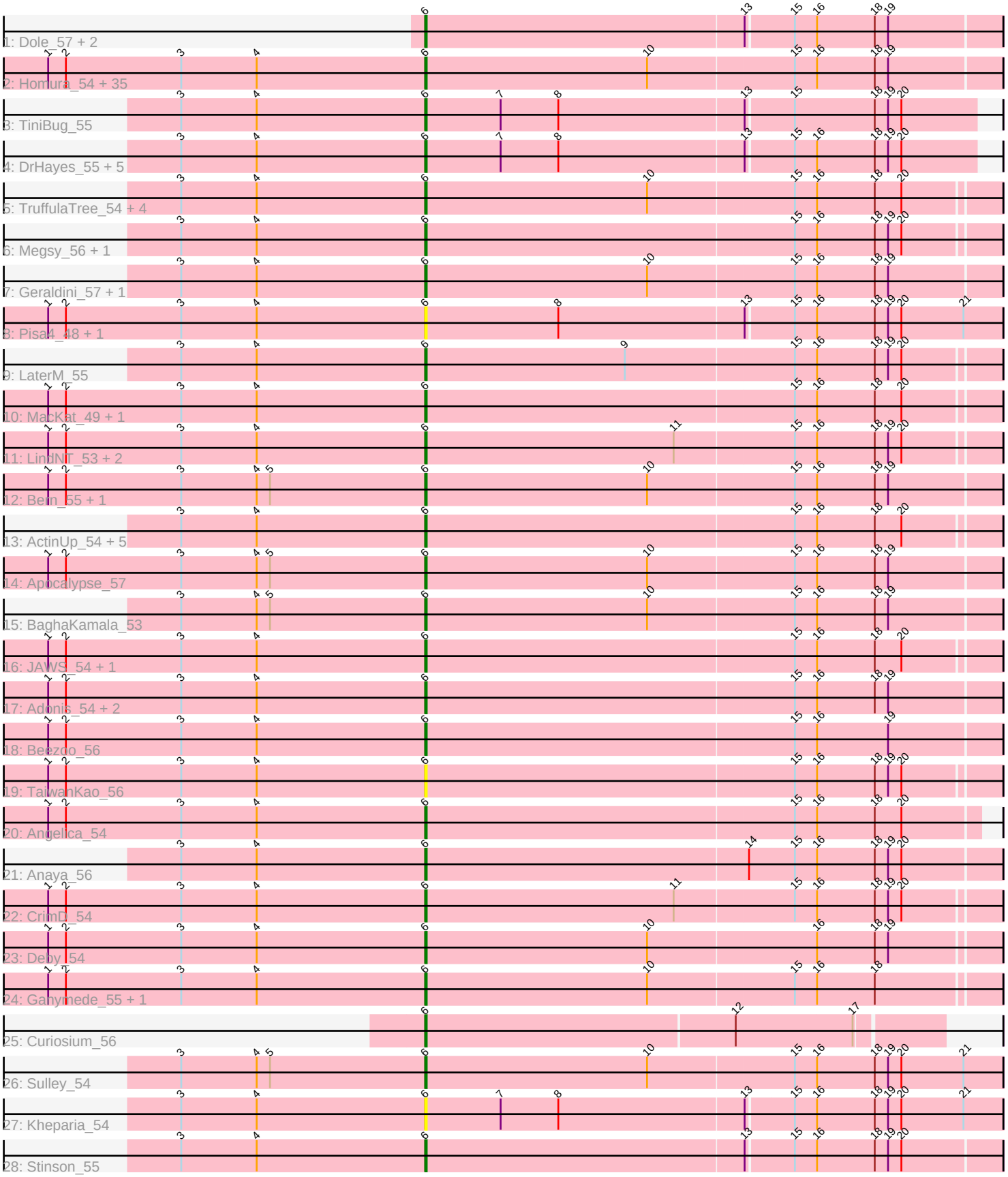
Pham 345615


1: Dole_57 + 2
2: Homura_54 + 35
3: TiniBug_55
4: DrHayes_55 + 5
5: TruffulaTree_54 + 4
6: Megsy_56 + 1
7: Geraldini_57 + 1
8: Pisa4_48 + 1
9: LaterM_55
10: MacKat_49 + 1
11: LindNT_53 + 2
12: Benn_55 + 1
13: ActinUp_54 + 5
14: Apocalypse_57
15: BaghaKamala_53
16: JAWS_54 + 1
17: Adonis_54 + 2
18: Beezoo_56
19: TaiwanKao_56
20: Angelica_54
21: Anaya_56
22: CrimD_54
23: Deby_54
24: Ganymede_55 + 1
25: Curiosium_56
26: Sulley_54
27: Kheparia_54
28: Stinson_55

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 345615 Report

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

Pham number 345615 has 90 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Dole_57, Illumine_57, Devera_59
• Track 2 : Homura_54, Jarvi_54, Peel_54, Rosmarinus_54, CREW_54, Lokum_55, Boiiii_54, Topper_54, Dalmuri_54, BGlluviae_54, Tiri_55, Hyperbowlee_54, Asayake_54, Jeckyll_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, Padpat_56, Spock_54, Twitch_54, Emerson_55, ShiaSurprise_55, Piatt_54, Padfoot_54, Llorens_54, CaseJules_56
• Track 3 : TiniBug_55
• Track 4 : DrHayes_55, Bella96_55, Anma_55, Urkel_55, DartGoblin_56, SamuelLPlaqson_55
• Track 5 : TruffulaTree_54, Slimphazie_54, Rapunzel97_55, Jayhawk_55, BarrelRoll_54
• Track 6 : Megsy_56, Murucutumbu_55
• Track 7 : Geraldini_57, Pokerus_53
• Track 8 : Pisa4_48, Pisa1_54
• Track 9 : LaterM_55
• Track 10 : MacKat_49, Clipper_57
• Track 11 : LindNT_53, Prithvi_55, TreyKay_55
• Track 12 : Bern_55, CheetoDust_53
• Track 13 : ActinUp_54, Zavala_56, Zabiza_49, Mynx_55, HedwigODU_54, Ramen_55
• Track 14 : Apocalypse_57
• Track 15 : BaghaKamala_53
• Track 16 : JAWS_54, Veliki_55
• Track 17 : Adonis_54, YoureAdopted_53, MeaningOfLife_55
• Track 18 : Beezoo_56
• Track 19 : TaiwanKao_56
• Track 20 : Angelica_54
• Track 21 : Anaya_56
• Track 22 : CrimD_54
• Track 23 : Deby_54
• Track 24 : Ganymede_55, QuincyRose_53
• Track 25 : Curiosium_56
• Track 26 : Sulley_54
• Track 27 : Kheparia_54
• Track 28 : Stinson_55

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

The start number called the most often in the published annotations is 6, it was called in 85 of the 85 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ActinUp_54, Adephagia_54, Adonis_54, AlishaPH_54, Anaya_56, Angelica_54, Anma_55, Apocalypse_57, Asayake_54, Atiba_55, BEEST_54, BGlluviae_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, CheetoDust_53, Clipper_57, CrimD_54, Curiosium_56, Dalmuri_54, DartGoblin_56, Deby_54, Devera_59, Dole_57, DrHayes_55, Durfee_54, Emerson_55, Ganymede_55, Geraldini_57, HedwigODU_54, Homura_54, Hyperbowlee_54, Illumine_57, Inky_54, JAWS_54, Jarvi_54, Jayhawk_55, Jeckyll_54, Joy99_54, Kheparia_54, LaterM_55, LindNT_53, Llorens_54, Lokum_55, Lunahalos_54, MacKat_49, MeaningOfLife_55, Megsy_56, Murucutumbu_55, Mynx_55, Padfoot_54, Padpat_56, Peel_54, Piatt_54, Pisa1_54, Pisa4_48, Pokerus_53, Prithvi_55, QuincyRose_53, Ramen_55, Rapunzel97_55, Rosmarinus_54, SamuelLPlaqson_55, ShiaSurprise_55, Slimphazie_54, Spock_54, Stinson_55, Sulley_54, Tachez_54, TaiwanKao_56, TiniBug_55, Tiri_55, Topper_54, TreyKay_55, TruffulaTree_54, Twitch_54, Urkel_55, Veliki_55, YoureAdopted_53, Zabiza_49, Zavala_56,

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

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

Summary by start number:

Start 6:
• Found in 90 of 90 (100.0%) of genes in pham
• Manual Annotations of this start: 85 of 85
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ActinUp_54 (K1), Adephagia_54 (K1), Adonis_54 (K1), AlishaPH_54 (K1), Anaya_56 (K1), Angelica_54 (K1), Anma_55 (K1), Apocalypse_57 (K1), Asayake_54 (K1), Atiba_55 (K1), BEEST_54 (K1), BGlluviae_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), CheetoDust_53 (K1), Clipper_57 (K1), CrimD_54 (K1), Curiosium_56 (K1), Dalmuri_54 (K1), DartGoblin_56 (K1), Deby_54 (K1), Devera_59 (K1), Dole_57 (K1), DrHayes_55 (K1), Durfee_54 (K1), Emerson_55 (K1), Ganymede_55 (K1), Geraldini_57 (K1), 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), Kheparia_54 (K1), LaterM_55 (K1), LindNT_53 (K1), Llorens_54 (K1), Lokum_55 (K1), Lunahalos_54 (K1), MacKat_49 (K1), MeaningOfLife_55 (K1), Megsy_56 (K1), Murucutumbu_55 (K1), Mynx_55 (K1), Padfoot_54 (K1), Padpat_56 (K1), Peel_54 (K1), Piatt_54 (K1), Pisa1_54 (K1), Pisa4_48 (K1), Pokerus_53 (K1), Prithvi_55 (K1), QuincyRose_53 (K1), Ramen_55

(K1), Rapunzel97_55 (K1), Rosmarinus_54 (K1), SamuelLPlaqson_55 (K1), ShiaSurprise_55 (K1), 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), TruffulaTree_54 (K1), Twitch_54 (K1), Urkel_55 (K1), Veliki_55 (K1), YoureAdopted_53 (K1), Zabiza_49 (K1), Zavala_56 (K1),

Summary by clusters:

There is one cluster represented in this pham: K1

Info for manual annotations of cluster K1:
•Start number 6 was manually annotated 85 times for cluster K1.

Gene Information:

Gene: ActinUp_54 Start: 39118, Stop: 39498, Start Num: 6
Candidate Starts for ActinUp_54:
(3, 38953), (4, 39004), (Start: 6 @39118 has 85 MA's), (15, 39364), (16, 39379), (18, 39418), (20, 39436),

Gene: Adephagia_54 Start: 39115, Stop: 39498, Start Num: 6
Candidate Starts for Adephagia_54:
(1, 38860), (2, 38872), (3, 38950), (4, 39001), (Start: 6 @39115 has 85 MA's), (10, 39265), (15, 39361), (16, 39376), (18, 39415), (19, 39424),

Gene: Adonis_54 Start: 39359, Stop: 39742, Start Num: 6
Candidate Starts for Adonis_54:
(1, 39104), (2, 39116), (3, 39194), (4, 39245), (Start: 6 @39359 has 85 MA's), (15, 39605), (16, 39620), (18, 39659), (19, 39668),

Gene: AlishaPH_54 Start: 39376, Stop: 39759, Start Num: 6
Candidate Starts for AlishaPH_54:
(1, 39121), (2, 39133), (3, 39211), (4, 39262), (Start: 6 @39376 has 85 MA's), (10, 39526), (15, 39622), (16, 39637), (18, 39676), (19, 39685),

Gene: Anaya_56 Start: 39634, Stop: 40017, Start Num: 6
Candidate Starts for Anaya_56:
(3, 39469), (4, 39520), (Start: 6 @39634 has 85 MA's), (14, 39850), (15, 39880), (16, 39895), (18, 39934), (19, 39943), (20, 39952),

Gene: Angelica_54 Start: 39265, Stop: 39633, Start Num: 6
Candidate Starts for Angelica_54:
(1, 39010), (2, 39022), (3, 39100), (4, 39151), (Start: 6 @39265 has 85 MA's), (15, 39511), (16, 39526), (18, 39565), (20, 39583),

Gene: Anma_55 Start: 40012, Stop: 40377, Start Num: 6
Candidate Starts for Anma_55:
(3, 39847), (4, 39898), (Start: 6 @40012 has 85 MA's), (7, 40063), (8, 40102), (13, 40225), (15, 40255), (16, 40270), (18, 40309), (19, 40318), (20, 40327),

Gene: Apocalypse_57 Start: 40045, Stop: 40428, Start Num: 6

Candidate Starts for Apocalypse_57:
(1, 39790), (2, 39802), (3, 39880), (4, 39931), (5, 39940), (Start: 6 @40045 has 85 MA's), (10, 40195), (15, 40291), (16, 40306), (18, 40345), (19, 40354),

Gene: Asayake_54 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for Asayake_54:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: Atiba_55 Start: 39078, Stop: 39461, Start Num: 6
Candidate Starts for Atiba_55:
(1, 38823), (2, 38835), (3, 38913), (4, 38964), (Start: 6 @39078 has 85 MA's), (10, 39228), (15, 39324), (16, 39339), (18, 39378), (19, 39387),

Gene: BEEST_54 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for BEEST_54:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: BGlluviae_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for BGlluviae_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: BaghaKamala_53 Start: 38477, Stop: 38860, Start Num: 6
Candidate Starts for BaghaKamala_53:
(3, 38312), (4, 38363), (5, 38372), (Start: 6 @38477 has 85 MA's), (10, 38627), (15, 38723), (16, 38738), (18, 38777), (19, 38786),

Gene: BarrelRoll_54 Start: 39101, Stop: 39481, Start Num: 6
Candidate Starts for BarrelRoll_54:
(3, 38936), (4, 38987), (Start: 6 @39101 has 85 MA's), (10, 39251), (15, 39347), (16, 39362), (18, 39401), (20, 39419),

Gene: Beezoo_56 Start: 40076, Stop: 40459, Start Num: 6
Candidate Starts for Beezoo_56:
(1, 39821), (2, 39833), (3, 39911), (4, 39962), (Start: 6 @40076 has 85 MA's), (15, 40322), (16, 40337), (19, 40385),

Gene: Bella96_55 Start: 39857, Stop: 40222, Start Num: 6
Candidate Starts for Bella96_55:
(3, 39692), (4, 39743), (Start: 6 @39857 has 85 MA's), (7, 39908), (8, 39947), (13, 40070), (15, 40100), (16, 40115), (18, 40154), (19, 40163), (20, 40172),

Gene: Belladonna_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Belladonna_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: Bern_55 Start: 38067, Stop: 38450, Start Num: 6
Candidate Starts for Bern_55:
(1, 37812), (2, 37824), (3, 37902), (4, 37953), (5, 37962), (Start: 6 @38067 has 85 MA's), (10, 38217), (15, 38313), (16, 38328), (18, 38367), (19, 38376),

Gene: Blizzard_54 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for Blizzard_54:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: Boiiii_54 Start: 39432, Stop: 39815, Start Num: 6
Candidate Starts for Boiiii_54:
(1, 39177), (2, 39189), (3, 39267), (4, 39318), (Start: 6 @39432 has 85 MA's), (10, 39582), (15, 39678), (16, 39693), (18, 39732), (19, 39741),

Gene: CREW_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for CREW_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: CallaLilly_54 Start: 39156, Stop: 39539, Start Num: 6
Candidate Starts for CallaLilly_54:
(1, 38901), (2, 38913), (3, 38991), (4, 39042), (Start: 6 @39156 has 85 MA's), (10, 39306), (15, 39402), (16, 39417), (18, 39456), (19, 39465),

Gene: Capricorn_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Capricorn_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: CaseJules_56 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for CaseJules_56:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: CheetoDust_53 Start: 38521, Stop: 38904, Start Num: 6
Candidate Starts for CheetoDust_53:
(1, 38266), (2, 38278), (3, 38356), (4, 38407), (5, 38416), (Start: 6 @38521 has 85 MA's), (10, 38671), (15, 38767), (16, 38782), (18, 38821), (19, 38830),

Gene: Clipper_57 Start: 39697, Stop: 40077, Start Num: 6
Candidate Starts for Clipper_57:
(1, 39442), (2, 39454), (3, 39532), (4, 39583), (Start: 6 @39697 has 85 MA's), (15, 39943), (16, 39958), (18, 39997), (20, 40015),

Gene: CrimD_54 Start: 39353, Stop: 39733, Start Num: 6
Candidate Starts for CrimD_54:
(1, 39098), (2, 39110), (3, 39188), (4, 39239), (Start: 6 @39353 has 85 MA's), (11, 39521), (15, 39599), (16, 39614), (18, 39653), (19, 39662), (20, 39671),

Gene: Curiosium_56 Start: 38035, Stop: 38376, Start Num: 6
Candidate Starts for Curiosium_56:
(Start: 6 @38035 has 85 MA's), (12, 38242), (17, 38320),

Gene: Dalmuri_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Dalmuri_54:

(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: DartGoblin_56 Start: 39829, Stop: 40194, Start Num: 6
Candidate Starts for DartGoblin_56:
(3, 39664), (4, 39715), (Start: 6 @39829 has 85 MA's), (7, 39880), (8, 39919), (13, 40042), (15, 40072), (16, 40087), (18, 40126), (19, 40135), (20, 40144),

Gene: Deby_54 Start: 39292, Stop: 39672, Start Num: 6
Candidate Starts for Deby_54:
(1, 39037), (2, 39049), (3, 39127), (4, 39178), (Start: 6 @39292 has 85 MA's), (10, 39442), (16, 39553), (18, 39592), (19, 39601),

Gene: Devera_59 Start: 39872, Stop: 40252, Start Num: 6
Candidate Starts for Devera_59:
(Start: 6 @39872 has 85 MA's), (13, 40085), (15, 40115), (16, 40130), (18, 40169), (19, 40178),

Gene: Dole_57 Start: 39875, Stop: 40255, Start Num: 6
Candidate Starts for Dole_57:
(Start: 6 @39875 has 85 MA's), (13, 40088), (15, 40118), (16, 40133), (18, 40172), (19, 40181),

Gene: DrHayes_55 Start: 40012, Stop: 40377, Start Num: 6
Candidate Starts for DrHayes_55:
(3, 39847), (4, 39898), (Start: 6 @40012 has 85 MA's), (7, 40063), (8, 40102), (13, 40225), (15, 40255), (16, 40270), (18, 40309), (19, 40318), (20, 40327),

Gene: Durfee_54 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for Durfee_54:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: Emerson_55 Start: 39112, Stop: 39495, Start Num: 6
Candidate Starts for Emerson_55:
(1, 38857), (2, 38869), (3, 38947), (4, 38998), (Start: 6 @39112 has 85 MA's), (10, 39262), (15, 39358), (16, 39373), (18, 39412), (19, 39421),

Gene: Ganymede_55 Start: 39494, Stop: 39874, Start Num: 6
Candidate Starts for Ganymede_55:
(1, 39239), (2, 39251), (3, 39329), (4, 39380), (Start: 6 @39494 has 85 MA's), (10, 39644), (15, 39740), (16, 39755), (18, 39794),

Gene: Geraldini_57 Start: 40165, Stop: 40548, Start Num: 6
Candidate Starts for Geraldini_57:
(3, 40000), (4, 40051), (Start: 6 @40165 has 85 MA's), (10, 40315), (15, 40411), (16, 40426), (18, 40465), (19, 40474),

Gene: HedwigODU_54 Start: 39118, Stop: 39498, Start Num: 6
Candidate Starts for HedwigODU_54:
(3, 38953), (4, 39004), (Start: 6 @39118 has 85 MA's), (15, 39364), (16, 39379), (18, 39418), (20, 39436),

Gene: Homura_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Homura_54:

(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: Hyperbowlee_54 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for Hyperbowlee_54:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: Illumine_57 Start: 39874, Stop: 40254, Start Num: 6
Candidate Starts for Illumine_57:
(Start: 6 @39874 has 85 MA's), (13, 40087), (15, 40117), (16, 40132), (18, 40171), (19, 40180),

Gene: Inky_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Inky_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: JAWS_54 Start: 39107, Stop: 39487, Start Num: 6
Candidate Starts for JAWS_54:
(1, 38852), (2, 38864), (3, 38942), (4, 38993), (Start: 6 @39107 has 85 MA's), (15, 39353), (16, 39368), (18, 39407), (20, 39425),

Gene: Jarvi_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Jarvi_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: Jayhawk_55 Start: 39116, Stop: 39496, Start Num: 6
Candidate Starts for Jayhawk_55:
(3, 38951), (4, 39002), (Start: 6 @39116 has 85 MA's), (10, 39266), (15, 39362), (16, 39377), (18, 39416), (20, 39434),

Gene: Jeckyll_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Jeckyll_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: Joy99_54 Start: 39162, Stop: 39545, Start Num: 6
Candidate Starts for Joy99_54:
(1, 38907), (2, 38919), (3, 38997), (4, 39048), (Start: 6 @39162 has 85 MA's), (10, 39312), (15, 39408), (16, 39423), (18, 39462), (19, 39471),

Gene: Kheparia_54 Start: 37106, Stop: 37489, Start Num: 6
Candidate Starts for Kheparia_54:
(3, 36941), (4, 36992), (Start: 6 @37106 has 85 MA's), (7, 37157), (8, 37196), (13, 37319), (15, 37349), (16, 37364), (18, 37403), (19, 37412), (20, 37421), (21, 37463),

Gene: LaterM_55 Start: 39999, Stop: 40379, Start Num: 6
Candidate Starts for LaterM_55:
(3, 39834), (4, 39885), (Start: 6 @39999 has 85 MA's), (9, 40134), (15, 40245), (16, 40260), (18, 40299), (19, 40308), (20, 40317),

Gene: LindNT_53 Start: 39321, Stop: 39701, Start Num: 6

Candidate Starts for LindNT_53:
(1, 39066), (2, 39078), (3, 39156), (4, 39207), (Start: 6 @39321 has 85 MA's), (11, 39489), (15, 39567), (16, 39582), (18, 39621), (19, 39630), (20, 39639),

Gene: Llorens_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Llorens_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: Lokum_55 Start: 39234, Stop: 39617, Start Num: 6
Candidate Starts for Lokum_55:
(1, 38979), (2, 38991), (3, 39069), (4, 39120), (Start: 6 @39234 has 85 MA's), (10, 39384), (15, 39480), (16, 39495), (18, 39534), (19, 39543),

Gene: Lunahalos_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Lunahalos_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: MacKat_49 Start: 34581, Stop: 34961, Start Num: 6
Candidate Starts for MacKat_49:
(1, 34326), (2, 34338), (3, 34416), (4, 34467), (Start: 6 @34581 has 85 MA's), (15, 34827), (16, 34842), (18, 34881), (20, 34899),

Gene: MeaningOfLife_55 Start: 39988, Stop: 40371, Start Num: 6
Candidate Starts for MeaningOfLife_55:
(1, 39733), (2, 39745), (3, 39823), (4, 39874), (Start: 6 @39988 has 85 MA's), (15, 40234), (16, 40249), (18, 40288), (19, 40297),

Gene: Megsy_56 Start: 39389, Stop: 39769, Start Num: 6
Candidate Starts for Megsy_56:
(3, 39224), (4, 39275), (Start: 6 @39389 has 85 MA's), (15, 39635), (16, 39650), (18, 39689), (19, 39698), (20, 39707),

Gene: Murucutumbu_55 Start: 40098, Stop: 40478, Start Num: 6
Candidate Starts for Murucutumbu_55:
(3, 39933), (4, 39984), (Start: 6 @40098 has 85 MA's), (15, 40344), (16, 40359), (18, 40398), (19, 40407), (20, 40416),

Gene: Mynx_55 Start: 39437, Stop: 39817, Start Num: 6
Candidate Starts for Mynx_55:
(3, 39272), (4, 39323), (Start: 6 @39437 has 85 MA's), (15, 39683), (16, 39698), (18, 39737), (20, 39755),

Gene: Padfoot_54 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for Padfoot_54:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: Padpat_56 Start: 39112, Stop: 39495, Start Num: 6
Candidate Starts for Padpat_56:
(1, 38857), (2, 38869), (3, 38947), (4, 38998), (Start: 6 @39112 has 85 MA's), (10, 39262), (15, 39358), (16, 39373), (18, 39412), (19, 39421),

Gene: Peel_54 Start: 39235, Stop: 39618, Start Num: 6
Candidate Starts for Peel_54:
(1, 38980), (2, 38992), (3, 39070), (4, 39121), (Start: 6 @39235 has 85 MA's), (10, 39385), (15, 39481), (16, 39496), (18, 39535), (19, 39544),

Gene: Piatt_54 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for Piatt_54:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: Pisa1_54 Start: 40091, Stop: 40474, Start Num: 6
Candidate Starts for Pisa1_54:
(1, 39836), (2, 39848), (3, 39926), (4, 39977), (Start: 6 @40091 has 85 MA's), (8, 40181), (13, 40304), (15, 40334), (16, 40349), (18, 40388), (19, 40397), (20, 40406), (21, 40448),

Gene: Pisa4_48 Start: 35460, Stop: 35843, Start Num: 6
Candidate Starts for Pisa4_48:
(1, 35205), (2, 35217), (3, 35295), (4, 35346), (Start: 6 @35460 has 85 MA's), (8, 35550), (13, 35673), (15, 35703), (16, 35718), (18, 35757), (19, 35766), (20, 35775), (21, 35817),

Gene: Pokerus_53 Start: 39165, Stop: 39548, Start Num: 6
Candidate Starts for Pokerus_53:
(3, 39000), (4, 39051), (Start: 6 @39165 has 85 MA's), (10, 39315), (15, 39411), (16, 39426), (18, 39465), (19, 39474),

Gene: Prithvi_55 Start: 39321, Stop: 39701, Start Num: 6
Candidate Starts for Prithvi_55:
(1, 39066), (2, 39078), (3, 39156), (4, 39207), (Start: 6 @39321 has 85 MA's), (11, 39489), (15, 39567), (16, 39582), (18, 39621), (19, 39630), (20, 39639),

Gene: QuincyRose_53 Start: 39494, Stop: 39874, Start Num: 6
Candidate Starts for QuincyRose_53:
(1, 39239), (2, 39251), (3, 39329), (4, 39380), (Start: 6 @39494 has 85 MA's), (10, 39644), (15, 39740), (16, 39755), (18, 39794),

Gene: Ramen_55 Start: 39120, Stop: 39500, Start Num: 6
Candidate Starts for Ramen_55:
(3, 38955), (4, 39006), (Start: 6 @39120 has 85 MA's), (15, 39366), (16, 39381), (18, 39420), (20, 39438),

Gene: Rapunzel97_55 Start: 39116, Stop: 39496, Start Num: 6
Candidate Starts for Rapunzel97_55:
(3, 38951), (4, 39002), (Start: 6 @39116 has 85 MA's), (10, 39266), (15, 39362), (16, 39377), (18, 39416), (20, 39434),

Gene: Rosmarinus_54 Start: 39221, Stop: 39604, Start Num: 6
Candidate Starts for Rosmarinus_54:
(1, 38966), (2, 38978), (3, 39056), (4, 39107), (Start: 6 @39221 has 85 MA's), (10, 39371), (15, 39467), (16, 39482), (18, 39521), (19, 39530),

Gene: SamuelLPlaqson_55 Start: 40012, Stop: 40377, Start Num: 6
Candidate Starts for SamuelLPlaqson_55:

(3, 39847), (4, 39898), (Start: 6 @40012 has 85 MA's), (7, 40063), (8, 40102), (13, 40225), (15, 40255), (16, 40270), (18, 40309), (19, 40318), (20, 40327),

Gene: ShiaSurprise_55 Start: 39430, Stop: 39813, Start Num: 6
Candidate Starts for ShiaSurprise_55:
(1, 39175), (2, 39187), (3, 39265), (4, 39316), (Start: 6 @39430 has 85 MA's), (10, 39580), (15, 39676), (16, 39691), (18, 39730), (19, 39739),

Gene: Slimphazie_54 Start: 39116, Stop: 39496, Start Num: 6
Candidate Starts for Slimphazie_54:
(3, 38951), (4, 39002), (Start: 6 @39116 has 85 MA's), (10, 39266), (15, 39362), (16, 39377), (18, 39416), (20, 39434),

Gene: Spock_54 Start: 39234, Stop: 39617, Start Num: 6
Candidate Starts for Spock_54:
(1, 38979), (2, 38991), (3, 39069), (4, 39120), (Start: 6 @39234 has 85 MA's), (10, 39384), (15, 39480), (16, 39495), (18, 39534), (19, 39543),

Gene: Stinson_55 Start: 39621, Stop: 40001, Start Num: 6
Candidate Starts for Stinson_55:
(3, 39456), (4, 39507), (Start: 6 @39621 has 85 MA's), (13, 39834), (15, 39864), (16, 39879), (18, 39918), (19, 39927), (20, 39936),

Gene: Sulley_54 Start: 39280, Stop: 39666, Start Num: 6
Candidate Starts for Sulley_54:
(3, 39115), (4, 39166), (5, 39175), (Start: 6 @39280 has 85 MA's), (10, 39430), (15, 39526), (16, 39541), (18, 39580), (19, 39589), (20, 39598), (21, 39640),

Gene: Tachez_54 Start: 39078, Stop: 39461, Start Num: 6
Candidate Starts for Tachez_54:
(1, 38823), (2, 38835), (3, 38913), (4, 38964), (Start: 6 @39078 has 85 MA's), (10, 39228), (15, 39324), (16, 39339), (18, 39378), (19, 39387),

Gene: TaiwanKao_56 Start: 39383, Stop: 39763, Start Num: 6
Candidate Starts for TaiwanKao_56:
(1, 39128), (2, 39140), (3, 39218), (4, 39269), (Start: 6 @39383 has 85 MA's), (15, 39629), (16, 39644), (18, 39683), (19, 39692), (20, 39701),

Gene: TiniBug_55 Start: 40008, Stop: 40373, Start Num: 6
Candidate Starts for TiniBug_55:
(3, 39843), (4, 39894), (Start: 6 @40008 has 85 MA's), (7, 40059), (8, 40098), (13, 40221), (15, 40251), (18, 40305), (19, 40314), (20, 40323),

Gene: Tiri_55 Start: 39408, Stop: 39788, Start Num: 6
Candidate Starts for Tiri_55:
(1, 39153), (2, 39165), (3, 39243), (4, 39294), (Start: 6 @39408 has 85 MA's), (10, 39558), (15, 39654), (16, 39669), (18, 39708), (19, 39717),

Gene: Topper_54 Start: 39233, Stop: 39616, Start Num: 6
Candidate Starts for Topper_54:
(1, 38978), (2, 38990), (3, 39068), (4, 39119), (Start: 6 @39233 has 85 MA's), (10, 39383), (15, 39479), (16, 39494), (18, 39533), (19, 39542),

Gene: TreyKay_55 Start: 39321, Stop: 39701, Start Num: 6
Candidate Starts for TreyKay_55:
(1, 39066), (2, 39078), (3, 39156), (4, 39207), (Start: 6 @39321 has 85 MA's), (11, 39489), (15, 39567), (16, 39582), (18, 39621), (19, 39630), (20, 39639),

Gene: TruffulaTree_54 Start: 39112, Stop: 39492, Start Num: 6
Candidate Starts for TruffulaTree_54:
(3, 38947), (4, 38998), (Start: 6 @39112 has 85 MA's), (10, 39262), (15, 39358), (16, 39373), (18, 39412), (20, 39430),

Gene: Twitch_54 Start: 39235, Stop: 39618, Start Num: 6
Candidate Starts for Twitch_54:
(1, 38980), (2, 38992), (3, 39070), (4, 39121), (Start: 6 @39235 has 85 MA's), (10, 39385), (15, 39481), (16, 39496), (18, 39535), (19, 39544),

Gene: Urkel_55 Start: 40012, Stop: 40377, Start Num: 6
Candidate Starts for Urkel_55:
(3, 39847), (4, 39898), (Start: 6 @40012 has 85 MA's), (7, 40063), (8, 40102), (13, 40225), (15, 40255), (16, 40270), (18, 40309), (19, 40318), (20, 40327),

Gene: Veliki_55 Start: 39098, Stop: 39478, Start Num: 6
Candidate Starts for Veliki_55:
(1, 38843), (2, 38855), (3, 38933), (4, 38984), (Start: 6 @39098 has 85 MA's), (15, 39344), (16, 39359), (18, 39398), (20, 39416),

Gene: YoureAdopted_53 Start: 39236, Stop: 39616, Start Num: 6
Candidate Starts for YoureAdopted_53:
(1, 38981), (2, 38993), (3, 39071), (4, 39122), (Start: 6 @39236 has 85 MA's), (15, 39482), (16, 39497), (18, 39536), (19, 39545),

Gene: Zabiza_49 Start: 35423, Stop: 35803, Start Num: 6
Candidate Starts for Zabiza_49:
(3, 35258), (4, 35309), (Start: 6 @35423 has 85 MA's), (15, 35669), (16, 35684), (18, 35723), (20, 35741),

Gene: Zavala_56 Start: 39397, Stop: 39777, Start Num: 6
Candidate Starts for Zavala_56:
(3, 39232), (4, 39283), (Start: 6 @39397 has 85 MA's), (15, 39643), (16, 39658), (18, 39697), (20, 39715),