17

Candidate Starts for Angelica_54:

(3, 39010), (5, 39022), (7, 39100), (10, 39151), (Start: 17 @39265 has 110 MA's), (46, 39511), (50, 39526), (60, 39565), (64, 39583),

Gene: Anma_56 Start: 40012, Stop: 40377, Start Num: 17

Candidate Starts for Anma_56:

(7, 39847), (10, 39898), (Start: 17 @40012 has 110 MA's), (20, 40063), (24, 40102), (36, 40225), (46, 40255), (50, 40270), (60, 40309), (61, 40318), (64, 40327),

Gene: Apocalypse_57 Start: 40045, Stop: 40428, Start Num: 17

Candidate Starts for Apocalypse_57:

(3, 39790), (5, 39802), (7, 39880), (10, 39931), (11, 39940), (Start: 17 @40045 has 110 MA's), (27, 40195), (46, 40291), (50, 40306), (60, 40345), (61, 40354),

Gene: Applecrisp_53 Start: 39501, Stop: 39953, Start Num: 17

Candidate Starts for Applecrisp_53:

(9, 39348), (Start: 17 @39501 has 110 MA's), (27, 39651), (34, 39720), (67, 39837), (70, 39879),

Gene: Asayake_54 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for Asayake_54:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: Atiba_55 Start: 39078, Stop: 39461, Start Num: 17

Candidate Starts for Atiba_55:

(3, 38823), (5, 38835), (7, 38913), (10, 38964), (Start: 17 @39078 has 110 MA's), (27, 39228), (46, 39324), (50, 39339), (60, 39378), (61, 39387),

Gene: BEEST_54 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for BEEST_54:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: BGlluviae_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for BGlluviae_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: BaghaKamala_53 Start: 38477, Stop: 38860, Start Num: 17

Candidate Starts for BaghaKamala_53:

(7, 38312), (10, 38363), (11, 38372), (Start: 17 @38477 has 110 MA's), (27, 38627), (46, 38723), (50, 38738), (60, 38777), (61, 38786),

Gene: BarrelRoll_54 Start: 39101, Stop: 39481, Start Num: 17

Candidate Starts for BarrelRoll_54:

(7, 38936), (10, 38987), (Start: 17 @39101 has 110 MA's), (27, 39251), (46, 39347), (50, 39362), (60, 39401), (64, 39419),

Gene: Beezoo_56 Start: 40076, Stop: 40459, Start Num: 17

Candidate Starts for Beezoo_56:

(3, 39821), (5, 39833), (7, 39911), (10, 39962), (Start: 17 @40076 has 110 MA's), (46, 40322), (50, 40337), (61, 40385),

Gene: Bella96_55 Start: 39857, Stop: 40222, Start Num: 17

Candidate Starts for Bella96_55:

(7, 39692), (10, 39743), (Start: 17 @39857 has 110 MA's), (20, 39908), (24, 39947), (36, 40070), (46, 40100), (50, 40115), (60, 40154), (61, 40163), (64, 40172),

Gene: Belladonna_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Belladonna_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: Bern_55 Start: 38067, Stop: 38450, Start Num: 17

Candidate Starts for Bern_55:

(3, 37812), (5, 37824), (7, 37902), (10, 37953), (11, 37962), (Start: 17 @38067 has 110 MA's), (27, 38217), (46, 38313), (50, 38328), (60, 38367), (61, 38376),

Gene: Blizzard_54 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for Blizzard_54:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: Boiiii_54 Start: 39432, Stop: 39815, Start Num: 17

Candidate Starts for Boiiii_54:

(3, 39177), (5, 39189), (7, 39267), (10, 39318), (Start: 17 @39432 has 110 MA's), (27, 39582), (46, 39678), (50, 39693), (60, 39732), (61, 39741),

Gene: CREW_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for CREW_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: CallaLilly_54 Start: 39156, Stop: 39539, Start Num: 17

Candidate Starts for CallaLilly_54:

(3, 38901), (5, 38913), (7, 38991), (10, 39042), (Start: 17 @39156 has 110 MA's), (27, 39306), (46, 39402), (50, 39417), (60, 39456), (61, 39465),

Gene: Capricorn_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Capricorn_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: CaseJules_56 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for CaseJules_56:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: Chavito_58 Start: 40526, Stop: 40843, Start Num: 17

Candidate Starts for Chavito_58:

(3, 40271), (7, 40361), (10, 40412), (15, 40481), (Start: 17 @40526 has 110 MA's), (27, 40676), (37, 40745),

Gene: CheetoDust_53 Start: 38521, Stop: 38904, Start Num: 17

Candidate Starts for CheetoDust_53:

(3, 38266), (5, 38278), (7, 38356), (10, 38407), (11, 38416), (Start: 17 @38521 has 110 MA's), (27, 38671), (46, 38767), (50, 38782), (60, 38821), (61, 38830),

Gene: Chris_56 Start: 39748, Stop: 40203, Start Num: 17

Candidate Starts for Chris_56:

(7, 39586), (10, 39634), (Start: 17 @39748 has 110 MA's), (21, 39814), (27, 39898), (31, 39958), (34, 39967), (35, 39973), (39, 39988), (48, 40021), (52, 40033), (59, 40060), (67, 40093), (74, 40198),

Gene: Clipper_57 Start: 39697, Stop: 40077, Start Num: 17

Candidate Starts for Clipper_57:

(3, 39442), (5, 39454), (7, 39532), (10, 39583), (Start: 17 @39697 has 110 MA's), (46, 39943), (50, 39958), (60, 39997), (64, 40015),

Gene: CrimD_54 Start: 39353, Stop: 39733, Start Num: 17

Candidate Starts for CrimD_54:

(3, 39098), (5, 39110), (7, 39188), (10, 39239), (Start: 17 @39353 has 110 MA's), (28, 39521), (46, 39599), (50, 39614), (60, 39653), (61, 39662), (64, 39671),

Gene: Curiosium_56 Start: 38035, Stop: 38376, Start Num: 17

Candidate Starts for Curiosium_56:

(Start: 17 @38035 has 110 MA's), (32, 38242), (56, 38320),

Gene: Dalmuri_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Dalmuri_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: DartGoblin_57 Start: 39829, Stop: 40194, Start Num: 17

Candidate Starts for DartGoblin_57:

(7, 39664), (10, 39715), (Start: 17 @39829 has 110 MA's), (20, 39880), (24, 39919), (36, 40042), (46, 40072), (50, 40087), (60, 40126), (61, 40135), (64, 40144),

Gene: DarthP_56 Start: 39825, Stop: 40292, Start Num: 17

Candidate Starts for DarthP_56:

(9, 39669), (Start: 17 @39825 has 110 MA's), (27, 39975), (34, 40044), (67, 40173), (71, 40224), (72, 40230),

Gene: Dartin_57 Start: 39804, Stop: 40115, Start Num: 17

Candidate Starts for Dartin_57:

(3, 39549), (7, 39639), (10, 39690), (Start: 17 @39804 has 110 MA's), (27, 39954), (44, 40047),

Gene: Deby_54 Start: 39292, Stop: 39672, Start Num: 17

Candidate Starts for Deby_54:

(3, 39037), (5, 39049), (7, 39127), (10, 39178), (Start: 17 @39292 has 110 MA's), (27, 39442), (50, 39553), (60, 39592), (61, 39601),

Gene: Devera_59 Start: 39872, Stop: 40252, Start Num: 17

Candidate Starts for Devera_59:

(Start: 17 @39872 has 110 MA's), (36, 40085), (46, 40115), (50, 40130), (60, 40169), (61, 40178),

Gene: Dole_57 Start: 39875, Stop: 40255, Start Num: 17

Candidate Starts for Dole_57:

(Start: 17 @39875 has 110 MA's), (36, 40088), (46, 40118), (50, 40133), (60, 40172), (61, 40181),

Gene: DrHayes_55 Start: 40012, Stop: 40377, Start Num: 17

Candidate Starts for DrHayes_55:

(7, 39847), (10, 39898), (Start: 17 @40012 has 110 MA's), (20, 40063), (24, 40102), (36, 40225), (46, 40255), (50, 40270), (60, 40309), (61, 40318), (64, 40327),

Gene: Durfee_54 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for Durfee_54:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: Ekdilam_54 Start: 39830, Stop: 40297, Start Num: 17

Candidate Starts for Ekdilam_54:

(3, 39578), (5, 39590), (10, 39716), (Start: 17 @39830 has 110 MA's), (34, 40049), (41, 40076), (52, 40112), (67, 40178), (68, 40181), (70, 40220),

Gene: Ellie_52 Start: 39193, Stop: 39645, Start Num: 17

Candidate Starts for Ellie_52:

(9, 39040), (Start: 17 @39193 has 110 MA's), (27, 39343), (34, 39412), (67, 39529), (70, 39571),

Gene: Emerson_55 Start: 39112, Stop: 39495, Start Num: 17

Candidate Starts for Emerson_55:

(3, 38857), (5, 38869), (7, 38947), (10, 38998), (Start: 17 @39112 has 110 MA's), (27, 39262), (46, 39358), (50, 39373), (60, 39412), (61, 39421),

Gene: Fefferhead_54 Start: 39140, Stop: 39592, Start Num: 17

Candidate Starts for Fefferhead_54:

(9, 38987), (Start: 17 @39140 has 110 MA's), (27, 39290), (34, 39359), (67, 39476), (70, 39518),

Gene: Ganymede_55 Start: 39494, Stop: 39874, Start Num: 17

Candidate Starts for Ganymede_55:

(3, 39239), (5, 39251), (7, 39329), (10, 39380), (Start: 17 @39494 has 110 MA's), (27, 39644), (46, 39740), (50, 39755), (60, 39794),

Gene: Geraldini_57 Start: 40165, Stop: 40548, Start Num: 17

Candidate Starts for Geraldini_57:

(7, 40000), (10, 40051), (Start: 17 @40165 has 110 MA's), (27, 40315), (46, 40411), (50, 40426), (60, 40465), (61, 40474),

Gene: Hammy_56 Start: 39813, Stop: 40280, Start Num: 17

Candidate Starts for Hammy_56:

(9, 39657), (Start: 17 @39813 has 110 MA's), (27, 39963), (34, 40032), (42, 40062), (67, 40161), (71, 40212), (72, 40218),

Gene: HedwigODU_54 Start: 39118, Stop: 39498, Start Num: 17

Candidate Starts for HedwigODU_54:

(7, 38953), (10, 39004), (Start: 17 @39118 has 110 MA's), (46, 39364), (50, 39379), (60, 39418), (64, 39436),

Gene: Homura_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Homura_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: Hurricane_55 Start: 39527, Stop: 39946, Start Num: 16

Candidate Starts for Hurricane_55:

(6, 39296), (8, 39380), (12, 39434), (14, 39491), (Start: 16 @39527 has 6 MA's), (Start: 17 @39536 has 110 MA's), (33, 39746), (38, 39770), (40, 39779), (57, 39836), (58, 39839), (65, 39878),

Gene: Hyperbowlee_54 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for Hyperbowlee_54:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: Illumine_57 Start: 39874, Stop: 40254, Start Num: 17

Candidate Starts for Illumine_57:

(Start: 17 @39874 has 110 MA's), (36, 40087), (46, 40117), (50, 40132), (60, 40171), (61, 40180),

Gene: Inky_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Inky_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: JAWS_54 Start: 39107, Stop: 39487, Start Num: 17

Candidate Starts for JAWS_54:

(3, 38852), (5, 38864), (7, 38942), (10, 38993), (Start: 17 @39107 has 110 MA's), (46, 39353), (50, 39368), (60, 39407), (64, 39425),

Gene: Jarvi_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Jarvi_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: Jayhawk_55 Start: 39116, Stop: 39496, Start Num: 17

Candidate Starts for Jayhawk_55:

(7, 38951), (10, 39002), (Start: 17 @39116 has 110 MA's), (27, 39266), (46, 39362), (50, 39377), (60, 39416), (64, 39434),

Gene: Jeckyll_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Jeckyll_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: Joy99_54 Start: 39162, Stop: 39545, Start Num: 17

Candidate Starts for Joy99_54:

(3, 38907), (5, 38919), (7, 38997), (10, 39048), (Start: 17 @39162 has 110 MA's), (27, 39312), (46, 39408), (50, 39423), (60, 39462), (61, 39471),

Gene: Keshu_57 Start: 39634, Stop: 40044, Start Num: 17

Candidate Starts for Keshu_57:

(Start: 17 @39634 has 110 MA's), (27, 39784), (29, 39817), (33, 39844), (38, 39868), (40, 39877), (41, 39883), (57, 39934), (58, 39937), (65, 39976),

Gene: KiSi_58 Start: 39779, Stop: 40234, Start Num: 17

Candidate Starts for KiSi_58:

(3, 39527), (5, 39539), (7, 39617), (10, 39665), (Start: 17 @39779 has 110 MA's), (21, 39845), (25, 39911), (34, 39998), (41, 40031), (59, 40091), (62, 40103), (66, 40121), (67, 40124), (68, 40127), (70, 40166), (74, 40229),

Gene: LaterM_55 Start: 39999, Stop: 40379, Start Num: 17

Candidate Starts for LaterM_55:

(7, 39834), (10, 39885), (Start: 17 @39999 has 110 MA's), (26, 40134), (46, 40245), (50, 40260), (60, 40299), (61, 40308), (64, 40317),

Gene: Lavahound_56 Start: 40482, Stop: 40937, Start Num: 17

Candidate Starts for Lavahound_56:

(7, 40320), (10, 40368), (Start: 17 @40482 has 110 MA's), (27, 40635), (34, 40704), (67, 40821), (70, 40863),

Gene: LeMond_58 Start: 39760, Stop: 40215, Start Num: 17

Candidate Starts for LeMond_58:

(3, 39508), (5, 39520), (7, 39598), (10, 39646), (Start: 17 @39760 has 110 MA's), (21, 39826), (25, 39892), (34, 39979), (41, 40012), (59, 40072), (62, 40084), (66, 40102), (67, 40105), (68, 40108), (70, 40147), (74, 40210),

Gene: Lea83_55 Start: 39580, Stop: 39999, Start Num: 16

Candidate Starts for Lea83_55:

(6, 39349), (8, 39433), (12, 39487), (14, 39544), (Start: 16 @39580 has 6 MA's), (Start: 17 @39589 has 110 MA's), (33, 39799), (38, 39823), (41, 39838), (57, 39889), (58, 39892), (65, 39931),

Gene: LindNT_53 Start: 39321, Stop: 39701, Start Num: 17

Candidate Starts for LindNT_53:

(3, 39066), (5, 39078), (7, 39156), (10, 39207), (Start: 17 @39321 has 110 MA's), (28, 39489), (46, 39567), (50, 39582), (60, 39621), (61, 39630), (64, 39639),

Gene: Llorens_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Llorens_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: Lunahalos_54 Start: 39233, Stop: 39616, Start Num: 17

Candidate Starts for Lunahalos_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: MacKat_49 Start: 34581, Stop: 34961, Start Num: 17

Candidate Starts for MacKat_49:

(3, 34326), (5, 34338), (7, 34416), (10, 34467), (Start: 17 @34581 has 110 MA's), (46, 34827), (50, 34842), (60, 34881), (64, 34899),

Gene: MacnCheese_57 Start: 40122, Stop: 40535, Start Num: 16

Candidate Starts for MacnCheese_57:

(13, 40041), (14, 40086), (Start: 16 @40122 has 6 MA's), (Start: 17 @40131 has 110 MA's), (38, 40362), (56, 40413), (57, 40416), (65, 40458), (73, 40518),

Gene: MarkPhew_57 Start: 39451, Stop: 39903, Start Num: 17

Candidate Starts for MarkPhew_57:

(3, 39199), (5, 39211), (7, 39289), (Start: 17 @39451 has 110 MA's), (27, 39601), (34, 39670), (48, 39721), (66, 39790), (67, 39793), (68, 39796), (74, 39898),

Gene: Marshawn_56 Start: 39609, Stop: 39935, Start Num: 17

Candidate Starts for Marshawn_56:

(9, 39453), (Start: 17 @39609 has 110 MA's), (23, 39690), (27, 39759), (33, 39810), (49, 39861), (54, 39870), (59, 39888),

Gene: McMater_57 Start: 39804, Stop: 40115, Start Num: 17

Candidate Starts for McMater_57:

(3, 39549), (7, 39639), (10, 39690), (Start: 17 @39804 has 110 MA's), (27, 39954), (44, 40047),

Gene: MeaningOfLife_55 Start: 39988, Stop: 40371, Start Num: 17

Candidate Starts for MeaningOfLife_55:

(3, 39733), (5, 39745), (7, 39823), (10, 39874), (Start: 17 @39988 has 110 MA's), (46, 40234), (50, 40249), (60, 40288), (61, 40297),

Gene: Megsy_56 Start: 39389, Stop: 39769, Start Num: 17

Candidate Starts for Megsy_56:

(7, 39224), (10, 39275), (Start: 17 @39389 has 110 MA's), (46, 39635), (50, 39650), (60, 39689), (61, 39698), (64, 39707),

Gene: Murucutumbu_55 Start: 40098, Stop: 40478, Start Num: 17

Candidate Starts for Murucutumbu_55:

(7, 39933), (10, 39984), (Start: 17 @40098 has 110 MA's), (46, 40344), (50, 40359), (60, 40398), (61, 40407), (64, 40416),

Gene: Mynx_55 Start: 39437, Stop: 39817, Start Num: 17

Candidate Starts for Mynx_55:

(7, 39272), (10, 39323), (Start: 17 @39437 has 110 MA's), (46, 39683), (50, 39698), (60, 39737), (64, 39755),

Gene: Nergal_51 Start: 37133, Stop: 37462, Start Num: 17

Candidate Starts for Nergal_51:

(Start: 17 @37133 has 110 MA's), (18, 37175), (22, 37211), (41, 37373), (43, 37379),

Gene: Nibb_56 Start: 39155, Stop: 39607, Start Num: 17

Candidate Starts for Nibb_56:

(3, 38903), (5, 38915), (7, 38993), (10, 39041), (Start: 17 @39155 has 110 MA's), (27, 39305), (30, 39362), (48, 39425), (66, 39494), (67, 39497), (68, 39500), (74, 39602),

Gene: Niklas_57 Start: 39865, Stop: 40176, Start Num: 17

Candidate Starts for Niklas_57:

(3, 39610), (7, 39700), (10, 39751), (Start: 17 @39865 has 110 MA's), (27, 40015), (44, 40108),

Gene: November_54 Start: 39693, Stop: 40166, Start Num: 17

Candidate Starts for November_54:

(9, 39537), (Start: 17 @39693 has 110 MA's), (27, 39843), (67, 40050), (70, 40092),

Gene: Oscar_58 Start: 39665, Stop: 40120, Start Num: 17

Candidate Starts for Oscar_58:

(3, 39413), (5, 39425), (7, 39503), (10, 39551), (Start: 17 @39665 has 110 MA's), (21, 39731), (25, 39797), (34, 39884), (41, 39917), (59, 39977), (62, 39989), (66, 40007), (67, 40010), (68, 40013), (70,

40052), (74, 40115),

Gene: Padfoot_54 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for Padfoot_54:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: Padpat_56 Start: 39112, Stop: 39495, Start Num: 17

Candidate Starts for Padpat_56:

(3, 38857), (5, 38869), (7, 38947), (10, 38998), (Start: 17 @39112 has 110 MA's), (27, 39262), (46, 39358), (50, 39373), (60, 39412), (61, 39421),

Gene: Peanam_57 Start: 39823, Stop: 40134, Start Num: 17

Candidate Starts for Peanam_57:

(1, 39547), (3, 39568), (7, 39658), (10, 39709), (Start: 17 @39823 has 110 MA's), (27, 39973), (44, 40066),

Gene: Peel_54 Start: 39235, Stop: 39618, Start Num: 17

Candidate Starts for Peel_54:

(3, 38980), (5, 38992), (7, 39070), (10, 39121), (Start: 17 @39235 has 110 MA's), (27, 39385), (46, 39481), (50, 39496), (60, 39535), (61, 39544),

Gene: Pharb_53 Start: 38444, Stop: 38890, Start Num: 17

Candidate Starts for Pharb_53:

(2, 38183), (3, 38195), (7, 38285), (11, 38342), (Start: 17 @38444 has 110 MA's), (27, 38594), (29, 38627), (30, 38648), (38, 38678), (57, 38732),

Gene: Piatt_54 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for Piatt_54:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: Pisa1_54 Start: 40091, Stop: 40474, Start Num: 17

Candidate Starts for Pisa1_54:

(3, 39836), (5, 39848), (7, 39926), (10, 39977), (Start: 17 @40091 has 110 MA's), (24, 40181), (36, 40304), (46, 40334), (50, 40349), (60, 40388), (61, 40397), (64, 40406), (69, 40448),

Gene: Pisa4_48 Start: 35460, Stop: 35843, Start Num: 17

Candidate Starts for Pisa4_48:

(3, 35205), (5, 35217), (7, 35295), (10, 35346), (Start: 17 @35460 has 110 MA's), (24, 35550), (36, 35673), (46, 35703), (50, 35718), (60, 35757), (61, 35766), (64, 35775), (69, 35817),

Gene: Pixie_54 Start: 39065, Stop: 39484, Start Num: 16

Candidate Starts for Pixie_54:

(4, 38825), (6, 38834), (8, 38918), (12, 38972), (14, 39029), (Start: 16 @39065 has 6 MA's), (Start: 17 @39074 has 110 MA's), (27, 39224), (29, 39257), (33, 39284), (38, 39308), (40, 39317), (57, 39374), (58, 39377), (65, 39416),

Gene: Pokerus_53 Start: 39165, Stop: 39548, Start Num: 17

Candidate Starts for Pokerus_53:

(7, 39000), (10, 39051), (Start: 17 @39165 has 110 MA's), (27, 39315), (46, 39411), (50, 39426), (60, 39465), (61, 39474),

Gene: Prithvi_55 Start: 39321, Stop: 39701, Start Num: 17

Candidate Starts for Prithvi_55:

(3, 39066), (5, 39078), (7, 39156), (10, 39207), (Start: 17 @39321 has 110 MA's), (28, 39489), (46, 39567), (50, 39582), (60, 39621), (61, 39630), (64, 39639),

Gene: QuincyRose_53 Start: 39494, Stop: 39874, Start Num: 17

Candidate Starts for QuincyRose_53:

(3, 39239), (5, 39251), (7, 39329), (10, 39380), (Start: 17 @39494 has 110 MA's), (27, 39644), (46, 39740), (50, 39755), (60, 39794),

Gene: Ramen_55 Start: 39120, Stop: 39500, Start Num: 17

Candidate Starts for Ramen_55:

(7, 38955), (10, 39006), (Start: 17 @39120 has 110 MA's), (46, 39366), (50, 39381), (60, 39420), (64, 39438),

Gene: Rapunzel97_55 Start: 39116, Stop: 39496, Start Num: 17

Candidate Starts for Rapunzel97_55:

(7, 38951), (10, 39002), (Start: 17 @39116 has 110 MA's), (27, 39266), (46, 39362), (50, 39377), (60, 39416), (64, 39434),

Gene: Richo_57 Start: 39804, Stop: 40115, Start Num: 17

Candidate Starts for Richo_57:

(3, 39549), (7, 39639), (10, 39690), (Start: 17 @39804 has 110 MA's), (27, 39954), (44, 40047),

Gene: Rosmarinus_54 Start: 39221, Stop: 39604, Start Num: 17

Candidate Starts for Rosmarinus_54:

(3, 38966), (5, 38978), (7, 39056), (10, 39107), (Start: 17 @39221 has 110 MA's), (27, 39371), (46, 39467), (50, 39482), (60, 39521), (61, 39530),

Gene: SamuelLPlaqson_55 Start: 40012, Stop: 40377, Start Num: 17

Candidate Starts for SamuelLPlaqson_55:

(7, 39847), (10, 39898), (Start: 17 @40012 has 110 MA's), (20, 40063), (24, 40102), (36, 40225), (46, 40255), (50, 40270), (60, 40309), (61, 40318), (64, 40327),

Gene: Scarlett_58 Start: 39660, Stop: 40115, Start Num: 17

Candidate Starts for Scarlett_58:

(3, 39408), (5, 39420), (7, 39498), (10, 39546), (Start: 17 @39660 has 110 MA's), (21, 39726), (25, 39792), (34, 39879), (41, 39912), (59, 39972), (62, 39984), (66, 40002), (67, 40005), (68, 40008), (70, 40047), (74, 40110),

Gene: Shaobing_57 Start: 39841, Stop: 40152, Start Num: 17

Candidate Starts for Shaobing_57:

(3, 39586), (7, 39676), (10, 39727), (Start: 17 @39841 has 110 MA's), (27, 39991), (44, 40084),

Gene: ShedlockHolmes_56 Start: 39584, Stop: 40003, Start Num: 16

Candidate Starts for ShedlockHolmes_56:

(6, 39353), (8, 39437), (12, 39491), (14, 39548), (Start: 16 @39584 has 6 MA's), (Start: 17 @39593 has 110 MA's), (33, 39803), (38, 39827), (41, 39842), (57, 39893), (58, 39896), (65, 39935),

Gene: ShiaSurprise_55 Start: 39430, Stop: 39813, Start Num: 17

Candidate Starts for ShiaSurprise_55:

(3, 39175), (5, 39187), (7, 39265), (10, 39316), (Start: 17 @39430 has 110 MA's), (27, 39580), (46, 39676), (50, 39691), (60, 39730), (61, 39739),

Gene: SirPhilip_56 Start: 40093, Stop: 40404, Start Num: 17
Candidate Starts for SirPhilip_56:
(Start: 17 @40093 has 110 MA's), (27, 40243), (34, 40312), (48, 40366),

Gene: Slimphazie_54 Start: 39116, Stop: 39496, Start Num: 17
Candidate Starts for Slimphazie_54:
(7, 38951), (10, 39002), (Start: 17 @39116 has 110 MA's), (27, 39266), (46, 39362), (50, 39377), (60, 39416), (64, 39434),

Gene: Spock_54 Start: 39234, Stop: 39617, Start Num: 17
Candidate Starts for Spock_54:
(3, 38979), (5, 38991), (7, 39069), (10, 39120), (Start: 17 @39234 has 110 MA's), (27, 39384), (46, 39480), (50, 39495), (60, 39534), (61, 39543),

Gene: Stinson_55 Start: 39621, Stop: 40001, Start Num: 17
Candidate Starts for Stinson_55:
(7, 39456), (10, 39507), (Start: 17 @39621 has 110 MA's), (36, 39834), (46, 39864), (50, 39879), (60, 39918), (61, 39927), (64, 39936),

Gene: Sulley_54 Start: 39280, Stop: 39666, Start Num: 17
Candidate Starts for Sulley_54:
(7, 39115), (10, 39166), (11, 39175), (Start: 17 @39280 has 110 MA's), (27, 39430), (46, 39526), (50, 39541), (60, 39580), (61, 39589), (64, 39598), (69, 39640),

Gene: TBond007_53 Start: 39064, Stop: 39483, Start Num: 16
Candidate Starts for TBond007_53:
(4, 38824), (6, 38833), (8, 38917), (12, 38971), (14, 39028), (Start: 16 @39064 has 6 MA's), (Start: 17 @39073 has 110 MA's), (27, 39223), (29, 39256), (33, 39283), (38, 39307), (40, 39316), (57, 39373), (58, 39376), (65, 39415),

Gene: Tachez_54 Start: 39078, Stop: 39461, Start Num: 17
Candidate Starts for Tachez_54:
(3, 38823), (5, 38835), (7, 38913), (10, 38964), (Start: 17 @39078 has 110 MA's), (27, 39228), (46, 39324), (50, 39339), (60, 39378), (61, 39387),

Gene: TaiwanKao_56 Start: 39383, Stop: 39763, Start Num: 17
Candidate Starts for TaiwanKao_56:
(3, 39128), (5, 39140), (7, 39218), (10, 39269), (Start: 17 @39383 has 110 MA's), (46, 39629), (50, 39644), (60, 39683), (61, 39692), (64, 39701),

Gene: TiniBug_55 Start: 40008, Stop: 40373, Start Num: 17
Candidate Starts for TiniBug_55:
(7, 39843), (10, 39894), (Start: 17 @40008 has 110 MA's), (20, 40059), (24, 40098), (36, 40221), (46, 40251), (60, 40305), (61, 40314), (64, 40323),

Gene: Tiri_55 Start: 39408, Stop: 39788, Start Num: 17
Candidate Starts for Tiri_55:
(3, 39153), (5, 39165), (7, 39243), (10, 39294), (Start: 17 @39408 has 110 MA's), (27, 39558), (46, 39654), (50, 39669), (60, 39708), (61, 39717),

Gene: Topper_54 Start: 39233, Stop: 39616, Start Num: 17
Candidate Starts for Topper_54:

(3, 38978), (5, 38990), (7, 39068), (10, 39119), (Start: 17 @39233 has 110 MA's), (27, 39383), (46, 39479), (50, 39494), (60, 39533), (61, 39542),

Gene: TreyKay_55 Start: 39321, Stop: 39701, Start Num: 17

Candidate Starts for TreyKay_55:

(3, 39066), (5, 39078), (7, 39156), (10, 39207), (Start: 17 @39321 has 110 MA's), (28, 39489), (46, 39567), (50, 39582), (60, 39621), (61, 39630), (64, 39639),

Gene: TribbleTrouble_53 Start: 39295, Stop: 39714, Start Num: 17

Candidate Starts for TribbleTrouble_53:

(7, 39136), (10, 39184), (Start: 17 @39295 has 110 MA's), (29, 39478), (33, 39505), (38, 39529), (40, 39538), (41, 39544), (57, 39595), (58, 39598),

Gene: TruffulaTree_54 Start: 39112, Stop: 39492, Start Num: 17

Candidate Starts for TruffulaTree_54:

(7, 38947), (10, 38998), (Start: 17 @39112 has 110 MA's), (27, 39262), (46, 39358), (50, 39373), (60, 39412), (64, 39430),

Gene: Twitch_54 Start: 39235, Stop: 39618, Start Num: 17

Candidate Starts for Twitch_54:

(3, 38980), (5, 38992), (7, 39070), (10, 39121), (Start: 17 @39235 has 110 MA's), (27, 39385), (46, 39481), (50, 39496), (60, 39535), (61, 39544),

Gene: Urkel_55 Start: 40012, Stop: 40377, Start Num: 17

Candidate Starts for Urkel_55:

(7, 39847), (10, 39898), (Start: 17 @40012 has 110 MA's), (20, 40063), (24, 40102), (36, 40225), (46, 40255), (50, 40270), (60, 40309), (61, 40318), (64, 40327),

Gene: Validus_59 Start: 40022, Stop: 40411, Start Num: 17

Candidate Starts for Validus_59:

(3, 39767), (5, 39779), (7, 39857), (10, 39908), (15, 39977), (Start: 17 @40022 has 110 MA's), (19, 40070), (32, 40226), (41, 40256), (47, 40271), (53, 40295), (55, 40298), (63, 40337),

Gene: Veliki_55 Start: 39098, Stop: 39478, Start Num: 17

Candidate Starts for Veliki_55:

(3, 38843), (5, 38855), (7, 38933), (10, 38984), (Start: 17 @39098 has 110 MA's), (46, 39344), (50, 39359), (60, 39398), (64, 39416),

Gene: YoureAdopted_53 Start: 39236, Stop: 39616, Start Num: 17

Candidate Starts for YoureAdopted_53:

(3, 38981), (5, 38993), (7, 39071), (10, 39122), (Start: 17 @39236 has 110 MA's), (46, 39482), (50, 39497), (60, 39536), (61, 39545),

Gene: Yuna_60 Start: 40495, Stop: 40959, Start Num: 17

Candidate Starts for Yuna_60:

(3, 40240), (7, 40330), (10, 40381), (11, 40390), (Start: 17 @40495 has 110 MA's), (26, 40630), (45, 40744), (47, 40747), (51, 40771), (66, 40837), (67, 40840), (68, 40843),

Gene: Zabiza_49 Start: 35423, Stop: 35803, Start Num: 17

Candidate Starts for Zabiza_49:

(7, 35258), (10, 35309), (Start: 17 @35423 has 110 MA's), (46, 35669), (50, 35684), (60, 35723), (64, 35741),

Gene: Zavala_56 Start: 39397, Stop: 39777, Start Num: 17

Candidate Starts for Zavala_56:

(7, 39232), (10, 39283), (Start: 17 @39397 has 110 MA's), (46, 39643), (50, 39658), (60, 39697), (64, 39715),