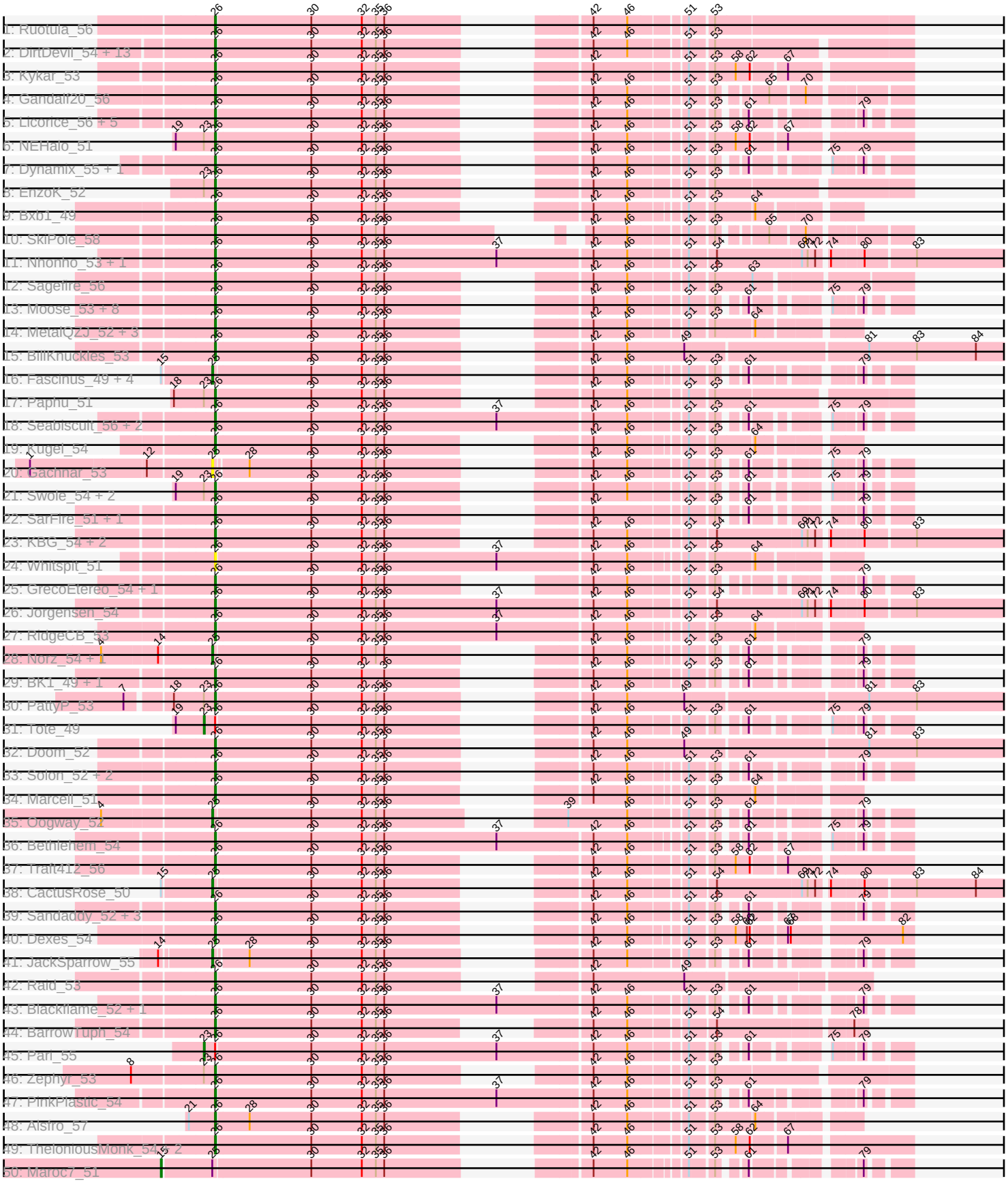
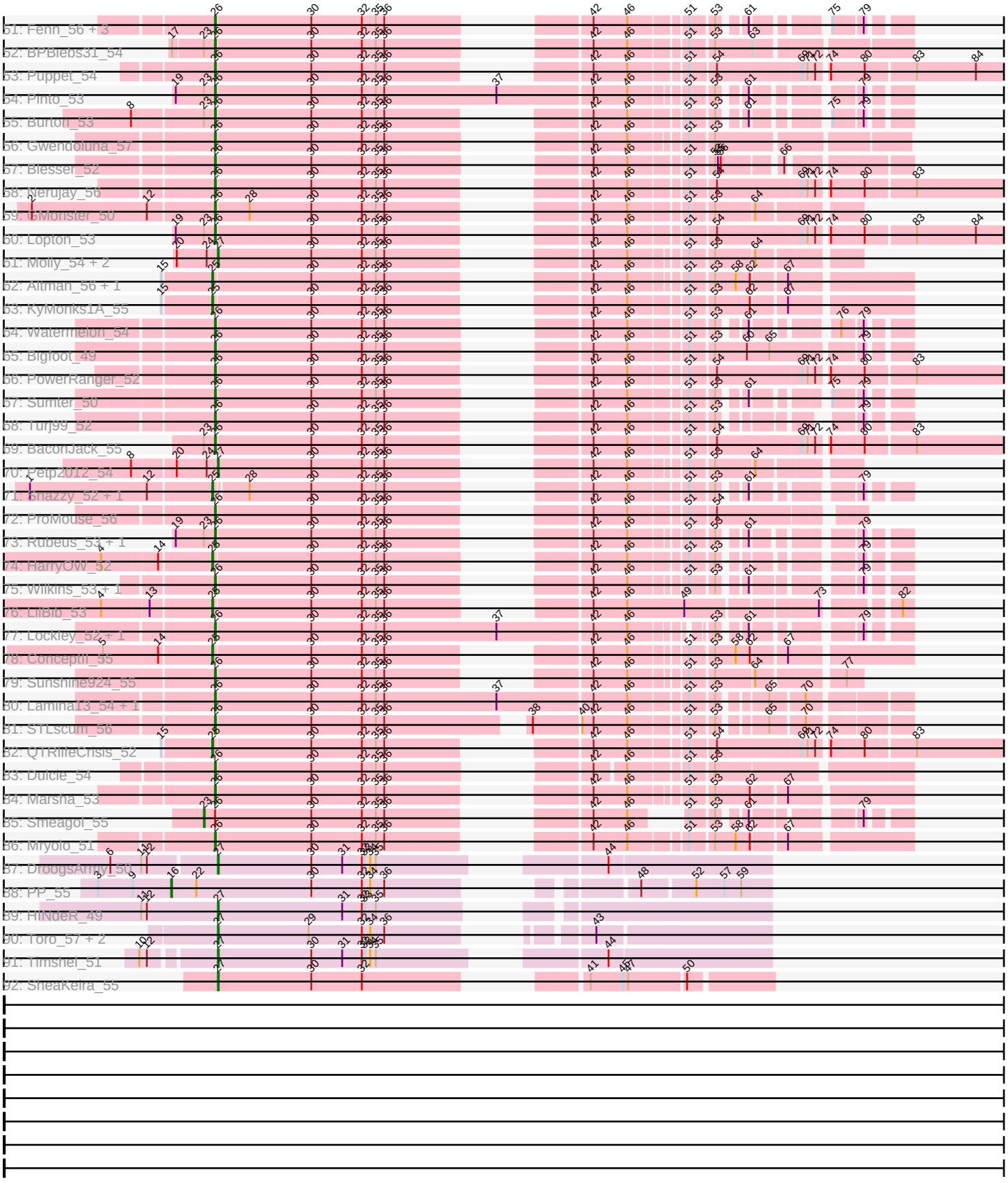
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1: Ruotula_56
2: DirtDevil_54 + 13
3: Kykar_53
4: Gandalf20_56
5: Licorice_56 + 5
6: NEHalo_51
7: Dynamix_55 + 1
8: EnzoK_52
9: Bx01_49
10: SkiPole_58
11: Nhonho_53 + 1
12: Sagelfre_56
13: Moose_53 + 8
14: MetalQZJ_52 + 3
15: BillKnuckles_53
16: Fascinus_49 + 4
17: Paphu_51
18: Seabiscuit_56 + 2
19: Kugel_54
20: Gachnar_53
21: Swole_54 + 2
22: SarFire_51 + 1
23: KBG_54 + 2
24: Whitspit_51
25: GrecoEtereo_54 + 1
26: Jorgensen_54
27: RidgeCB_53
28: Norz_54 + 1
29: BK1_49 + 1
30: PattyP_53
31: Tote_49
32: Doom_52
33: Solon_52 + 2
34: Marcell_51
35: Oogway_52
36: Bethlehem_54
37: Trail412_56
38: CactusRose_50
39: Sandaddy_52 + 3
40: Dexes_54
41: JackSparrow_55
42: Raid_53
43: Blackflame_52 + 1
44: BarrowTuph_54
45: Pari_55
46: Zephyr_53
47: PinkPlastic_54
48: Alsiro_57
49: ThelioniousMonk_54 + 2
50: Maroc7_51

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51: Fenn_56 + 3
52: BPBlebs31_54
53: Puppet_54
54: Pinto_53
55: Burton_53
56: Gwendoluna_57
57: Blesser_52
58: Nerujay_56
59: GMonster_50
60: Lopton_53
61: Molly_54 + 2
62: Altman_56 + 1
63: KyMonks1A_55
64: Watermelon_54
65: Bigfoot_49
66: PowerRanger_52
67: Sumter_50
68: Turj99_52
69: BaconJack_55
70: Petp2012_54
71: Snazzy_52 + 1
72: ProMouse_56
73: Rubeus_53 + 1
74: HarryOW_52
75: Wilkins_53 + 1
76: LilBib_53
77: Lockley_52 + 1
78: Conceptll_55
79: Sunshine924_55
80: Lamina13_54 + 1
81: STLscum_56
82: QTRifleCrisis_52
83: Dulcie_54
84: Marsha_53
85: Smeagol_55
86: Mryolo_51
87: DroogsArmy1_50
88: PP_55
89: HiNdeR_49
90: Toro_57 + 2
91: Timshel_51
92: SheaKeira_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 347336 Report

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

Pham number 347336 has 158 members, 10 are drafts.

Phages represented in each track:
• Track 1 : Ruotula_56
• Track 2 : DirtDevil_54, Hermia_54, Greg_55, Ciao_53, Buttons_52, KikiBouba_54, Marge_53, Ohno789_55, Fajezeel_55, Pippin_55, GroundGoblin_53, CatBus_53, Noxious_54, Aldrich_53
• Track 3 : Kykar_53
• Track 4 : Gandalf20_56
• Track 5 : Licorice_56, StewieG_50, Homines_46, McSinger_54, HanShotFirst_54, Sanya_52
• Track 6 : NEHalo_51
• Track 7 : Dynamix_55, BeesKnees_56
• Track 8 : EnzoK_52
• Track 9 : Bxb1_49
• Track 10 : SkiPole_58
• Track 11 : Nhonho_53, Hope4ever_55
• Track 12 : Sagefire_56
• Track 13 : Moose_53, Corvo_54, Forsytheast_53, SwissCheese_55, PascalRango_54, McGuire_55, KSSJEB_53, Papez_56, Killigrew_54
• Track 14 : MetalQZJ_52, ILeeKay_57, MaryBeth_53, Rajelicia_54
• Track 15 : BillKnuckles_53
• Track 16 : Fascinus_49, Bigchungi_53, Gyzlar_49, Phlippers_52, CartmannCramer_52
• Track 17 : Paphu_51
• Track 18 : Seabiscuit_56, DreamCatcher_57, Briton15_57
• Track 19 : Kugel_54
• Track 20 : Gachnar_53
• Track 21 : Swole_54, JuliaChild_54, Museum_54
• Track 22 : SarFire_51, Thor_51
• Track 23 : KBG_54, Bexan_51, StrongArm_52
• Track 24 : Whitspit_51
• Track 25 : GrecoEtereo_54, Magnito_52
• Track 26 : Jorgensen_54
• Track 27 : RidgeCB_53
• Track 28 : Norz_54, Atkinbua_56
• Track 29 : BK1_49, A6_49
• Track 30 : PattyP_53
• Track 31 : Tote_49
• Track 32 : Doom_52

• Track 33 : Solon_52, Target_54, U2_53
• Track 34 : Marcell_51
• Track 35 : Oogway_52
• Track 36 : Bethlehem_54
• Track 37 : Traft412_56
• Track 38 : CactusRose_50
• Track 39 : Sandaddy_52, MilleFeuille_53, Ringer_54, Sorpresa_52
• Track 40 : Dexes_54
• Track 41 : JackSparrow_55
• Track 42 : Raid_53
• Track 43 : Blackflame_52, Parliament_53
• Track 44 : BarrowTuph_54
• Track 45 : Pari_55
• Track 46 : Zephyr_53
• Track 47 : PinkPlastic_54
• Track 48 : Alsfro_57
• Track 49 : TheloniousMonk_54, Peterson_58, Paraselene_51
• Track 50 : Maroc7_51
• Track 51 : Fenn_56, Switzer_55, Squee_54, Naira_56
• Track 52 : BPBiebs31_54
• Track 53 : Puppet_54
• Track 54 : Pinto_53
• Track 55 : Burton_53
• Track 56 : Gwendoluna_57
• Track 57 : Blesser_52
• Track 58 : Nerujay_56
• Track 59 : GMonster_50
• Track 60 : Lopton_53
• Track 61 : Molly_54, Arcanine_54, Slagathor_55
• Track 62 : Altman_56, Kanely_55
• Track 63 : KyMonks1A_55
• Track 64 : Watermelon_54
• Track 65 : Bigfoot_49
• Track 66 : PowerRanger_52
• Track 67 : Sumter_50
• Track 68 : Turj99_52
• Track 69 : BaconJack_55
• Track 70 : Petp2012_54
• Track 71 : Snazzy_52, ShortQueendom_48
• Track 72 : ProMouse_56
• Track 73 : Rubeus_53, Ichabod_56
• Track 74 : HarryOW_52
• Track 75 : Wilkins_53, Topgun_53
• Track 76 : LilBib_53
• Track 77 : Lockley_52, DD5_53
• Track 78 : ConceptII_55
• Track 79 : Sunshine924_55
• Track 80 : Lamina13_54, Tasp14_55
• Track 81 : STLscum_56
• Track 82 : QTRlifeCrisis_52
• Track 83 : Dulcie_54
• Track 84 : Marsha_53
• Track 85 : Smeagol_55

• Track 86 : Mryolo_51
• Track 87 : DroogsArmy_50
• Track 88 : PP_55
• Track 89 : HINdeR_49
• Track 90 : Toro_57, Sheen_55, FlyCatcher_59
• Track 91 : Timshel_51
• Track 92 : SheaKeira_55

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

The start number called the most often in the published annotations is 26, it was called in 117 of the 148 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A6_49, Aldrich_53, Alsfro_57, BK1_49, BPBiebs31_54, BaconJack_55, BarrowTuph_54, BeesKnees_56, Bethlehem_54, Bexan_51, Bigfoot_49, BillKnuckles_53, Blackflame_52, Blesser_52, Briton15_57, Burton_53, Buttons_52, Bxb1_49, CatBus_53, Ciao_53, Corvo_54, DD5_53, Dexes_54, DirtDevil_54, Doom_52, DreamCatcher_57, Dulcie_54, Dynamix_55, EnzoK_52, Fajezeel_55, Fenn_56, Forsytheast_53, GMonster_50, Gandalf20_56, GrecoEtereo_54, Greg_55, GroundGoblin_53, Gwendoluna_57, HanShotFirst_54, Hermia_54, Homines_46, Hope4ever_55, ILeeKay_57, Ichabod_56, Jorgensen_54, JuliaChild_54, KBG_54, KSSJEB_53, KikiBouba_54, Killigrew_54, Kugel_54, Kykar_53, Lamina13_54, Licorice_56, Lockley_52, Lopton_53, Magnito_52, Marcell_51, Marge_53, Marsha_53, MaryBeth_53, McGuire_55, McSinger_54, MetalQZJ_52, MilleFeuille_53, Moose_53, Mryolo_51, Museum_54, NEHalo_51, Naira_56, Nerujay_56, Nhonho_53, Noxious_54, Ohno789_55, Papez_56, Paphu_51, Paraselene_51, Parliament_53, PascalRango_54, PattyP_53, Peterson_58, PinkPlastic_54, Pinto_53, Pippin_55, PowerRanger_52, ProMouse_56, Puppet_54, Raid_53, Rajelicia_54, RidgeCB_53, Ringer_54, Rubeus_53, Ruotula_56, STLscum_56, Sagefire_56, Sandaddy_52, Sanya_52, SarFire_51, Seabiscuit_56, SkiPole_58, Solon_52, Sorpresa_52, Squee_54, StewieG_50, StrongArm_52, Sumter_50, Sunshine924_55, SwissCheese_55, Switzer_55, Swole_54, Target_54, Tasp14_55, TheloniousMonk_54, Thor_51, Topgun_53, Traft412_56, Turj99_52, U2_53, Watermelon_54, Whitspit_51, Wilkins_53, Zephyr_53,

Genes that have the "Most Annotated" start but do not call it:
• Pari_55, Smeagol_55, Tote_49,

Genes that do not have the "Most Annotated" start:
• Altman_56, Arcanine_54, Atkinbua_56, Bigchungi_53, CactusRose_50, CartmannCramer_52, ConceptII_55, DroogsArmy_50, Fascinus_49, FlyCatcher_59, Gachnar_53, Gyzlar_49, HINdeR_49, HarryOW_52, JackSparrow_55, Kanely_55, KyMonks1A_55, LilBib_53, Maroc7_51, Molly_54, Norz_54, Oogway_52, PP_55, Petp2012_54, Phlippers_52, QTRlifeCrisis_52, SheaKeira_55, Sheen_55, ShortQueendom_48, Slagathor_55, Snazzy_52, Timshel_51, Toro_57,

Summary by start number:

Start 15:

• Found in 11 of 158 (7.0%) of genes in pham
• Manual Annotations of this start: 1 of 148
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Maroc7_51 (A1),

Start 16:
• Found in 1 of 158 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 148
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PP_55 (A7),

Start 23:
• Found in 18 of 158 (11.4%) of genes in pham
• Manual Annotations of this start: 3 of 148
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Pari_55 (A1), Smeagol_55 (A1), Tote_49 (A1),

Start 25:
• Found in 21 of 158 (13.3%) of genes in pham
• Manual Annotations of this start: 17 of 148
• Called 95.2% of time when present
• Phage (with cluster) where this start called: Altman_56 (A1), Atkinbua_56 (A1), Bigchungi_53 (A1), CactusRose_50 (A1), CartmannCramer_52 (A1), ConceptII_55 (A1), Fascinus_49 (A1), Gachnar_53 (A1), Gyzlar_49 (A1), HarryOW_52 (A1), JackSparrow_55 (A1), Kanely_55 (A1), KyMonks1A_55 (A1), LilBib_53 (A1), Norz_54 (A1), Oogway_52 (A1), Phlippers_52 (A1), QTRlifeCrisis_52 (A1), ShortQueendom_48 (A1), Snazzy_52 (A1),

Start 26:
• Found in 125 of 158 (79.1%) of genes in pham
• Manual Annotations of this start: 117 of 148
• Called 97.6% of time when present
• Phage (with cluster) where this start called: A6_49 (A1), Aldrich_53 (A1), Alsfro_57 (A1), BK1_49 (A1), BPBiebs31_54 (A1), BaconJack_55 (A1), BarrowTuph_54 (A1), BeesKnees_56 (A1), Bethlehem_54 (A1), Bexan_51 (A1), Bigfoot_49 (A1), BillKnuckles_53 (A1), Blackflame_52 (A1), Blesser_52 (A1), Briton15_57 (A1), Burton_53 (A1), Buttons_52 (A1), Bxb1_49 (A1), CatBus_53 (A1), Ciao_53 (A1), Corvo_54 (A1), DD5_53 (A1), Dexes_54 (A1), DirtDevil_54 (A1), Doom_52 (A1), DreamCatcher_57 (A1), Dulcie_54 (A1), Dynamix_55 (A1), EnzoK_52 (A1), Fajezeel_55 (A1), Fenn_56 (A1), Forsytheast_53 (A1), GMonster_50 (A1), Gandalf20_56 (A1), GrecoEtereo_54 (A1), Greg_55 (A1), GroundGoblin_53 (A1), Gwendoluna_57 (A1), HanShotFirst_54 (A1), Hermia_54 (A1), Homines_46 (A1), Hope4ever_55 (A1), ILeeKay_57 (A1), Ichabod_56 (A1), Jorgensen_54 (A1), JuliaChild_54 (A1), KBG_54 (A1), KSSJEB_53 (A1), KikiBouba_54 (A1), Killigrew_54 (A1), Kugel_54 (A1), Kykar_53 (A1), Lamina13_54 (A1), Licorice_56 (A1), Lockley_52 (A1), Lopton_53 (A1), Magnito_52 (A1), Marcell_51 (A1), Marge_53 (A1), Marsha_53 (A1), MaryBeth_53 (A1), McGuire_55 (A1), McSinger_54 (A1), MetalQZJ_52 (A1), MilleFeuille_53 (A1), Moose_53 (A1), Mryolo_51 (A1), Museum_54 (A1), NEHalo_51 (A1), Naira_56 (A1), Nerujay_56 (A1), Nhonho_53 (A1), Noxious_54 (A1), Ohno789_55 (A1), Papez_56 (A1), Paphu_51 (A1), Paraselene_51 (A1), Parliament_53 (A1), PascalRango_54 (A1), PattyP_53 (A1), Peterson_58 (A1), PinkPlastic_54 (A1), Pinto_53 (A1), Pippin_55 (A1), PowerRanger_52 (A1),

ProMouse_56 (A1), Puppet_54 (A1), Raid_53 (A1), Rajelicia_54 (A1), RidgeCB_53 (A1), Ringer_54 (A1), Rubeus_53 (A1), Ruotula_56 (A1), STLscum_56 (A1), Sagefire_56 (A1), Sandaddy_52 (A1), Sanya_52 (A1), SarFire_51 (A1), Seabiscuit_56 (A1), SkiPole_58 (A1), Solon_52 (A1), Sorpresa_52 (A1), Squee_54 (A1), StewieG_50 (A1), StrongArm_52 (A1), Sumter_50 (A1), Sunshine924_55 (A1), SwissCheese_55 (A1), Switzer_55 (A1), Swole_54 (A1), Target_54 (A1), Tasp14_55 (A1), TheloniousMonk_54 (A1), Thor_51 (A1), Topgun_53 (A1), Traft412_56 (A1), Turj99_52 (A1), U2_53 (A1), Watermelon_54 (A1), Whitspit_51 (A1), Wilkins_53 (A1), Zephyr_53 (A1),

Start 27:
• Found in 11 of 158 (7.0%) of genes in pham
• Manual Annotations of this start: 9 of 148
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arcanine_54 (A1), DroogsArmy_50 (A7), FlyCatcher_59 (A7), HINdeR_49 (A7), Molly_54 (A1), Petp2012_54 (A1), SheaKeira_55 (A9), Sheen_55 (A7), Slagathor_55 (A1), Timshel_51 (A7), Toro_57 (A7),

Summary by clusters:

There are 3 clusters represented in this pham: A1, A9, A7,

Info for manual annotations of cluster A1:
•Start number 15 was manually annotated 1 time for cluster A1.
•Start number 23 was manually annotated 3 times for cluster A1.
•Start number 25 was manually annotated 17 times for cluster A1.
•Start number 26 was manually annotated 117 times for cluster A1.
•Start number 27 was manually annotated 4 times for cluster A1.

Info for manual annotations of cluster A7:
•Start number 16 was manually annotated 1 time for cluster A7.
•Start number 27 was manually annotated 4 times for cluster A7.

Info for manual annotations of cluster A9:
•Start number 27 was manually annotated 1 time for cluster A9.

Gene Information:

Gene: A6_49 Start: 36945, Stop: 36379, Start Num: 26
Candidate Starts for A6_49:
(Start: 26 @36945 has 117 MA's), (30, 36846), (32, 36792), (36, 36768), (42, 36633), (46, 36597), (51, 36543), (53, 36522), (61, 36501), (79, 36417),

Gene: Aldrich_53 Start: 38813, Stop: 38196, Start Num: 26
Candidate Starts for Aldrich_53:
(Start: 26 @38813 has 117 MA's), (30, 38714), (32, 38660), (35, 38645), (36, 38636), (42, 38501), (46, 38465), (51, 38411), (53, 38390),

Gene: Alsfro_57 Start: 38448, Stop: 37891, Start Num: 26
Candidate Starts for Alsfro_57:

(21, 38475), (Start: 26 @38448 has 117 MA's), (28, 38415), (30, 38349), (32, 38295), (35, 38280), (36, 38271), (42, 38136), (46, 38100), (51, 38046), (53, 38025), (64, 37986),

Gene: Altman_56 Start: 39112, Stop: 38498, Start Num: 25
Candidate Starts for Altman_56:
(Start: 15 @39163 has 1 MA's), (Start: 25 @39112 has 17 MA's), (30, 39010), (32, 38956), (35, 38941), (36, 38932), (42, 38797), (46, 38761), (51, 38710), (53, 38689), (58, 38668), (62, 38653), (67, 38620),

Gene: Arcanine_54 Start: 38877, Stop: 38323, Start Num: 27
Candidate Starts for Arcanine_54:
(20, 38919), (24, 38889), (Start: 27 @38877 has 9 MA's), (30, 38778), (32, 38724), (35, 38709), (36, 38700), (42, 38565), (46, 38529), (51, 38478), (53, 38457), (64, 38418),

Gene: Atkinbua_56 Start: 38718, Stop: 38152, Start Num: 25
Candidate Starts for Atkinbua_56:
(4, 38829), (14, 38772), (Start: 25 @38718 has 17 MA's), (30, 38616), (32, 38562), (35, 38547), (36, 38538), (42, 38403), (46, 38367), (51, 38316), (53, 38295), (61, 38274), (79, 38190),

Gene: BK1_49 Start: 36945, Stop: 36379, Start Num: 26
Candidate Starts for BK1_49:
(Start: 26 @36945 has 117 MA's), (30, 36846), (32, 36792), (36, 36768), (42, 36633), (46, 36597), (51, 36543), (53, 36522), (61, 36501), (79, 36417),

Gene: BPBiebs31_54 Start: 39309, Stop: 38695, Start Num: 26
Candidate Starts for BPBiebs31_54:
(17, 39351), (Start: 23 @39321 has 3 MA's), (Start: 26 @39309 has 117 MA's), (30, 39210), (32, 39156), (35, 39141), (36, 39132), (42, 38997), (46, 38961), (51, 38907), (53, 38886), (63, 38847),

Gene: BaconJack_55 Start: 39964, Stop: 39221, Start Num: 26
Candidate Starts for BaconJack_55:
(Start: 23 @39976 has 3 MA's), (Start: 26 @39964 has 117 MA's), (30, 39865), (32, 39811), (35, 39796), (36, 39787), (42, 39652), (46, 39616), (51, 39562), (54, 39538), (69, 39451), (71, 39445), (72, 39439), (74, 39430), (80, 39400), (83, 39349),

Gene: BarrowTuph_54 Start: 38581, Stop: 38015, Start Num: 26
Candidate Starts for BarrowTuph_54:
(Start: 26 @38581 has 117 MA's), (30, 38482), (32, 38428), (35, 38413), (36, 38404), (42, 38269), (46, 38233), (51, 38179), (54, 38155), (78, 38026),

Gene: BeesKnees_56 Start: 38614, Stop: 38048, Start Num: 26
Candidate Starts for BeesKnees_56:
(Start: 26 @38614 has 117 MA's), (30, 38515), (32, 38461), (35, 38446), (36, 38437), (42, 38302), (46, 38266), (51, 38212), (53, 38191), (61, 38170), (75, 38113), (79, 38086),

Gene: Bethlehem_54 Start: 40112, Stop: 39468, Start Num: 26
Candidate Starts for Bethlehem_54:
(Start: 26 @40112 has 117 MA's), (30, 40013), (32, 39959), (35, 39944), (36, 39935), (37, 39815), (42, 39719), (46, 39683), (51, 39632), (53, 39611), (61, 39590), (75, 39533), (79, 39506),

Gene: Bexan_51 Start: 39240, Stop: 38497, Start Num: 26
Candidate Starts for Bexan_51:
(Start: 26 @39240 has 117 MA's), (30, 39141), (32, 39087), (35, 39072), (36, 39063), (42, 38928), (46, 38892), (51, 38838), (54, 38814), (69, 38727), (71, 38721), (72, 38715), (74, 38706), (80, 38676), (83,

38625),

Gene: Bigchungi_53 Start: 37682, Stop: 37113, Start Num: 25
Candidate Starts for Bigchungi_53:
(Start: 15 @37733 has 1 MA's), (Start: 25 @37682 has 17 MA's), (30, 37580), (32, 37526), (35, 37511), (36, 37502), (42, 37367), (46, 37331), (51, 37277), (53, 37256), (61, 37235), (79, 37151),

Gene: Bigfoot_49 Start: 37265, Stop: 36663, Start Num: 26
Candidate Starts for Bigfoot_49:
(Start: 26 @37265 has 117 MA's), (30, 37166), (32, 37112), (35, 37097), (36, 37088), (42, 36953), (46, 36917), (51, 36863), (53, 36842), (60, 36809), (65, 36785), (79, 36701),

Gene: BillKnuckles_53 Start: 39161, Stop: 38388, Start Num: 26
Candidate Starts for BillKnuckles_53:
(Start: 26 @39161 has 117 MA's), (30, 39062), (32, 39008), (35, 38993), (36, 38984), (42, 38849), (46, 38813), (49, 38753), (81, 38567), (83, 38516), (84, 38453),

Gene: Blackflame_52 Start: 38321, Stop: 37674, Start Num: 26
Candidate Starts for Blackflame_52:
(Start: 26 @38321 has 117 MA's), (30, 38222), (32, 38168), (35, 38153), (36, 38144), (37, 38024), (42, 37928), (46, 37892), (51, 37838), (53, 37817), (61, 37796), (79, 37712),

Gene: Blesser_52 Start: 38226, Stop: 37630, Start Num: 26
Candidate Starts for Blesser_52:
(Start: 26 @38226 has 117 MA's), (30, 38127), (32, 38073), (35, 38058), (36, 38049), (42, 37914), (46, 37878), (51, 37824), (53, 37803), (55, 37800), (56, 37797), (66, 37743),

Gene: Briton15_57 Start: 38936, Stop: 38289, Start Num: 26
Candidate Starts for Briton15_57:
(Start: 26 @38936 has 117 MA's), (30, 38837), (32, 38783), (35, 38768), (36, 38759), (37, 38639), (42, 38543), (46, 38507), (51, 38453), (53, 38432), (61, 38411), (75, 38354), (79, 38327),

Gene: Burton_53 Start: 38704, Stop: 38138, Start Num: 26
Candidate Starts for Burton_53:
(8, 38788), (Start: 23 @38716 has 3 MA's), (Start: 26 @38704 has 117 MA's), (30, 38605), (32, 38551), (35, 38536), (36, 38527), (42, 38392), (46, 38356), (51, 38302), (53, 38281), (61, 38260), (75, 38203), (79, 38176),

Gene: Buttons_52 Start: 36766, Stop: 36149, Start Num: 26
Candidate Starts for Buttons_52:
(Start: 26 @36766 has 117 MA's), (30, 36667), (32, 36613), (35, 36598), (36, 36589), (42, 36454), (46, 36418), (51, 36364), (53, 36343),

Gene: Bxb1_49 Start: 37514, Stop: 36960, Start Num: 26
Candidate Starts for Bxb1_49:
(Start: 26 @37514 has 117 MA's), (30, 37415), (32, 37361), (35, 37346), (36, 37337), (42, 37202), (46, 37166), (51, 37115), (53, 37094), (64, 37055),

Gene: CactusRose_50 Start: 37728, Stop: 36982, Start Num: 25
Candidate Starts for CactusRose_50:
(Start: 15 @37779 has 1 MA's), (Start: 25 @37728 has 17 MA's), (30, 37626), (32, 37572), (35, 37557), (36, 37548), (42, 37413), (46, 37377), (51, 37323), (54, 37299), (69, 37212), (71, 37206), (72, 37200), (74, 37191), (80, 37161), (83, 37110), (84, 37047),

Gene: CartmannCramer_52 Start: 40075, Stop: 39509, Start Num: 25
Candidate Starts for CartmannCramer_52:
(Start: 15 @40126 has 1 MA's), (Start: 25 @40075 has 17 MA's), (30, 39973), (32, 39919), (35, 39904), (36, 39895), (42, 39760), (46, 39724), (51, 39673), (53, 39652), (61, 39631), (79, 39547),

Gene: CatBus_53 Start: 39005, Stop: 38388, Start Num: 26
Candidate Starts for CatBus_53:
(Start: 26 @39005 has 117 MA's), (30, 38906), (32, 38852), (35, 38837), (36, 38828), (42, 38693), (46, 38657), (51, 38603), (53, 38582),

Gene: Ciao_53 Start: 38224, Stop: 37607, Start Num: 26
Candidate Starts for Ciao_53:
(Start: 26 @38224 has 117 MA's), (30, 38125), (32, 38071), (35, 38056), (36, 38047), (42, 37912), (46, 37876), (51, 37822), (53, 37801),

Gene: ConceptII_55 Start: 39890, Stop: 39276, Start Num: 25
Candidate Starts for ConceptII_55:
(5, 40001), (14, 39944), (Start: 25 @39890 has 17 MA's), (30, 39788), (32, 39734), (35, 39719), (36, 39710), (42, 39575), (46, 39539), (51, 39488), (53, 39467), (58, 39446), (62, 39431), (67, 39398),

Gene: Corvo_54 Start: 39669, Stop: 39103, Start Num: 26
Candidate Starts for Corvo_54:
(Start: 26 @39669 has 117 MA's), (30, 39570), (32, 39516), (35, 39501), (36, 39492), (42, 39357), (46, 39321), (51, 39267), (53, 39246), (61, 39225), (75, 39168), (79, 39141),

Gene: DD5_53 Start: 39005, Stop: 38370, Start Num: 26
Candidate Starts for DD5_53:
(Start: 26 @39005 has 117 MA's), (30, 38906), (32, 38852), (35, 38837), (36, 38828), (37, 38708), (42, 38612), (46, 38576), (53, 38513), (61, 38492), (79, 38408),

Gene: Dexes_54 Start: 39125, Stop: 38514, Start Num: 26
Candidate Starts for Dexes_54:
(Start: 26 @39125 has 117 MA's), (30, 39026), (32, 38972), (35, 38957), (36, 38948), (42, 38813), (46, 38777), (51, 38726), (53, 38705), (58, 38684), (60, 38672), (62, 38669), (67, 38636), (68, 38633), (82, 38525),

Gene: DirtDevil_54 Start: 38813, Stop: 38196, Start Num: 26
Candidate Starts for DirtDevil_54:
(Start: 26 @38813 has 117 MA's), (30, 38714), (32, 38660), (35, 38645), (36, 38636), (42, 38501), (46, 38465), (51, 38411), (53, 38390),

Gene: Doom_52 Start: 38537, Stop: 37764, Start Num: 26
Candidate Starts for Doom_52:
(Start: 26 @38537 has 117 MA's), (30, 38438), (32, 38384), (35, 38369), (36, 38360), (42, 38225), (46, 38189), (49, 38129), (81, 37943), (83, 37892),

Gene: DreamCatcher_57 Start: 39673, Stop: 39026, Start Num: 26
Candidate Starts for DreamCatcher_57:
(Start: 26 @39673 has 117 MA's), (30, 39574), (32, 39520), (35, 39505), (36, 39496), (37, 39376), (42, 39280), (46, 39244), (51, 39190), (53, 39169), (61, 39148), (75, 39091), (79, 39064),

Gene: DroogsArmy_50 Start: 38758, Stop: 38237, Start Num: 27

Candidate Starts for DroogsArmy_50:
(6, 38866), (11, 38833), (12, 38827), (Start: 27 @38758 has 9 MA's), (30, 38659), (31, 38626), (32, 38605), (33, 38602), (34, 38596), (35, 38590), (44, 38407),

Gene: Dulcie_54 Start: 38438, Stop: 37827, Start Num: 26
Candidate Starts for Dulcie_54:
(Start: 26 @38438 has 117 MA's), (30, 38339), (32, 38285), (35, 38270), (36, 38261), (42, 38126), (46, 38096), (51, 38042), (53, 38021),

Gene: Dynamix_55 Start: 38412, Stop: 37846, Start Num: 26
Candidate Starts for Dynamix_55:
(Start: 26 @38412 has 117 MA's), (30, 38313), (32, 38259), (35, 38244), (36, 38235), (42, 38100), (46, 38064), (51, 38010), (53, 37989), (61, 37968), (75, 37911), (79, 37884),

Gene: EnzoK_52 Start: 36041, Stop: 35424, Start Num: 26
Candidate Starts for EnzoK_52:
(Start: 23 @36053 has 3 MA's), (Start: 26 @36041 has 117 MA's), (30, 35942), (32, 35888), (35, 35873), (36, 35864), (42, 35729), (46, 35693), (51, 35639), (53, 35618),

Gene: Fajezeel_55 Start: 38573, Stop: 37956, Start Num: 26
Candidate Starts for Fajezeel_55:
(Start: 26 @38573 has 117 MA's), (30, 38474), (32, 38420), (35, 38405), (36, 38396), (42, 38261), (46, 38225), (51, 38171), (53, 38150),

Gene: Fascinus_49 Start: 37456, Stop: 36887, Start Num: 25
Candidate Starts for Fascinus_49:
(Start: 15 @37507 has 1 MA's), (Start: 25 @37456 has 17 MA's), (30, 37354), (32, 37300), (35, 37285), (36, 37276), (42, 37141), (46, 37105), (51, 37054), (53, 37033), (61, 37012), (79, 36925),

Gene: Fenn_56 Start: 40358, Stop: 39792, Start Num: 26
Candidate Starts for Fenn_56:
(Start: 26 @40358 has 117 MA's), (30, 40259), (32, 40205), (35, 40190), (36, 40181), (42, 40046), (46, 40010), (51, 39956), (53, 39935), (61, 39914), (75, 39857), (79, 39830),

Gene: FlyCatcher_59 Start: 40134, Stop: 39640, Start Num: 27
Candidate Starts for FlyCatcher_59:
(Start: 27 @40134 has 9 MA's), (29, 40038), (32, 39981), (34, 39972), (36, 39957), (43, 39819),

Gene: Forsytheast_53 Start: 37985, Stop: 37419, Start Num: 26
Candidate Starts for Forsytheast_53:
(Start: 26 @37985 has 117 MA's), (30, 37886), (32, 37832), (35, 37817), (36, 37808), (42, 37673), (46, 37637), (51, 37583), (53, 37562), (61, 37541), (75, 37484), (79, 37457),

Gene: GMonster_50 Start: 36829, Stop: 36272, Start Num: 26
Candidate Starts for GMonster_50:
(2, 37015), (12, 36895), (Start: 26 @36829 has 117 MA's), (28, 36796), (30, 36730), (32, 36676), (35, 36661), (36, 36652), (42, 36517), (46, 36481), (51, 36427), (53, 36406), (64, 36367),

Gene: Gachnar_53 Start: 37597, Stop: 37031, Start Num: 25
Candidate Starts for Gachnar_53:
(1, 37783), (12, 37663), (Start: 25 @37597 has 17 MA's), (28, 37564), (30, 37498), (32, 37444), (35, 37429), (36, 37420), (42, 37285), (46, 37249), (51, 37195), (53, 37174), (61, 37153), (75, 37096), (79, 37069),

Gene: Gandalf20_56 Start: 40348, Stop: 39758, Start Num: 26
Candidate Starts for Gandalf20_56:
(Start: 26 @40348 has 117 MA's), (30, 40249), (32, 40195), (35, 40180), (36, 40171), (42, 40036), (46, 40000), (51, 39946), (53, 39925), (65, 39886), (70, 39853),

Gene: GrecoEtereo_54 Start: 38332, Stop: 37766, Start Num: 26
Candidate Starts for GrecoEtereo_54:
(Start: 26 @38332 has 117 MA's), (30, 38233), (32, 38179), (35, 38164), (36, 38155), (42, 38020), (46, 37984), (51, 37930), (53, 37909), (79, 37804),

Gene: Greg_55 Start: 38573, Stop: 37956, Start Num: 26
Candidate Starts for Greg_55:
(Start: 26 @38573 has 117 MA's), (30, 38474), (32, 38420), (35, 38405), (36, 38396), (42, 38261), (46, 38225), (51, 38171), (53, 38150),

Gene: GroundGoblin_53 Start: 38955, Stop: 38338, Start Num: 26
Candidate Starts for GroundGoblin_53:
(Start: 26 @38955 has 117 MA's), (30, 38856), (32, 38802), (35, 38787), (36, 38778), (42, 38643), (46, 38607), (51, 38553), (53, 38532),

Gene: Gwendoluna_57 Start: 40576, Stop: 39968, Start Num: 26
Candidate Starts for Gwendoluna_57:
(Start: 26 @40576 has 117 MA's), (30, 40477), (32, 40423), (35, 40408), (36, 40399), (42, 40264), (46, 40228), (51, 40177), (53, 40156),

Gene: Gyzlar_49 Start: 36249, Stop: 35680, Start Num: 25
Candidate Starts for Gyzlar_49:
(Start: 15 @36300 has 1 MA's), (Start: 25 @36249 has 17 MA's), (30, 36147), (32, 36093), (35, 36078), (36, 36069), (42, 35934), (46, 35898), (51, 35844), (53, 35823), (61, 35802), (79, 35718),

Gene: HINdeR_49 Start: 38405, Stop: 37899, Start Num: 27
Candidate Starts for HINdeR_49:
(11, 38486), (12, 38480), (Start: 27 @38405 has 9 MA's), (31, 38273), (32, 38252), (33, 38249), (35, 38237),

Gene: HanShotFirst_54 Start: 38872, Stop: 38306, Start Num: 26
Candidate Starts for HanShotFirst_54:
(Start: 26 @38872 has 117 MA's), (30, 38773), (32, 38719), (35, 38704), (36, 38695), (42, 38560), (46, 38524), (51, 38470), (53, 38449), (61, 38428), (79, 38344),

Gene: HarryOW_52 Start: 37507, Stop: 36938, Start Num: 25
Candidate Starts for HarryOW_52:
(4, 37618), (14, 37561), (Start: 25 @37507 has 17 MA's), (30, 37405), (32, 37351), (35, 37336), (36, 37327), (42, 37192), (46, 37156), (51, 37102), (53, 37081), (79, 36976),

Gene: Hermia_54 Start: 39005, Stop: 38388, Start Num: 26
Candidate Starts for Hermia_54:
(Start: 26 @39005 has 117 MA's), (30, 38906), (32, 38852), (35, 38837), (36, 38828), (42, 38693), (46, 38657), (51, 38603), (53, 38582),

Gene: Homines_46 Start: 34514, Stop: 33951, Start Num: 26
Candidate Starts for Homines_46:

(Start: 26 @34514 has 117 MA's), (30, 34415), (32, 34361), (35, 34346), (36, 34337), (42, 34202), (46, 34166), (51, 34115), (53, 34094), (61, 34073), (79, 33989),

Gene: Hope4ever_55 Start: 39237, Stop: 38413, Start Num: 26
Candidate Starts for Hope4ever_55:
(Start: 26 @39237 has 117 MA's), (30, 39138), (32, 39084), (35, 39069), (36, 39060), (37, 38940), (42, 38844), (46, 38808), (51, 38754), (54, 38730), (69, 38643), (71, 38637), (72, 38631), (74, 38622), (80, 38592), (83, 38541),

Gene: ILeeKay_57 Start: 39101, Stop: 38547, Start Num: 26
Candidate Starts for ILeeKay_57:
(Start: 26 @39101 has 117 MA's), (30, 39002), (32, 38948), (35, 38933), (36, 38924), (42, 38789), (46, 38753), (51, 38702), (53, 38681), (64, 38642),

Gene: Ichabod_56 Start: 39693, Stop: 39127, Start Num: 26
Candidate Starts for Ichabod_56:
(19, 39735), (Start: 23 @39705 has 3 MA's), (Start: 26 @39693 has 117 MA's), (30, 39594), (32, 39540), (35, 39525), (36, 39516), (42, 39381), (46, 39345), (51, 39291), (53, 39270), (61, 39249), (79, 39165),

Gene: JackSparrow_55 Start: 38752, Stop: 38186, Start Num: 25
Candidate Starts for JackSparrow_55:
(14, 38803), (Start: 25 @38752 has 17 MA's), (28, 38719), (30, 38653), (32, 38599), (35, 38584), (36, 38575), (42, 38440), (46, 38404), (51, 38350), (53, 38329), (61, 38308), (79, 38224),

Gene: Jorgensen_54 Start: 38562, Stop: 37738, Start Num: 26
Candidate Starts for Jorgensen_54:
(Start: 26 @38562 has 117 MA's), (30, 38463), (32, 38409), (35, 38394), (36, 38385), (37, 38265), (42, 38169), (46, 38133), (51, 38079), (54, 38055), (69, 37968), (71, 37962), (72, 37956), (74, 37947), (80, 37917), (83, 37866),

Gene: JuliaChild_54 Start: 38193, Stop: 37627, Start Num: 26
Candidate Starts for JuliaChild_54:
(19, 38235), (Start: 23 @38205 has 3 MA's), (Start: 26 @38193 has 117 MA's), (30, 38094), (32, 38040), (35, 38025), (36, 38016), (42, 37881), (46, 37845), (51, 37791), (53, 37770), (61, 37749), (75, 37692), (79, 37665),

Gene: KBG_54 Start: 40472, Stop: 39729, Start Num: 26
Candidate Starts for KBG_54:
(Start: 26 @40472 has 117 MA's), (30, 40373), (32, 40319), (35, 40304), (36, 40295), (42, 40160), (46, 40124), (51, 40070), (54, 40046), (69, 39959), (71, 39953), (72, 39947), (74, 39938), (80, 39908), (83, 39857),

Gene: KSSJEB_53 Start: 38192, Stop: 37626, Start Num: 26
Candidate Starts for KSSJEB_53:
(Start: 26 @38192 has 117 MA's), (30, 38093), (32, 38039), (35, 38024), (36, 38015), (42, 37880), (46, 37844), (51, 37790), (53, 37769), (61, 37748), (75, 37691), (79, 37664),

Gene: Kanely_55 Start: 38889, Stop: 38275, Start Num: 25
Candidate Starts for Kanely_55:
(Start: 15 @38940 has 1 MA's), (Start: 25 @38889 has 17 MA's), (30, 38787), (32, 38733), (35, 38718), (36, 38709), (42, 38574), (46, 38538), (51, 38487), (53, 38466), (58, 38445), (62, 38430), (67, 38397),

Gene: KikiBouba_54 Start: 38814, Stop: 38197, Start Num: 26
Candidate Starts for KikiBouba_54:
(Start: 26 @38814 has 117 MA's), (30, 38715), (32, 38661), (35, 38646), (36, 38637), (42, 38502), (46, 38466), (51, 38412), (53, 38391),

Gene: Killigrew_54 Start: 39392, Stop: 38826, Start Num: 26
Candidate Starts for Killigrew_54:
(Start: 26 @39392 has 117 MA's), (30, 39293), (32, 39239), (35, 39224), (36, 39215), (42, 39080), (46, 39044), (51, 38990), (53, 38969), (61, 38948), (75, 38891), (79, 38864),

Gene: Kugel_54 Start: 39457, Stop: 38903, Start Num: 26
Candidate Starts for Kugel_54:
(Start: 26 @39457 has 117 MA's), (30, 39358), (32, 39304), (35, 39289), (36, 39280), (42, 39145), (46, 39109), (51, 39058), (53, 39037), (64, 38998),

Gene: KyMonks1A_55 Start: 38450, Stop: 37833, Start Num: 25
Candidate Starts for KyMonks1A_55:
(Start: 15 @38501 has 1 MA's), (Start: 25 @38450 has 17 MA's), (30, 38348), (32, 38294), (35, 38279), (36, 38270), (42, 38135), (46, 38099), (51, 38045), (53, 38024), (62, 37988), (67, 37955),

Gene: Kykar_53 Start: 38219, Stop: 37605, Start Num: 26
Candidate Starts for Kykar_53:
(Start: 26 @38219 has 117 MA's), (30, 38120), (32, 38066), (35, 38051), (36, 38042), (42, 37907), (51, 37817), (53, 37796), (58, 37775), (62, 37760), (67, 37727),

Gene: Lamina13_54 Start: 38247, Stop: 37576, Start Num: 26
Candidate Starts for Lamina13_54:
(Start: 26 @38247 has 117 MA's), (30, 38148), (32, 38094), (35, 38079), (36, 38070), (37, 37950), (42, 37854), (46, 37818), (51, 37764), (53, 37743), (65, 37704), (70, 37671),

Gene: Licorice_56 Start: 40561, Stop: 39995, Start Num: 26
Candidate Starts for Licorice_56:
(Start: 26 @40561 has 117 MA's), (30, 40462), (32, 40408), (35, 40393), (36, 40384), (42, 40249), (46, 40213), (51, 40159), (53, 40138), (61, 40117), (79, 40033),

Gene: LilBib_53 Start: 39658, Stop: 39053, Start Num: 25
Candidate Starts for LilBib_53:
(4, 39769), (13, 39721), (Start: 25 @39658 has 17 MA's), (30, 39556), (32, 39502), (35, 39487), (36, 39478), (42, 39343), (46, 39307), (49, 39247), (73, 39124), (82, 39064),

Gene: Lockley_52 Start: 38167, Stop: 37532, Start Num: 26
Candidate Starts for Lockley_52:
(Start: 26 @38167 has 117 MA's), (30, 38068), (32, 38014), (35, 37999), (36, 37990), (37, 37870), (42, 37774), (46, 37738), (53, 37675), (61, 37654), (79, 37570),

Gene: Lopton_53 Start: 40447, Stop: 39704, Start Num: 26
Candidate Starts for Lopton_53:
(19, 40489), (Start: 23 @40459 has 3 MA's), (Start: 26 @40447 has 117 MA's), (30, 40348), (32, 40294), (35, 40279), (36, 40270), (42, 40135), (46, 40099), (51, 40045), (54, 40021), (69, 39934), (71, 39928), (72, 39922), (74, 39913), (80, 39883), (83, 39832), (84, 39769),

Gene: Magnito_52 Start: 38460, Stop: 37900, Start Num: 26
Candidate Starts for Magnito_52:

(Start: 26 @38460 has 117 MA's), (30, 38361), (32, 38307), (35, 38292), (36, 38283), (42, 38148), (46, 38112), (51, 38058), (53, 38037), (79, 37938),

Gene: Marcell_51 Start: 37819, Stop: 37265, Start Num: 26
Candidate Starts for Marcell_51:
(Start: 26 @37819 has 117 MA's), (30, 37720), (32, 37666), (35, 37651), (36, 37642), (42, 37507), (46, 37471), (51, 37420), (53, 37399), (64, 37360),

Gene: Marge_53 Start: 38708, Stop: 38079, Start Num: 26
Candidate Starts for Marge_53:
(Start: 26 @38708 has 117 MA's), (30, 38609), (32, 38555), (35, 38540), (36, 38531), (42, 38396), (46, 38360), (51, 38306), (53, 38285),

Gene: Maroc7_51 Start: 37816, Stop: 37196, Start Num: 15
Candidate Starts for Maroc7_51:
(Start: 15 @37816 has 1 MA's), (Start: 25 @37765 has 17 MA's), (30, 37663), (32, 37609), (35, 37594), (36, 37585), (42, 37450), (46, 37414), (51, 37363), (53, 37342), (61, 37321), (79, 37234),

Gene: Marsha_53 Start: 39249, Stop: 38638, Start Num: 26
Candidate Starts for Marsha_53:
(Start: 26 @39249 has 117 MA's), (30, 39150), (32, 39096), (35, 39081), (36, 39072), (42, 38937), (46, 38901), (51, 38850), (53, 38829), (62, 38793), (67, 38760),

Gene: MaryBeth_53 Start: 39046, Stop: 38489, Start Num: 26
Candidate Starts for MaryBeth_53:
(Start: 26 @39046 has 117 MA's), (30, 38947), (32, 38893), (35, 38878), (36, 38869), (42, 38734), (46, 38698), (51, 38644), (53, 38623), (64, 38584),

Gene: McGuire_55 Start: 38290, Stop: 37724, Start Num: 26
Candidate Starts for McGuire_55:
(Start: 26 @38290 has 117 MA's), (30, 38191), (32, 38137), (35, 38122), (36, 38113), (42, 37978), (46, 37942), (51, 37888), (53, 37867), (61, 37846), (75, 37789), (79, 37762),

Gene: McSinger_54 Start: 38436, Stop: 37870, Start Num: 26
Candidate Starts for McSinger_54:
(Start: 26 @38436 has 117 MA's), (30, 38337), (32, 38283), (35, 38268), (36, 38259), (42, 38124), (46, 38088), (51, 38034), (53, 38013), (61, 37992), (79, 37908),

Gene: MetalQZJ_52 Start: 39046, Stop: 38489, Start Num: 26
Candidate Starts for MetalQZJ_52:
(Start: 26 @39046 has 117 MA's), (30, 38947), (32, 38893), (35, 38878), (36, 38869), (42, 38734), (46, 38698), (51, 38644), (53, 38623), (64, 38584),

Gene: MilleFeuille_53 Start: 38205, Stop: 37639, Start Num: 26
Candidate Starts for MilleFeuille_53:
(Start: 26 @38205 has 117 MA's), (30, 38106), (32, 38052), (35, 38037), (36, 38028), (42, 37893), (46, 37857), (51, 37806), (53, 37785), (61, 37764), (79, 37677),

Gene: Molly_54 Start: 37493, Stop: 36939, Start Num: 27
Candidate Starts for Molly_54:
(20, 37535), (24, 37505), (Start: 27 @37493 has 9 MA's), (30, 37394), (32, 37340), (35, 37325), (36, 37316), (42, 37181), (46, 37145), (51, 37094), (53, 37073), (64, 37034),

Gene: Moose_53 Start: 37985, Stop: 37419, Start Num: 26
Candidate Starts for Moose_53:
(Start: 26 @37985 has 117 MA's), (30, 37886), (32, 37832), (35, 37817), (36, 37808), (42, 37673), (46, 37637), (51, 37583), (53, 37562), (61, 37541), (75, 37484), (79, 37457),

Gene: Mryolo_51 Start: 38512, Stop: 37898, Start Num: 26
Candidate Starts for Mryolo_51:
(Start: 26 @38512 has 117 MA's), (30, 38413), (32, 38359), (35, 38344), (36, 38335), (42, 38200), (46, 38164), (51, 38110), (53, 38089), (58, 38068), (62, 38053), (67, 38020),

Gene: Museum_54 Start: 38643, Stop: 38077, Start Num: 26
Candidate Starts for Museum_54:
(19, 38685), (Start: 23 @38655 has 3 MA's), (Start: 26 @38643 has 117 MA's), (30, 38544), (32, 38490), (35, 38475), (36, 38466), (42, 38331), (46, 38295), (51, 38241), (53, 38220), (61, 38199), (75, 38142), (79, 38115),

Gene: NEHalo_51 Start: 38428, Stop: 37814, Start Num: 26
Candidate Starts for NEHalo_51:
(19, 38470), (Start: 23 @38440 has 3 MA's), (Start: 26 @38428 has 117 MA's), (30, 38329), (32, 38275), (35, 38260), (36, 38251), (42, 38116), (46, 38080), (51, 38026), (53, 38005), (58, 37984), (62, 37969), (67, 37936),

Gene: Naira_56 Start: 40405, Stop: 39839, Start Num: 26
Candidate Starts for Naira_56:
(Start: 26 @40405 has 117 MA's), (30, 40306), (32, 40252), (35, 40237), (36, 40228), (42, 40093), (46, 40057), (51, 40003), (53, 39982), (61, 39961), (75, 39904), (79, 39877),

Gene: Nerujay_56 Start: 39287, Stop: 38544, Start Num: 26
Candidate Starts for Nerujay_56:
(Start: 26 @39287 has 117 MA's), (30, 39188), (32, 39134), (35, 39119), (36, 39110), (42, 38975), (46, 38939), (51, 38885), (54, 38861), (69, 38774), (71, 38768), (72, 38762), (74, 38753), (80, 38723), (83, 38672),

Gene: Nhonho_53 Start: 39633, Stop: 38809, Start Num: 26
Candidate Starts for Nhonho_53:
(Start: 26 @39633 has 117 MA's), (30, 39534), (32, 39480), (35, 39465), (36, 39456), (37, 39336), (42, 39240), (46, 39204), (51, 39150), (54, 39126), (69, 39039), (71, 39033), (72, 39027), (74, 39018), (80, 38988), (83, 38937),

Gene: Norz_54 Start: 39632, Stop: 39066, Start Num: 25
Candidate Starts for Norz_54:
(4, 39743), (14, 39686), (Start: 25 @39632 has 17 MA's), (30, 39530), (32, 39476), (35, 39461), (36, 39452), (42, 39317), (46, 39281), (51, 39230), (53, 39209), (61, 39188), (79, 39104),

Gene: Noxious_54 Start: 39005, Stop: 38388, Start Num: 26
Candidate Starts for Noxious_54:
(Start: 26 @39005 has 117 MA's), (30, 38906), (32, 38852), (35, 38837), (36, 38828), (42, 38693), (46, 38657), (51, 38603), (53, 38582),

Gene: Ohno789_55 Start: 39227, Stop: 38613, Start Num: 26
Candidate Starts for Ohno789_55:
(Start: 26 @39227 has 117 MA's), (30, 39128), (32, 39074), (35, 39059), (36, 39050), (42, 38915), (46, 38879), (51, 38828), (53, 38807),

Gene: Oogway_52 Start: 38320, Stop: 37736, Start Num: 25
Candidate Starts for Oogway_52:
(4, 38431), (Start: 25 @38320 has 17 MA's), (30, 38218), (32, 38164), (35, 38149), (36, 38140), (39, 38020), (46, 37957), (51, 37903), (53, 37882), (61, 37861), (79, 37774),

Gene: PP_55 Start: 41225, Stop: 40698, Start Num: 16
Candidate Starts for PP_55:
(3, 41300), (9, 41264), (Start: 16 @41225 has 1 MA's), (22, 41198), (30, 41075), (32, 41021), (34, 41012), (36, 40997), (48, 40829), (52, 40778), (57, 40748), (59, 40730),

Gene: Papez_56 Start: 40588, Stop: 40022, Start Num: 26
Candidate Starts for Papez_56:
(Start: 26 @40588 has 117 MA's), (30, 40489), (32, 40435), (35, 40420), (36, 40411), (42, 40276), (46, 40240), (51, 40186), (53, 40165), (61, 40144), (75, 40087), (79, 40060),

Gene: Paphu_51 Start: 37777, Stop: 37160, Start Num: 26
Candidate Starts for Paphu_51:
(18, 37819), (Start: 23 @37789 has 3 MA's), (Start: 26 @37777 has 117 MA's), (30, 37678), (32, 37624), (35, 37609), (36, 37600), (42, 37465), (46, 37429), (51, 37375), (53, 37354),

Gene: Paraselene_51 Start: 39100, Stop: 38486, Start Num: 26
Candidate Starts for Paraselene_51:
(Start: 26 @39100 has 117 MA's), (30, 39001), (32, 38947), (35, 38932), (36, 38923), (42, 38788), (46, 38752), (51, 38698), (53, 38677), (58, 38656), (62, 38641), (67, 38608),

Gene: Pari_55 Start: 38216, Stop: 37557, Start Num: 23
Candidate Starts for Pari_55:
(Start: 23 @38216 has 3 MA's), (Start: 26 @38204 has 117 MA's), (30, 38105), (32, 38051), (35, 38036), (36, 38027), (37, 37907), (42, 37811), (46, 37775), (51, 37721), (53, 37700), (61, 37679), (75, 37622), (79, 37595),

Gene: Parliament_53 Start: 38723, Stop: 38079, Start Num: 26
Candidate Starts for Parliament_53:
(Start: 26 @38723 has 117 MA's), (30, 38624), (32, 38570), (35, 38555), (36, 38546), (37, 38426), (42, 38330), (46, 38294), (51, 38243), (53, 38222), (61, 38201), (79, 38117),

Gene: PascalRango_54 Start: 38941, Stop: 38375, Start Num: 26
Candidate Starts for PascalRango_54:
(Start: 26 @38941 has 117 MA's), (30, 38842), (32, 38788), (35, 38773), (36, 38764), (42, 38629), (46, 38593), (51, 38539), (53, 38518), (61, 38497), (75, 38440), (79, 38413),

Gene: PattyP_53 Start: 38837, Stop: 38064, Start Num: 26
Candidate Starts for PattyP_53:
(7, 38921), (18, 38879), (Start: 23 @38849 has 3 MA's), (Start: 26 @38837 has 117 MA's), (30, 38738), (32, 38684), (35, 38669), (36, 38660), (42, 38525), (46, 38489), (49, 38429), (81, 38243), (83, 38192),

Gene: Peterson_58 Start: 40881, Stop: 40273, Start Num: 26
Candidate Starts for Peterson_58:
(Start: 26 @40881 has 117 MA's), (30, 40782), (32, 40728), (35, 40713), (36, 40704), (42, 40569), (46, 40539), (51, 40485), (53, 40464), (58, 40443), (62, 40428), (67, 40395),

Gene: Petp2012_54 Start: 38452, Stop: 37898, Start Num: 27

Candidate Starts for Petp2012_54:
(8, 38536), (20, 38494), (24, 38464), (Start: 27 @38452 has 9 MA's), (30, 38353), (32, 38299), (35, 38284), (36, 38275), (42, 38140), (46, 38104), (51, 38053), (53, 38032), (64, 37993),

Gene: Phlippers_52 Start: 39121, Stop: 38552, Start Num: 25
Candidate Starts for Phlippers_52:
(Start: 15 @39172 has 1 MA's), (Start: 25 @39121 has 17 MA's), (30, 39019), (32, 38965), (35, 38950), (36, 38941), (42, 38806), (46, 38770), (51, 38719), (53, 38698), (61, 38677), (79, 38590),

Gene: PinkPlastic_54 Start: 38325, Stop: 37675, Start Num: 26
Candidate Starts for PinkPlastic_54:
(Start: 26 @38325 has 117 MA's), (30, 38226), (32, 38172), (35, 38157), (36, 38148), (37, 38028), (42, 37932), (46, 37896), (51, 37842), (53, 37821), (61, 37800), (79, 37713),

Gene: Pinto_53 Start: 38711, Stop: 38067, Start Num: 26
Candidate Starts for Pinto_53:
(19, 38753), (Start: 23 @38723 has 3 MA's), (Start: 26 @38711 has 117 MA's), (30, 38612), (32, 38558), (35, 38543), (36, 38534), (37, 38414), (42, 38318), (46, 38282), (51, 38231), (53, 38210), (61, 38189), (79, 38105),

Gene: Pippin_55 Start: 38617, Stop: 38000, Start Num: 26
Candidate Starts for Pippin_55:
(Start: 26 @38617 has 117 MA's), (30, 38518), (32, 38464), (35, 38449), (36, 38440), (42, 38305), (46, 38269), (51, 38215), (53, 38194),

Gene: PowerRanger_52 Start: 39835, Stop: 39092, Start Num: 26
Candidate Starts for PowerRanger_52:
(Start: 26 @39835 has 117 MA's), (30, 39736), (32, 39682), (35, 39667), (36, 39658), (42, 39523), (46, 39487), (51, 39433), (54, 39409), (69, 39322), (71, 39316), (72, 39310), (74, 39301), (80, 39271), (83, 39220),

Gene: ProMouse_56 Start: 38872, Stop: 38312, Start Num: 26
Candidate Starts for ProMouse_56:
(Start: 26 @38872 has 117 MA's), (30, 38773), (32, 38719), (35, 38704), (36, 38695), (42, 38560), (46, 38524), (51, 38470), (54, 38446),

Gene: Puppet_54 Start: 39041, Stop: 38298, Start Num: 26
Candidate Starts for Puppet_54:
(Start: 26 @39041 has 117 MA's), (30, 38942), (32, 38888), (35, 38873), (36, 38864), (42, 38729), (46, 38693), (51, 38639), (54, 38615), (69, 38528), (71, 38522), (72, 38516), (74, 38507), (80, 38477), (83, 38426), (84, 38363),

Gene: QTRlifeCrisis_52 Start: 38670, Stop: 37924, Start Num: 25
Candidate Starts for QTRlifeCrisis_52:
(Start: 15 @38721 has 1 MA's), (Start: 25 @38670 has 17 MA's), (30, 38568), (32, 38514), (35, 38499), (36, 38490), (42, 38355), (46, 38319), (51, 38265), (54, 38241), (69, 38154), (71, 38148), (72, 38142), (74, 38133), (80, 38103), (83, 38052),

Gene: Raid_53 Start: 38288, Stop: 37695, Start Num: 26
Candidate Starts for Raid_53:
(Start: 26 @38288 has 117 MA's), (30, 38189), (32, 38135), (35, 38120), (36, 38111), (42, 37976), (49, 37880),

Gene: Rajelicia_54 Start: 39566, Stop: 39009, Start Num: 26
Candidate Starts for Rajelicia_54:
(Start: 26 @39566 has 117 MA's), (30, 39467), (32, 39413), (35, 39398), (36, 39389), (42, 39254), (46, 39218), (51, 39164), (53, 39143), (64, 39104),

Gene: RidgeCB_53 Start: 38830, Stop: 38195, Start Num: 26
Candidate Starts for RidgeCB_53:
(Start: 26 @38830 has 117 MA's), (30, 38731), (32, 38677), (35, 38662), (36, 38653), (37, 38533), (42, 38437), (46, 38401), (51, 38350), (53, 38329), (64, 38290),

Gene: Ringer_54 Start: 39883, Stop: 39317, Start Num: 26
Candidate Starts for Ringer_54:
(Start: 26 @39883 has 117 MA's), (30, 39784), (32, 39730), (35, 39715), (36, 39706), (42, 39571), (46, 39535), (51, 39481), (53, 39460), (61, 39439), (79, 39355),

Gene: Rubeus_53 Start: 36498, Stop: 35935, Start Num: 26
Candidate Starts for Rubeus_53:
(19, 36540), (Start: 23 @36510 has 3 MA's), (Start: 26 @36498 has 117 MA's), (30, 36399), (32, 36345), (35, 36330), (36, 36321), (42, 36186), (46, 36150), (51, 36099), (53, 36078), (61, 36057), (79, 35973),

Gene: Ruotula_56 Start: 39803, Stop: 39174, Start Num: 26
Candidate Starts for Ruotula_56:
(Start: 26 @39803 has 117 MA's), (30, 39704), (32, 39650), (35, 39635), (36, 39626), (42, 39491), (46, 39455), (51, 39401), (53, 39380),

Gene: STLscum_56 Start: 39588, Stop: 38947, Start Num: 26
Candidate Starts for STLscum_56:
(Start: 26 @39588 has 117 MA's), (30, 39489), (32, 39435), (35, 39420), (36, 39411), (38, 39282), (40, 39237), (42, 39225), (46, 39189), (51, 39135), (53, 39114), (65, 39075), (70, 39042),

Gene: Sagefire_56 Start: 39529, Stop: 38915, Start Num: 26
Candidate Starts for Sagefire_56:
(Start: 26 @39529 has 117 MA's), (30, 39430), (32, 39376), (35, 39361), (36, 39352), (42, 39217), (46, 39181), (51, 39127), (53, 39106), (63, 39067),

Gene: Sandaddy_52 Start: 38282, Stop: 37716, Start Num: 26
Candidate Starts for Sandaddy_52:
(Start: 26 @38282 has 117 MA's), (30, 38183), (32, 38129), (35, 38114), (36, 38105), (42, 37970), (46, 37934), (51, 37880), (53, 37859), (61, 37838), (79, 37754),

Gene: Sanya_52 Start: 38572, Stop: 38009, Start Num: 26
Candidate Starts for Sanya_52:
(Start: 26 @38572 has 117 MA's), (30, 38473), (32, 38419), (35, 38404), (36, 38395), (42, 38260), (46, 38224), (51, 38173), (53, 38152), (61, 38131), (79, 38047),

Gene: SarFire_51 Start: 37844, Stop: 37278, Start Num: 26
Candidate Starts for SarFire_51:
(Start: 26 @37844 has 117 MA's), (30, 37745), (32, 37691), (35, 37676), (36, 37667), (42, 37532), (51, 37442), (53, 37421), (61, 37400), (79, 37316),

Gene: Seabiscuit_56 Start: 38458, Stop: 37811, Start Num: 26
Candidate Starts for Seabiscuit_56:

(Start: 26 @38458 has 117 MA's), (30, 38359), (32, 38305), (35, 38290), (36, 38281), (37, 38161), (42, 38065), (46, 38029), (51, 37975), (53, 37954), (61, 37933), (75, 37876), (79, 37849),

Gene: SheaKeira_55 Start: 37666, Stop: 37181, Start Num: 27
Candidate Starts for SheaKeira_55:
(Start: 27 @37666 has 9 MA's), (30, 37567), (32, 37513), (41, 37360), (45, 37327), (47, 37321), (50, 37264),

Gene: Sheen_55 Start: 40022, Stop: 39528, Start Num: 27
Candidate Starts for Sheen_55:
(Start: 27 @40022 has 9 MA's), (29, 39926), (32, 39869), (34, 39860), (36, 39845), (43, 39707),

Gene: ShortQueendom_48 Start: 35302, Stop: 34736, Start Num: 25
Candidate Starts for ShortQueendom_48:
(1, 35488), (12, 35368), (Start: 25 @35302 has 17 MA's), (28, 35269), (30, 35203), (32, 35149), (35, 35134), (36, 35125), (42, 34990), (46, 34954), (51, 34900), (53, 34879), (61, 34858), (79, 34774),

Gene: SkiPole_58 Start: 39258, Stop: 38668, Start Num: 26
Candidate Starts for SkiPole_58:
(Start: 26 @39258 has 117 MA's), (30, 39159), (32, 39105), (35, 39090), (36, 39081), (42, 38946), (46, 38910), (51, 38856), (53, 38835), (65, 38796), (70, 38763),

Gene: Slagathor_55 Start: 39464, Stop: 38910, Start Num: 27
Candidate Starts for Slagathor_55:
(20, 39506), (24, 39476), (Start: 27 @39464 has 9 MA's), (30, 39365), (32, 39311), (35, 39296), (36, 39287), (42, 39152), (46, 39116), (51, 39065), (53, 39044), (64, 39005),

Gene: Smeagol_55 Start: 39706, Stop: 39155, Start Num: 23
Candidate Starts for Smeagol_55:
(Start: 23 @39706 has 3 MA's), (Start: 26 @39694 has 117 MA's), (30, 39595), (32, 39541), (35, 39526), (36, 39517), (42, 39382), (46, 39346), (51, 39322), (53, 39301), (61, 39280), (79, 39193),

Gene: Snazzy_52 Start: 37911, Stop: 37345, Start Num: 25
Candidate Starts for Snazzy_52:
(1, 38097), (12, 37977), (Start: 25 @37911 has 17 MA's), (28, 37878), (30, 37812), (32, 37758), (35, 37743), (36, 37734), (42, 37599), (46, 37563), (51, 37509), (53, 37488), (61, 37467), (79, 37383),

Gene: Solon_52 Start: 38166, Stop: 37603, Start Num: 26
Candidate Starts for Solon_52:
(Start: 26 @38166 has 117 MA's), (30, 38067), (32, 38013), (35, 37998), (36, 37989), (42, 37854), (46, 37818), (51, 37767), (53, 37746), (61, 37725), (79, 37641),

Gene: Sorpresa_52 Start: 38284, Stop: 37718, Start Num: 26
Candidate Starts for Sorpresa_52:
(Start: 26 @38284 has 117 MA's), (30, 38185), (32, 38131), (35, 38116), (36, 38107), (42, 37972), (46, 37936), (51, 37882), (53, 37861), (61, 37840), (79, 37756),

Gene: Squee_54 Start: 38872, Stop: 38306, Start Num: 26
Candidate Starts for Squee_54:
(Start: 26 @38872 has 117 MA's), (30, 38773), (32, 38719), (35, 38704), (36, 38695), (42, 38560), (46, 38524), (51, 38470), (53, 38449), (61, 38428), (75, 38371), (79, 38344),

Gene: StewieG_50 Start: 35689, Stop: 35123, Start Num: 26

Candidate Starts for StewieG_50:
(Start: 26 @35689 has 117 MA's), (30, 35590), (32, 35536), (35, 35521), (36, 35512), (42, 35377), (46, 35341), (51, 35290), (53, 35269), (61, 35248), (79, 35161),

Gene: StrongArm_52 Start: 39368, Stop: 38625, Start Num: 26
Candidate Starts for StrongArm_52:
(Start: 26 @39368 has 117 MA's), (30, 39269), (32, 39215), (35, 39200), (36, 39191), (42, 39056), (46, 39020), (51, 38966), (54, 38942), (69, 38855), (71, 38849), (72, 38843), (74, 38834), (80, 38804), (83, 38753),

Gene: Sumter_50 Start: 38825, Stop: 38259, Start Num: 26
Candidate Starts for Sumter_50:
(Start: 26 @38825 has 117 MA's), (30, 38726), (32, 38672), (35, 38657), (36, 38648), (42, 38513), (46, 38477), (51, 38423), (53, 38402), (61, 38381), (75, 38324), (79, 38297),

Gene: Sunshine924_55 Start: 37963, Stop: 37409, Start Num: 26
Candidate Starts for Sunshine924_55:
(Start: 26 @37963 has 117 MA's), (30, 37864), (32, 37810), (35, 37795), (36, 37786), (42, 37651), (46, 37615), (51, 37564), (53, 37543), (64, 37504), (77, 37426),

Gene: SwissCheese_55 Start: 38485, Stop: 37919, Start Num: 26
Candidate Starts for SwissCheese_55:
(Start: 26 @38485 has 117 MA's), (30, 38386), (32, 38332), (35, 38317), (36, 38308), (42, 38173), (46, 38137), (51, 38083), (53, 38062), (61, 38041), (75, 37984), (79, 37957),

Gene: Switzer_55 Start: 39397, Stop: 38831, Start Num: 26
Candidate Starts for Switzer_55:
(Start: 26 @39397 has 117 MA's), (30, 39298), (32, 39244), (35, 39229), (36, 39220), (42, 39085), (46, 39049), (51, 38995), (53, 38974), (61, 38953), (75, 38896), (79, 38869),

Gene: Swole_54 Start: 37668, Stop: 37102, Start Num: 26
Candidate Starts for Swole_54:
(19, 37710), (Start: 23 @37680 has 3 MA's), (Start: 26 @37668 has 117 MA's), (30, 37569), (32, 37515), (35, 37500), (36, 37491), (42, 37356), (46, 37320), (51, 37266), (53, 37245), (61, 37224), (75, 37167), (79, 37140),

Gene: Target_54 Start: 37073, Stop: 36507, Start Num: 26
Candidate Starts for Target_54:
(Start: 26 @37073 has 117 MA's), (30, 36974), (32, 36920), (35, 36905), (36, 36896), (42, 36761), (46, 36725), (51, 36671), (53, 36650), (61, 36629), (79, 36545),

Gene: Tasp14_55 Start: 38871, Stop: 38200, Start Num: 26
Candidate Starts for Tasp14_55:
(Start: 26 @38871 has 117 MA's), (30, 38772), (32, 38718), (35, 38703), (36, 38694), (37, 38574), (42, 38478), (46, 38442), (51, 38388), (53, 38367), (65, 38328), (70, 38295),

Gene: TheloniousMonk_54 Start: 40538, Stop: 39924, Start Num: 26
Candidate Starts for TheloniousMonk_54:
(Start: 26 @40538 has 117 MA's), (30, 40439), (32, 40385), (35, 40370), (36, 40361), (42, 40226), (46, 40190), (51, 40136), (53, 40115), (58, 40094), (62, 40079), (67, 40046),

Gene: Thor_51 Start: 37202, Stop: 36636, Start Num: 26
Candidate Starts for Thor_51:

(Start: 26 @37202 has 117 MA's), (30, 37103), (32, 37049), (35, 37034), (36, 37025), (42, 36890), (51, 36800), (53, 36779), (61, 36758), (79, 36674),

Gene: Timshel_51 Start: 38839, Stop: 38318, Start Num: 27
Candidate Starts for Timshel_51:
(10, 38905), (12, 38899), (Start: 27 @38839 has 9 MA's), (30, 38740), (31, 38707), (32, 38686), (33, 38683), (34, 38677), (35, 38671), (44, 38488),

Gene: Topgun_53 Start: 38055, Stop: 37489, Start Num: 26
Candidate Starts for Topgun_53:
(Start: 26 @38055 has 117 MA's), (30, 37956), (32, 37902), (35, 37887), (36, 37878), (42, 37743), (46, 37707), (51, 37656), (53, 37635), (61, 37614), (79, 37527),

Gene: Toro_57 Start: 40134, Stop: 39640, Start Num: 27
Candidate Starts for Toro_57:
(Start: 27 @40134 has 9 MA's), (29, 40038), (32, 39981), (34, 39972), (36, 39957), (43, 39819),

Gene: Tote_49 Start: 34947, Stop: 34369, Start Num: 23
Candidate Starts for Tote_49:
(19, 34977), (Start: 23 @34947 has 3 MA's), (Start: 26 @34935 has 117 MA's), (30, 34836), (32, 34782), (35, 34767), (36, 34758), (42, 34623), (46, 34587), (51, 34533), (53, 34512), (61, 34491), (75, 34434), (79, 34407),

Gene: Traft412_56 Start: 39446, Stop: 38832, Start Num: 26
Candidate Starts for Traft412_56:
(Start: 26 @39446 has 117 MA's), (30, 39347), (32, 39293), (35, 39278), (36, 39269), (42, 39134), (46, 39098), (51, 39044), (53, 39023), (58, 39002), (62, 38987), (67, 38954),

Gene: Turj99_52 Start: 38730, Stop: 38170, Start Num: 26
Candidate Starts for Turj99_52:
(Start: 26 @38730 has 117 MA's), (30, 38631), (32, 38577), (35, 38562), (36, 38553), (42, 38418), (46, 38382), (51, 38328), (53, 38307), (79, 38208),

Gene: U2_53 Start: 39377, Stop: 38811, Start Num: 26
Candidate Starts for U2_53:
(Start: 26 @39377 has 117 MA's), (30, 39278), (32, 39224), (35, 39209), (36, 39200), (42, 39065), (46, 39029), (51, 38975), (53, 38954), (61, 38933), (79, 38849),

Gene: Watermelon_54 Start: 38595, Stop: 38029, Start Num: 26
Candidate Starts for Watermelon_54:
(Start: 26 @38595 has 117 MA's), (30, 38496), (32, 38442), (35, 38427), (36, 38418), (42, 38283), (46, 38247), (51, 38193), (53, 38172), (61, 38151), (76, 38085), (79, 38067),

Gene: Whitspit_51 Start: 36041, Stop: 35406, Start Num: 26
Candidate Starts for Whitspit_51:
(Start: 26 @36041 has 117 MA's), (30, 35942), (32, 35888), (35, 35873), (36, 35864), (37, 35744), (42, 35648), (46, 35612), (51, 35561), (53, 35540), (64, 35501),

Gene: Wilkins_53 Start: 37985, Stop: 37419, Start Num: 26
Candidate Starts for Wilkins_53:
(Start: 26 @37985 has 117 MA's), (30, 37886), (32, 37832), (35, 37817), (36, 37808), (42, 37673), (46, 37637), (51, 37586), (53, 37565), (61, 37544), (79, 37457),

Gene: Zephyr_53 Start: 38133, Stop: 37516, Start Num: 26
Candidate Starts for Zephyr_53:
(8, 38217), (Start: 23 @38145 has 3 MA's), (Start: 26 @38133 has 117 MA's), (30, 38034), (32, 37980), (35, 37965), (36, 37956), (42, 37821), (46, 37785), (51, 37731), (53, 37710),