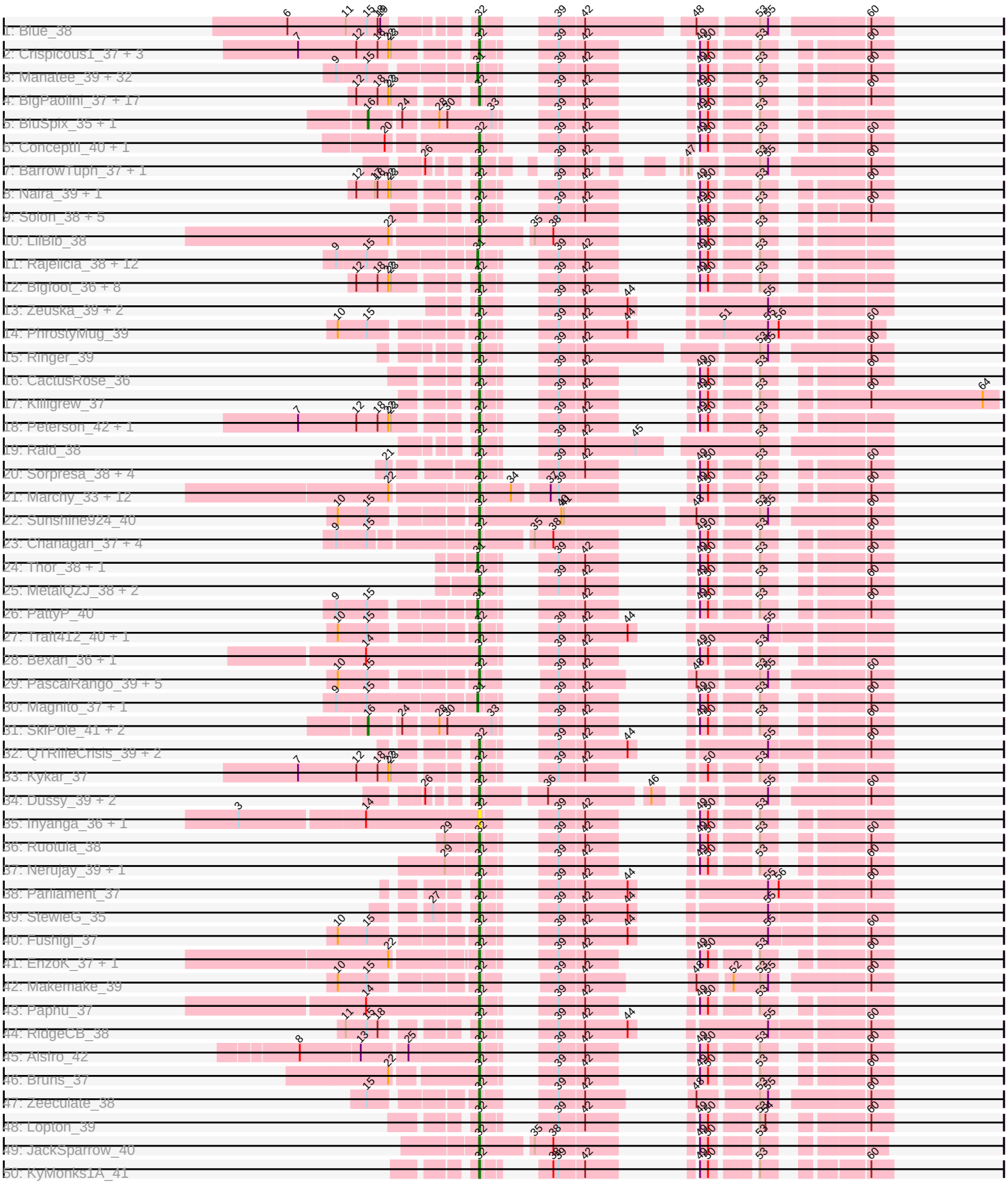
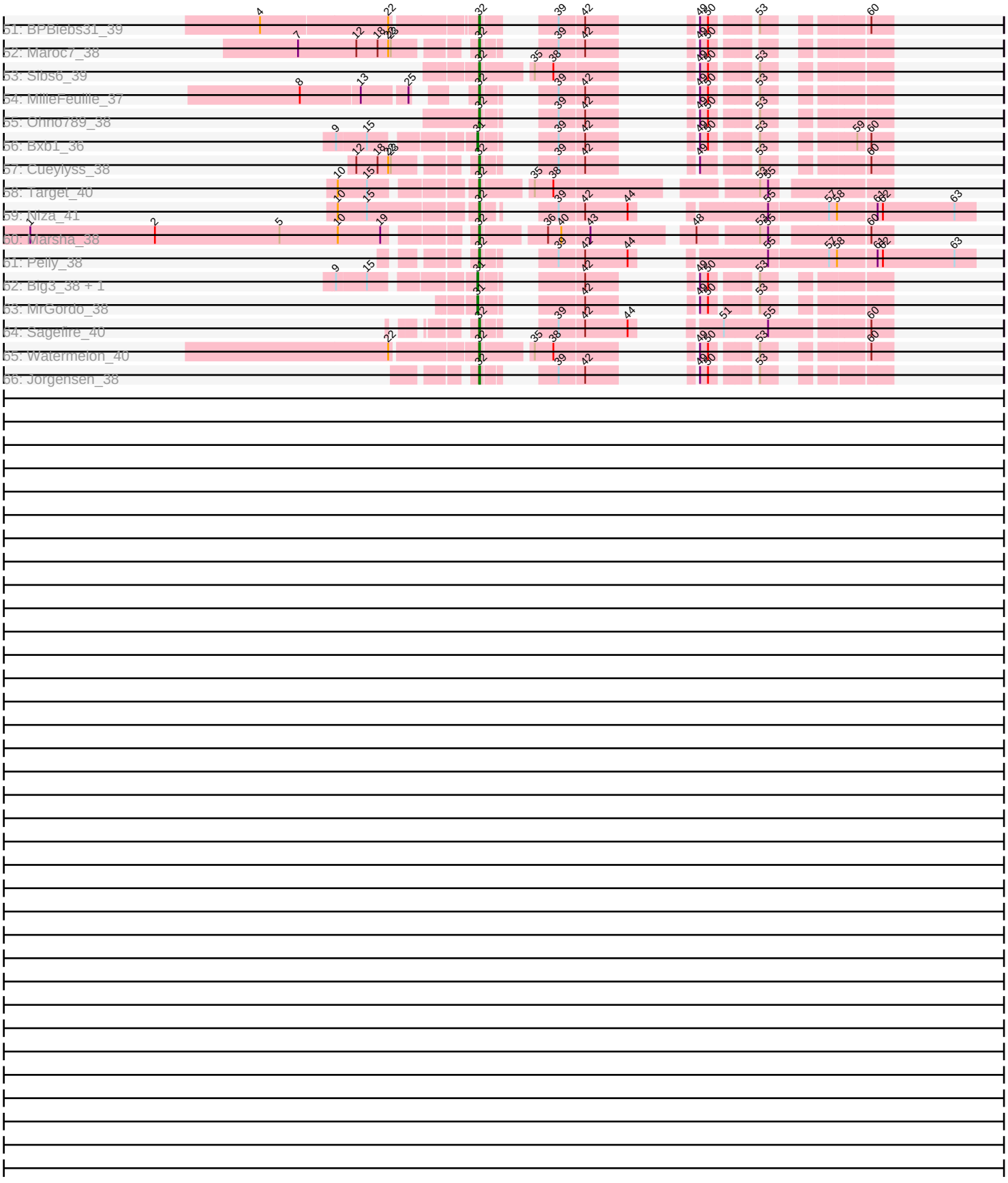
Pham 347286


1: Blue_38
2: Crispicous1_37 + 3
3: Manatee_39 + 32
4: BigPaolini_37 + 17
5: BluSpix_35 + 1
6: Conceptii_40 + 1
7: BarrowTuph_37 + 1
8: Naira_39 + 1
9: Solon_38 + 5
10: LilBib_38
11: Rajellcia_38 + 12
12: Bigfoot_36 + 8
13: Zeuska_39 + 2
14: PhrostyMug_39
15: Ringer_39
16: CactusRose_36
17: Killgrew_37
18: Peterson_42 + 1
19: Raid_38
20: Sorpresa_38 + 4
21: Marchy_33 + 12
22: Sunshine924_40
23: Chanagan_37 + 4
24: Thor_38 + 1
25: MetalQZJ_38 + 2
26: PattyP_40
27: Trait412_40 + 1
28: Bexan_36 + 1
29: PascalRango_39 + 5
30: Magnito_37 + 1
31: SkiPole_41 + 2
32: QTRifleCrisis_39 + 2
33: Kykar_37
34: Dussy_39 + 2
35: Inyanga_36 + 1
36: Ruotula_38
37: Nerujay_39 + 1
38: Parliament_37
39: StewieG_35
40: Fushigi_37
41: EnzoK_37 + 1
42: Makemake_39
43: Paphu_37
44: RidgeCB_38
45: Alsiro_42
46: Bruns_37
47: Zeeculate_38
48: Lopton_39
49: JackSparrow_40
50: KyMonks1A_41

Pham 347286


51: BPBiebs31_39
52: Maroc7_38
53: Sibs6_39
54: MilleFeuille_37
55: Ohno789_38
56: Bxb1_36
57: Cueylyss_38
58: Target_40
59: Niza_41
60: Marsha_38
61: Pelly_38
62: Big3_38 + 1
63: MrGordo_38
64: Sagelfre_40
65: Watermelon_40
66: Jorgensen_38

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 347286 Report

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

Pham number 347286 has 191 members, 13 are drafts.

Phages represented in each track:
• Track 1 : Blue_38
• Track 2 : Crispicous1_37, Magnar_38, Fascinus_37, Wheeler_39
• Track 3 : Manatee_39, DirtDevil_40, Snazzy_37, Marge_39, Switzer_39, Blesser_38, MPlant7149_38, Pinto_40, Violet_37, Gwendoluna_41, KikiBouba_41, Norz_40, Rufus_40, JuliaChild_40, GroundGoblin_40, CatBus_40, Anglerfish_40, GMonster_37, Ichabod_39, McGuire_39, Dynamix_39, Rhynn_38, Mkhuseli_39, Squee_39, Tripl3t_39, NEHalo_38, Smeagol_40, Noxious_41, Aldrich_40, Tote_35, AFIS_38, Hermia_41, Swole_40
• Track 4 : BigPaolini_37, Eyeball_38, Agaliana_36, A6_35, KBG_39, Froghopper_38, Wilkins_37, PacerPaul_39, LunarLander_39, Graduation_40, ChristmasHams_36, Topgun_37, Phlippers_36, BK1_35, Puppet_38, Francis47_38, Smairt_39, Licorice_40
• Track 5 : BluSpix_35, IgnatiusPatJac_37
• Track 6 : ConceptII_40, Teodoridan_36
• Track 7 : BarrowTuph_37, Marco3_38
• Track 8 : Naira_39, Fenn_39
• Track 9 : Solon_38, DrFeelGood_37, Lamina13_38, Tasp14_39, Rubeus_38, Sumter_37
• Track 10 : LilBib_38
• Track 11 : Rajelicia_38, Michley_38, Lesedi_37, GrecoEtereo_40, Gachnar_40, Arcanine_38, Buttons_38, Adahisdi_39, TheloniousMonk_40, Oogway_37, HarryOW_38, Slagathor_39, Beatrix_38
• Track 12 : Bigfoot_36, Nhonho_38, Bircsak_38, Bones_38, Gompeii16_38, Espresso_38, Doom_38, Papez_40, Barriga_38
• Track 13 : Zeuska_39, Applejack_35, Abrogate_390
• Track 14 : PhrostyMug_39
• Track 15 : Ringer_39
• Track 16 : CactusRose_36
• Track 17 : Killigrew_37
• Track 18 : Peterson_42, ILeeKay_40
• Track 19 : Raid_38
• Track 20 : Sorpresa_38, Pita2_40, Sandaddy_38, BaconJack_41, PSullivan_37
• Track 21 : Marchy_33, SwissCheese_40, Forsytheast_38, PhineBark_37, Blackflame_38, Levia_35, ShortQueendom_34, Altman_40, Payneful_38, Corvo_39, HanShotFirst_37, Moose_38, Kanely_39
• Track 22 : Sunshine924_40
• Track 23 : Chanagan_37, Carlyle_39, PherrisBueller_39, Jasper_39, Dreamboat_39

• Track 24 : Thor_38, SarFire_38
• Track 25 : MetalQZJ_38, Mryolo_36, MaryBeth_38
• Track 26 : PattyP_40
• Track 27 : Traft412_40, Perseus_40
• Track 28 : Bexan_36, StrongArm_37
• Track 29 : PascalRango_39, Paraselene_37, Arlo_37, Atkinbua_40, Briton15_40, ProMouse_38
• Track 30 : Magnito_37, Turj99_37
• Track 31 : SkiPole_41, Gandalf20_39, STLscum_39
• Track 32 : QTRlifeCrisis_39, Dexes_38, CartmannCramer_38
• Track 33 : Kykar_37
• Track 34 : Dussy_39, Abbyshoes_40, Kenmech_41
• Track 35 : Inyanga_36, Iqorha_36
• Track 36 : Ruotula_38
• Track 37 : Nerujay_39, Hope4ever_38
• Track 38 : Parliament_37
• Track 39 : StewieG_35
• Track 40 : Fushigi_37
• Track 41 : EnzoK_37, McSinger_39
• Track 42 : Makemake_39
• Track 43 : Paphu_37
• Track 44 : RidgeCB_38
• Track 45 : Alsfro_42
• Track 46 : Bruns_37
• Track 47 : Zeeculate_38
• Track 48 : Lopton_39
• Track 49 : JackSparrow_40
• Track 50 : KyMonks1A_41
• Track 51 : BPBiebs31_39
• Track 52 : Maroc7_38
• Track 53 : Sibs6_39
• Track 54 : MilleFeuille_37
• Track 55 : Ohno789_38
• Track 56 : Bxb1_36
• Track 57 : Cueylyss_38
• Track 58 : Target_40
• Track 59 : Niza_41
• Track 60 : Marsha_38
• Track 61 : Pelly_38
• Track 62 : Big3_38, Ajay_39
• Track 63 : MrGordo_38
• Track 64 : Sagefire_40
• Track 65 : Watermelon_40
• Track 66 : Jorgensen_38

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

The start number called the most often in the published annotations is 32, it was called in 122 of the 178 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A6_35, Abbyshoes_40, Abrogate_390, Agaliana_36, Alsfro_42, Altman_40, Applejack_35, Arlo_37, Atkinbua_40, BK1_35, BPBiebs31_39, BaconJack_41, Barriga_38, BarrowTuph_37, Bexan_36, BigPaolini_37, Bigfoot_36, Bircsak_38, Blackflame_38, Blue_38, Bones_38, Briton15_40, Bruns_37, CactusRose_36, Carlyle_39, CartmannCramer_38, Chanagan_37, ChristmasHams_36, ConceptII_40, Corvo_39, Crispicous1_37, Cueylyss_38, Dexes_38, Doom_38, DrFeelGood_37, Dreamboat_39, Dussy_39, EnzoK_37, Espresso_38, Eyeball_38, Fascinus_37, Fenn_39, Forsytheast_38, Francis47_38, Froghopper_38, Fushigi_37, Gompeii16_38, Graduation_40, HanShotFirst_37, Hope4ever_38, ILeeKay_40, Inyanga_36, Iqorha_36, JackSparrow_40, Jasper_39, Jorgensen_38, KBG_39, Kanely_39, Kenmech_41, Killigrew_37, KyMonks1A_41, Kykar_37, Lamina13_38, Levia_35, Licorice_40, LilBib_38, Lopton_39, LunarLander_39, Magnar_38, Makemake_39, Marchy_33, Marco3_38, Maroc7_38, Marsha_38, MaryBeth_38, McSinger_39, MetalQZJ_38, MilleFeuille_37, Moose_38, Mryolo_36, Naira_39, Nerujay_39, Nhonho_38, Niza_41, Ohno789_38, PSullivan_37, PacerPaul_39, Papez_40, Paphu_37, Paraselene_37, Parliament_37, PascalRango_39, Payneful_38, Pelly_38, Perseus_40, Peterson_42, PherrisBueller_39, PhineBark_37, Phlippers_36, PhrostyMug_39, Pita2_40, ProMouse_38, Puppet_38, QTRlifeCrisis_39, Raid_38, RidgeCB_38, Ringer_39, Rubeus_38, Ruotula_38, Sagefire_40, Sandaddy_38, ShortQueendom_34, Sibs6_39, Smairt_39, Solon_38, Sorpresa_38, StewieG_35, StrongArm_37, Sumter_37, Sunshine924_40, SwissCheese_40, Target_40, Tasp14_39, Teodoridan_36, Topgun_37, Traft412_40, Watermelon_40, Wheeler_39, Wilkins_37, Zeeculate_38, Zeuska_39,

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

Genes that do not have the "Most Annotated" start:
• AFIS_38, Adahisdi_39, Ajay_39, Aldrich_40, Anglerfish_40, Arcanine_38, Beatrix_38, Big3_38, Blesser_38, BluSpix_35, Buttons_38, Bxb1_36, CatBus_40, DirtDevil_40, Dynamix_39, GMonster_37, Gachnar_40, Gandalf20_39, GrecoEtereo_40, GroundGoblin_40, Gwendoluna_41, HarryOW_38, Hermia_41, Ichabod_39, IgnatiusPatJac_37, JuliaChild_40, KikiBouba_41, Lesedi_37, MPlant7149_38, Magnito_37, Manatee_39, Marge_39, McGuire_39, Michley_38, Mkhuseli_39, MrGordo_38, NEHalo_38, Norz_40, Noxious_41, Oogway_37, PattyP_40, Pinto_40, Rajelicia_38, Rhynn_38, Rufus_40, STLscum_39, SarFire_38, SkiPole_41, Slagathor_39, Smeagol_40, Snazzy_37, Squee_39, Switzer_39, Swole_40, TheloniousMonk_40, Thor_38, Tote_35, Tripl3t_39, Turj99_37, Violet_37,

Summary by start number:

Start 16:
• Found in 5 of 191 (2.6%) of genes in pham
• Manual Annotations of this start: 5 of 178
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BluSpix_35 (A1), Gandalf20_39 (A1), IgnatiusPatJac_37 (A1), STLscum_39 (A1), SkiPole_41 (A1),

Start 31:
• Found in 55 of 191 (28.8%) of genes in pham
• Manual Annotations of this start: 51 of 178
• Called 100.0% of time when present

• Phage (with cluster) where this start called: AFIS_38 (A1), Adahisdi_39 (A1), Ajay_39 (A1), Aldrich_40 (A1), Anglerfish_40 (A1), Arcanine_38 (A1), Beatrix_38 (A1), Big3_38 (A1), Blesser_38 (A1), Buttons_38 (A1), Bxb1_36 (A1), CatBus_40 (A1), DirtDevil_40 (A1), Dynamix_39 (A1), GMonster_37 (A1), Gachnar_40 (A1), GrecoEtereo_40 (A1), GroundGoblin_40 (A1), Gwendoluna_41 (A1), HarryOW_38 (A1), Hermia_41 (A1), Ichabod_39 (A1), JuliaChild_40 (A1), KikiBouba_41 (A1), Lesedi_37 (A1), MPlant7149_38 (A1), Magnito_37 (A1), Manatee_39 (A1), Marge_39 (A1), McGuire_39 (A1), Michley_38 (A1), Mkhuseli_39 (A1), MrGordo_38 (A1), NEHalo_38 (A1), Norz_40 (A1), Noxious_41 (A1), Oogway_37 (A1), PattyP_40 (A1), Pinto_40 (A1), Rajelicia_38 (A1), Rhynn_38 (A1), Rufus_40 (A1), SarFire_38 (A1), Slagathor_39 (A1), Smeagol_40 (A1), Snazzy_37 (A1), Squee_39 (A1), Switzer_39 (A1), Swole_40 (A1), TheloniousMonk_40 (A1), Thor_38 (A1), Tote_35 (A1), Tripl3t_39 (A1), Turj99_37 (A1), Violet_37 (A1),

Start 32:
• Found in 131 of 191 (68.6%) of genes in pham
• Manual Annotations of this start: 122 of 178
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A6_35 (A1), Abbyshoes_40 (A1), Abrogate_390 (A1), Agaliana_36 (A1), Alsfro_42 (A1), Altman_40 (A1), Applejack_35 (A1), Arlo_37 (A1), Atkinbua_40 (A1), BK1_35 (A1), BPBiebs31_39 (A1), BaconJack_41 (A1), Barriga_38 (A1), BarrowTuph_37 (A1), Bexan_36 (A1), BigPaolini_37 (A1), Bigfoot_36 (A1), Bircsak_38 (A1), Blackflame_38 (A1), Blue_38 (A1), Bones_38 (A1), Briton15_40 (A1), Bruns_37 (A1), CactusRose_36 (A1), Carlyle_39 (A1), CartmannCramer_38 (A1), Chanagan_37 (A1), ChristmasHams_36 (A1), ConceptII_40 (A1), Corvo_39 (A1), Crispicous1_37 (A1), Cueylyss_38 (A1), Dexes_38 (A1), Doom_38 (A1), DrFeelGood_37 (A1), Dreamboat_39 (A1), Dussy_39 (A1), EnzoK_37 (A1), Espresso_38 (A1), Eyeball_38 (A1), Fascinus_37 (A1), Fenn_39 (A1), Forsytheast_38 (A1), Francis47_38 (A1), Froghopper_38 (A1), Fushigi_37 (A1), Gompeii16_38 (A1), Graduation_40 (A1), HanShotFirst_37 (A1), Hope4ever_38 (A1), ILeeKay_40 (A1), Inyanga_36 (A1), Iqorha_36 (A1), JackSparrow_40 (A1), Jasper_39 (A1), Jorgensen_38 (A1), KBG_39 (A1), Kanely_39 (A1), Kenmech_41 (A1), Killigrew_37 (A1), KyMonks1A_41 (A1), Kykar_37 (A1), Lamina13_38 (A1), Levia_35 (A1), Licorice_40 (A1), LilBib_38 (A1), Lopton_39 (A1), LunarLander_39 (A1), Magnar_38 (A1), Makemake_39 (A1), Marchy_33 (A1), Marco3_38 (A1), Maroc7_38 (A1), Marsha_38 (A1), MaryBeth_38 (A1), McSinger_39 (A1), MetalQZJ_38 (A1), MilleFeuille_37 (A1), Moose_38 (A1), Mryolo_36 (A1), Naira_39 (A1), Nerujay_39 (A1), Nhonho_38 (A1), Niza_41 (A1), Ohno789_38 (A1), PSullivan_37 (A1), PacerPaul_39 (A1), Papez_40 (A1), Paphu_37 (A1), Paraselene_37 (A1), Parliament_37 (A1), PascalRango_39 (A1), Payneful_38 (A1), Pelly_38 (A1), Perseus_40 (A1), Peterson_42 (A1), PherrisBueller_39 (A1), PhineBark_37 (A1), Phlippers_36 (A1), PhrostyMug_39 (A1), Pita2_40 (A1), ProMouse_38 (A1), Puppet_38 (A1), QTRlifeCrisis_39 (A1), Raid_38 (A1), RidgeCB_38 (A1), Ringer_39 (A1), Rubeus_38 (A1), Ruotula_38 (A1), Sagefire_40 (A1), Sandaddy_38 (A1), ShortQueendom_34 (A1), Sibs6_39 (A1), Smairt_39 (A1), Solon_38 (A1), Sorpresa_38 (A1), StewieG_35 (A1), StrongArm_37 (A1), Sumter_37 (A1), Sunshine924_40 (A1), SwissCheese_40 (A1), Target_40 (A1), Tasp14_39 (A1), Teodoridan_36 (A1), Topgun_37 (A1), Traft412_40 (A1), Watermelon_40 (A1), Wheeler_39 (A1), Wilkins_37 (A1), Zeeculate_38 (A1), Zeuska_39 (A1),

Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:
•Start number 16 was manually annotated 5 times for cluster A1.
•Start number 31 was manually annotated 51 times for cluster A1.
•Start number 32 was manually annotated 122 times for cluster A1.

Gene Information:

Gene: A6_35 Start: 30422, Stop: 30150, Start Num: 32
Candidate Starts for A6_35:
(12, 30536), (18, 30512), (22, 30500), (23, 30497), (Start: 32 @30422 has 122 MA's), (39, 30380), (42, 30353), (49, 30308), (50, 30299), (53, 30260), (60, 30173),

Gene: AFIS_38 Start: 31598, Stop: 31326, Start Num: 31
Candidate Starts for AFIS_38:
(9, 31733), (15, 31700), (Start: 31 @31598 has 51 MA's), (39, 31556), (42, 31529), (49, 31484), (50, 31475), (53, 31436), (60, 31349),

Gene: Abbyshoes_40 Start: 31568, Stop: 31185, Start Num: 32
Candidate Starts for Abbyshoes_40:
(26, 31604), (Start: 32 @31568 has 122 MA's), (36, 31502), (46, 31400), (55, 31301), (60, 31208),

Gene: Abrogate_390 Start: 32285, Stop: 31953, Start Num: 32
Candidate Starts for Abrogate_390:
(Start: 32 @32285 has 122 MA's), (39, 32243), (42, 32216), (44, 32168), (55, 32075),

Gene: Adahisdi_39 Start: 31648, Stop: 31376, Start Num: 31
Candidate Starts for Adahisdi_39:
(9, 31783), (15, 31750), (Start: 31 @31648 has 51 MA's), (39, 31606), (42, 31579), (49, 31534), (50, 31525), (53, 31486),

Gene: Agaliana_36 Start: 28180, Stop: 27908, Start Num: 32
Candidate Starts for Agaliana_36:
(12, 28294), (18, 28270), (22, 28258), (23, 28255), (Start: 32 @28180 has 122 MA's), (39, 28138), (42, 28111), (49, 28066), (50, 28057), (53, 28018), (60, 27931),

Gene: Ajay_39 Start: 31439, Stop: 31167, Start Num: 31
Candidate Starts for Ajay_39:
(9, 31574), (15, 31541), (Start: 31 @31439 has 51 MA's), (42, 31370), (49, 31325), (50, 31316), (53, 31277),

Gene: Aldrich_40 Start: 32611, Stop: 32339, Start Num: 31
Candidate Starts for Aldrich_40:
(9, 32746), (15, 32713), (Start: 31 @32611 has 51 MA's), (39, 32569), (42, 32542), (49, 32497), (50, 32488), (53, 32449), (60, 32362),

Gene: Alsfro_42 Start: 31790, Stop: 31518, Start Num: 32
Candidate Starts for Alsfro_42:
(8, 31982), (13, 31916), (25, 31868), (Start: 32 @31790 has 122 MA's), (39, 31748), (42, 31721), (49, 31676), (50, 31667), (53, 31628), (60, 31541),

Gene: Altman_40 Start: 32259, Stop: 31951, Start Num: 32
Candidate Starts for Altman_40:
(22, 32346), (Start: 32 @32259 has 122 MA's), (34, 32226), (37, 32190), (39, 32181), (49, 32109), (50, 32100), (53, 32061), (60, 31974),

Gene: Anglerfish_40 Start: 31701, Stop: 31429, Start Num: 31
Candidate Starts for Anglerfish_40:
(9, 31836), (15, 31803), (Start: 31 @31701 has 51 MA's), (39, 31659), (42, 31632), (49, 31587), (50, 31578), (53, 31539), (60, 31452),

Gene: Applejack_35 Start: 28515, Stop: 28180, Start Num: 32
Candidate Starts for Applejack_35:
(Start: 32 @28515 has 122 MA's), (39, 28470), (42, 28443), (44, 28395), (55, 28302),

Gene: Arcanine_38 Start: 30821, Stop: 30549, Start Num: 31
Candidate Starts for Arcanine_38:
(9, 30956), (15, 30923), (Start: 31 @30821 has 51 MA's), (39, 30779), (42, 30752), (49, 30707), (50, 30698), (53, 30659),

Gene: Arlo_37 Start: 31329, Stop: 31018, Start Num: 32
Candidate Starts for Arlo_37:
(10, 31464), (15, 31431), (Start: 32 @31329 has 122 MA's), (39, 31287), (42, 31260), (48, 31206), (53, 31143), (55, 31134), (60, 31041),

Gene: Atkinbua_40 Start: 31777, Stop: 31466, Start Num: 32
Candidate Starts for Atkinbua_40:
(10, 31912), (15, 31879), (Start: 32 @31777 has 122 MA's), (39, 31735), (42, 31708), (48, 31654), (53, 31591), (55, 31582), (60, 31489),

Gene: BK1_35 Start: 30422, Stop: 30150, Start Num: 32
Candidate Starts for BK1_35:
(12, 30536), (18, 30512), (22, 30500), (23, 30497), (Start: 32 @30422 has 122 MA's), (39, 30380), (42, 30353), (49, 30308), (50, 30299), (53, 30260), (60, 30173),

Gene: BPBiebs31_39 Start: 31743, Stop: 31468, Start Num: 32
Candidate Starts for BPBiebs31_39:
(4, 31971), (22, 31830), (Start: 32 @31743 has 122 MA's), (39, 31698), (42, 31671), (49, 31626), (50, 31617), (53, 31578), (60, 31491),

Gene: BaconJack_41 Start: 31798, Stop: 31526, Start Num: 32
Candidate Starts for BaconJack_41:
(21, 31882), (Start: 32 @31798 has 122 MA's), (39, 31756), (42, 31729), (49, 31684), (50, 31675), (53, 31636), (60, 31549),

Gene: Barriga_38 Start: 30917, Stop: 30645, Start Num: 32
Candidate Starts for Barriga_38:
(12, 31031), (18, 31007), (22, 30995), (23, 30992), (Start: 32 @30917 has 122 MA's), (39, 30875), (42, 30848), (49, 30803), (50, 30794), (53, 30755),

Gene: BarrowTuph_37 Start: 31319, Stop: 31008, Start Num: 32
Candidate Starts for BarrowTuph_37:
(26, 31355), (Start: 32 @31319 has 122 MA's), (39, 31277), (42, 31250), (47, 31196), (53, 31133), (55, 31124), (60, 31031),

Gene: Beatrix_38 Start: 32774, Stop: 32502, Start Num: 31
Candidate Starts for Beatrix_38:
(9, 32909), (15, 32876), (Start: 31 @32774 has 51 MA's), (39, 32732), (42, 32705), (49, 32660), (50, 32651), (53, 32612),

Gene: Bexan_36 Start: 32268, Stop: 31996, Start Num: 32
Candidate Starts for Bexan_36:
(14, 32394), (Start: 32 @32268 has 122 MA's), (39, 32226), (42, 32199), (49, 32154), (50, 32145), (53, 32106),

Gene: Big3_38 Start: 31940, Stop: 31668, Start Num: 31
Candidate Starts for Big3_38:
(9, 32075), (15, 32042), (Start: 31 @31940 has 51 MA's), (42, 31871), (49, 31826), (50, 31817), (53, 31778),

Gene: BigPaolini_37 Start: 29684, Stop: 29412, Start Num: 32
Candidate Starts for BigPaolini_37:
(12, 29798), (18, 29774), (22, 29762), (23, 29759), (Start: 32 @29684 has 122 MA's), (39, 29642), (42, 29615), (49, 29570), (50, 29561), (53, 29522), (60, 29435),

Gene: Bigfoot_36 Start: 30710, Stop: 30438, Start Num: 32
Candidate Starts for Bigfoot_36:
(12, 30824), (18, 30800), (22, 30788), (23, 30785), (Start: 32 @30710 has 122 MA's), (39, 30668), (42, 30641), (49, 30596), (50, 30587), (53, 30548),

Gene: Bircsak_38 Start: 31775, Stop: 31503, Start Num: 32
Candidate Starts for Bircsak_38:
(12, 31889), (18, 31865), (22, 31853), (23, 31850), (Start: 32 @31775 has 122 MA's), (39, 31733), (42, 31706), (49, 31661), (50, 31652), (53, 31613),

Gene: Blackflame_38 Start: 30951, Stop: 30643, Start Num: 32
Candidate Starts for Blackflame_38:
(22, 31038), (Start: 32 @30951 has 122 MA's), (34, 30918), (37, 30882), (39, 30873), (49, 30801), (50, 30792), (53, 30753), (60, 30666),

Gene: Blesser_38 Start: 31835, Stop: 31563, Start Num: 31
Candidate Starts for Blesser_38:
(9, 31970), (15, 31937), (Start: 31 @31835 has 51 MA's), (39, 31793), (42, 31766), (49, 31721), (50, 31712), (53, 31673), (60, 31586),

Gene: BluSpix_35 Start: 27351, Stop: 26965, Start Num: 16
Candidate Starts for BluSpix_35:
(Start: 16 @27351 has 5 MA's), (24, 27318), (28, 27282), (30, 27273), (33, 27225), (39, 27195), (42, 27168), (49, 27123), (50, 27114), (53, 27075),

Gene: Blue_38 Start: 31834, Stop: 31469, Start Num: 32
Candidate Starts for Blue_38:
(6, 32014), (11, 31948), (15, 31924), (18, 31912), (19, 31909), (Start: 32 @31834 has 122 MA's), (39, 31789), (42, 31762), (48, 31657), (53, 31594), (55, 31585), (60, 31492),

Gene: Bones_38 Start: 31179, Stop: 30907, Start Num: 32
Candidate Starts for Bones_38:

(12, 31293), (18, 31269), (22, 31257), (23, 31254), (Start: 32 @31179 has 122 MA's), (39, 31137), (42, 31110), (49, 31065), (50, 31056), (53, 31017),

Gene: Briton15_40 Start: 31612, Stop: 31301, Start Num: 32
Candidate Starts for Briton15_40:
(10, 31747), (15, 31714), (Start: 32 @31612 has 122 MA's), (39, 31570), (42, 31543), (48, 31489), (53, 31426), (55, 31417), (60, 31324),

Gene: Bruns_37 Start: 31253, Stop: 30981, Start Num: 32
Candidate Starts for Bruns_37:
(22, 31340), (Start: 32 @31253 has 122 MA's), (39, 31211), (42, 31184), (49, 31139), (50, 31130), (53, 31091), (60, 31004),

Gene: Buttons_38 Start: 30324, Stop: 30052, Start Num: 31
Candidate Starts for Buttons_38:
(9, 30459), (15, 30426), (Start: 31 @30324 has 51 MA's), (39, 30282), (42, 30255), (49, 30210), (50, 30201), (53, 30162),

Gene: Bxb1_36 Start: 31386, Stop: 31114, Start Num: 31
Candidate Starts for Bxb1_36:
(9, 31521), (15, 31488), (Start: 31 @31386 has 51 MA's), (39, 31344), (42, 31317), (49, 31272), (50, 31263), (53, 31224), (59, 31149), (60, 31137),

Gene: CactusRose_36 Start: 30823, Stop: 30551, Start Num: 32
Candidate Starts for CactusRose_36:
(Start: 32 @30823 has 122 MA's), (39, 30781), (42, 30754), (49, 30709), (50, 30700), (53, 30661), (60, 30574),

Gene: Carlyle_39 Start: 30068, Stop: 29760, Start Num: 32
Candidate Starts for Carlyle_39:
(9, 30203), (15, 30170), (Start: 32 @30068 has 122 MA's), (35, 30017), (38, 29996), (49, 29918), (50, 29909), (53, 29870), (60, 29783),

Gene: CartmannCramer_38 Start: 33534, Stop: 33202, Start Num: 32
Candidate Starts for CartmannCramer_38:
(Start: 32 @33534 has 122 MA's), (39, 33492), (42, 33465), (44, 33417), (55, 33324), (60, 33225),

Gene: CatBus_40 Start: 32803, Stop: 32531, Start Num: 31
Candidate Starts for CatBus_40:
(9, 32938), (15, 32905), (Start: 31 @32803 has 51 MA's), (39, 32761), (42, 32734), (49, 32689), (50, 32680), (53, 32641), (60, 32554),

Gene: Chanagan_37 Start: 30908, Stop: 30600, Start Num: 32
Candidate Starts for Chanagan_37:
(9, 31043), (15, 31010), (Start: 32 @30908 has 122 MA's), (35, 30857), (38, 30836), (49, 30758), (50, 30749), (53, 30710), (60, 30623),

Gene: ChristmasHams_36 Start: 28576, Stop: 28304, Start Num: 32
Candidate Starts for ChristmasHams_36:
(12, 28690), (18, 28666), (22, 28654), (23, 28651), (Start: 32 @28576 has 122 MA's), (39, 28534), (42, 28507), (49, 28462), (50, 28453), (53, 28414), (60, 28327),

Gene: ConceptII_40 Start: 32357, Stop: 32085, Start Num: 32

Candidate Starts for ConceptII_40:
(20, 32447), (Start: 32 @32357 has 122 MA's), (39, 32315), (42, 32288), (49, 32243), (50, 32234), (53, 32195), (60, 32108),

Gene: Corvo_39 Start: 32273, Stop: 31965, Start Num: 32
Candidate Starts for Corvo_39:
(22, 32360), (Start: 32 @32273 has 122 MA's), (34, 32240), (37, 32204), (39, 32195), (49, 32123), (50, 32114), (53, 32075), (60, 31988),

Gene: Crispicous1_37 Start: 30836, Stop: 30564, Start Num: 32
Candidate Starts for Crispicous1_37:
(7, 31016), (12, 30950), (18, 30926), (22, 30914), (23, 30911), (Start: 32 @30836 has 122 MA's), (39, 30794), (42, 30767), (49, 30722), (50, 30713), (53, 30674), (60, 30587),

Gene: Cueylyss_38 Start: 31412, Stop: 31140, Start Num: 32
Candidate Starts for Cueylyss_38:
(12, 31526), (18, 31502), (22, 31490), (23, 31487), (Start: 32 @31412 has 122 MA's), (39, 31370), (42, 31343), (49, 31298), (53, 31250), (60, 31163),

Gene: Dexes_38 Start: 31800, Stop: 31477, Start Num: 32
Candidate Starts for Dexes_38:
(Start: 32 @31800 has 122 MA's), (39, 31758), (42, 31731), (44, 31683), (55, 31590), (60, 31491),

Gene: DirtDevil_40 Start: 32611, Stop: 32339, Start Num: 31
Candidate Starts for DirtDevil_40:
(9, 32746), (15, 32713), (Start: 31 @32611 has 51 MA's), (39, 32569), (42, 32542), (49, 32497), (50, 32488), (53, 32449), (60, 32362),

Gene: Doom_38 Start: 31605, Stop: 31333, Start Num: 32
Candidate Starts for Doom_38:
(12, 31719), (18, 31695), (22, 31683), (23, 31680), (Start: 32 @31605 has 122 MA's), (39, 31563), (42, 31536), (49, 31491), (50, 31482), (53, 31443),

Gene: DrFeelGood_37 Start: 31699, Stop: 31427, Start Num: 32
Candidate Starts for DrFeelGood_37:
(Start: 32 @31699 has 122 MA's), (39, 31657), (42, 31630), (49, 31585), (50, 31576), (53, 31537), (60, 31450),

Gene: Dreamboat_39 Start: 31286, Stop: 30978, Start Num: 32
Candidate Starts for Dreamboat_39:
(9, 31421), (15, 31388), (Start: 32 @31286 has 122 MA's), (35, 31235), (38, 31214), (49, 31136), (50, 31127), (53, 31088), (60, 31001),

Gene: Dussy_39 Start: 31588, Stop: 31205, Start Num: 32
Candidate Starts for Dussy_39:
(26, 31624), (Start: 32 @31588 has 122 MA's), (36, 31522), (46, 31420), (55, 31321), (60, 31228),

Gene: Dynamix_39 Start: 31345, Stop: 31073, Start Num: 31
Candidate Starts for Dynamix_39:
(9, 31480), (15, 31447), (Start: 31 @31345 has 51 MA's), (39, 31303), (42, 31276), (49, 31231), (50, 31222), (53, 31183), (60, 31096),

Gene: EnzoK_37 Start: 29448, Stop: 29176, Start Num: 32

Candidate Starts for EnzoK_37:
(22, 29535), (Start: 32 @29448 has 122 MA's), (39, 29406), (42, 29379), (49, 29334), (50, 29325), (53, 29286), (60, 29199),

Gene: Espresso_38 Start: 31529, Stop: 31257, Start Num: 32
Candidate Starts for Espresso_38:
(12, 31643), (18, 31619), (22, 31607), (23, 31604), (Start: 32 @31529 has 122 MA's), (39, 31487), (42, 31460), (49, 31415), (50, 31406), (53, 31367),

Gene: Eyeball_38 Start: 31085, Stop: 30813, Start Num: 32
Candidate Starts for Eyeball_38:
(12, 31199), (18, 31175), (22, 31163), (23, 31160), (Start: 32 @31085 has 122 MA's), (39, 31043), (42, 31016), (49, 30971), (50, 30962), (53, 30923), (60, 30836),

Gene: Fascinus_37 Start: 30859, Stop: 30587, Start Num: 32
Candidate Starts for Fascinus_37:
(7, 31039), (12, 30973), (18, 30949), (22, 30937), (23, 30934), (Start: 32 @30859 has 122 MA's), (39, 30817), (42, 30790), (49, 30745), (50, 30736), (53, 30697), (60, 30610),

Gene: Fenn_39 Start: 32892, Stop: 32620, Start Num: 32
Candidate Starts for Fenn_39:
(12, 33006), (17, 32985), (18, 32982), (22, 32970), (23, 32967), (Start: 32 @32892 has 122 MA's), (39, 32850), (42, 32823), (49, 32778), (50, 32769), (53, 32730), (60, 32643),

Gene: Forsytheast_38 Start: 31551, Stop: 31243, Start Num: 32
Candidate Starts for Forsytheast_38:
(22, 31638), (Start: 32 @31551 has 122 MA's), (34, 31518), (37, 31482), (39, 31473), (49, 31401), (50, 31392), (53, 31353), (60, 31266),

Gene: Francis47_38 Start: 31946, Stop: 31674, Start Num: 32
Candidate Starts for Francis47_38:
(12, 32060), (18, 32036), (22, 32024), (23, 32021), (Start: 32 @31946 has 122 MA's), (39, 31904), (42, 31877), (49, 31832), (50, 31823), (53, 31784), (60, 31697),

Gene: Froghopper_38 Start: 30873, Stop: 30601, Start Num: 32
Candidate Starts for Froghopper_38:
(12, 30987), (18, 30963), (22, 30951), (23, 30948), (Start: 32 @30873 has 122 MA's), (39, 30831), (42, 30804), (49, 30759), (50, 30750), (53, 30711), (60, 30624),

Gene: Fushigi_37 Start: 29564, Stop: 29232, Start Num: 32
Candidate Starts for Fushigi_37:
(10, 29699), (15, 29666), (Start: 32 @29564 has 122 MA's), (39, 29522), (42, 29495), (44, 29447), (55, 29354), (60, 29255),

Gene: GMonster_37 Start: 30681, Stop: 30409, Start Num: 31
Candidate Starts for GMonster_37:
(9, 30816), (15, 30783), (Start: 31 @30681 has 51 MA's), (39, 30639), (42, 30612), (49, 30567), (50, 30558), (53, 30519), (60, 30432),

Gene: Gachnar_40 Start: 31453, Stop: 31181, Start Num: 31
Candidate Starts for Gachnar_40:
(9, 31588), (15, 31555), (Start: 31 @31453 has 51 MA's), (39, 31411), (42, 31384), (49, 31339), (50, 31330), (53, 31291),

Gene: Gandalf20_39 Start: 32248, Stop: 31862, Start Num: 16
Candidate Starts for Gandalf20_39:
(Start: 16 @32248 has 5 MA's), (24, 32215), (28, 32179), (30, 32170), (33, 32122), (39, 32092), (42, 32065), (49, 32020), (50, 32011), (53, 31972), (60, 31885),

Gene: Gompeii16_38 Start: 31776, Stop: 31504, Start Num: 32
Candidate Starts for Gompeii16_38:
(12, 31890), (18, 31866), (22, 31854), (23, 31851), (Start: 32 @31776 has 122 MA's), (39, 31734), (42, 31707), (49, 31662), (50, 31653), (53, 31614),

Gene: Graduation_40 Start: 31999, Stop: 31727, Start Num: 32
Candidate Starts for Graduation_40:
(12, 32113), (18, 32089), (22, 32077), (23, 32074), (Start: 32 @31999 has 122 MA's), (39, 31957), (42, 31930), (49, 31885), (50, 31876), (53, 31837), (60, 31750),

Gene: GrecoEtereo_40 Start: 32075, Stop: 31803, Start Num: 31
Candidate Starts for GrecoEtereo_40:
(9, 32210), (15, 32177), (Start: 31 @32075 has 51 MA's), (39, 32033), (42, 32006), (49, 31961), (50, 31952), (53, 31913),

Gene: GroundGoblin_40 Start: 32753, Stop: 32481, Start Num: 31
Candidate Starts for GroundGoblin_40:
(9, 32888), (15, 32855), (Start: 31 @32753 has 51 MA's), (39, 32711), (42, 32684), (49, 32639), (50, 32630), (53, 32591), (60, 32504),

Gene: Gwendoluna_41 Start: 33532, Stop: 33128, Start Num: 31
Candidate Starts for Gwendoluna_41:
(9, 33667), (15, 33634), (Start: 31 @33532 has 51 MA's), (39, 33490), (42, 33463), (49, 33418), (50, 33409), (53, 33370), (60, 33277),

Gene: HanShotFirst_37 Start: 30903, Stop: 30595, Start Num: 32
Candidate Starts for HanShotFirst_37:
(22, 30990), (Start: 32 @30903 has 122 MA's), (34, 30870), (37, 30834), (39, 30825), (49, 30753), (50, 30744), (53, 30705), (60, 30618),

Gene: HarryOW_38 Start: 31247, Stop: 30975, Start Num: 31
Candidate Starts for HarryOW_38:
(9, 31382), (15, 31349), (Start: 31 @31247 has 51 MA's), (39, 31205), (42, 31178), (49, 31133), (50, 31124), (53, 31085),

Gene: Hermia_41 Start: 32803, Stop: 32531, Start Num: 31
Candidate Starts for Hermia_41:
(9, 32938), (15, 32905), (Start: 31 @32803 has 51 MA's), (39, 32761), (42, 32734), (49, 32689), (50, 32680), (53, 32641), (60, 32554),

Gene: Hope4ever_38 Start: 31682, Stop: 31410, Start Num: 32
Candidate Starts for Hope4ever_38:
(29, 31718), (Start: 32 @31682 has 122 MA's), (39, 31640), (42, 31613), (49, 31568), (50, 31559), (53, 31520), (60, 31433),

Gene: ILeeKay_40 Start: 31449, Stop: 31177, Start Num: 32
Candidate Starts for ILeeKay_40:

(7, 31629), (12, 31563), (18, 31539), (22, 31527), (23, 31524), (Start: 32 @31449 has 122 MA's), (39, 31407), (42, 31380), (49, 31335), (50, 31326), (53, 31287),

Gene: Ichabod_39 Start: 31486, Stop: 31214, Start Num: 31
Candidate Starts for Ichabod_39:
(9, 31621), (15, 31588), (Start: 31 @31486 has 51 MA's), (39, 31444), (42, 31417), (49, 31372), (50, 31363), (53, 31324), (60, 31237),

Gene: IgnatiusPatJac_37 Start: 31296, Stop: 30910, Start Num: 16
Candidate Starts for IgnatiusPatJac_37:
(Start: 16 @31296 has 5 MA's), (24, 31263), (28, 31227), (30, 31218), (33, 31170), (39, 31140), (42, 31113), (49, 31068), (50, 31059), (53, 31020),

Gene: Inyanga_36 Start: 30633, Stop: 30358, Start Num: 32
Candidate Starts for Inyanga_36:
(3, 30894), (14, 30759), (Start: 32 @30633 has 122 MA's), (39, 30588), (42, 30561), (49, 30516), (50, 30507), (53, 30468),

Gene: Iqorha_36 Start: 30632, Stop: 30357, Start Num: 32
Candidate Starts for Iqorha_36:
(3, 30893), (14, 30758), (Start: 32 @30632 has 122 MA's), (39, 30587), (42, 30560), (49, 30515), (50, 30506), (53, 30467),

Gene: JackSparrow_40 Start: 32093, Stop: 31791, Start Num: 32
Candidate Starts for JackSparrow_40:
(Start: 32 @32093 has 122 MA's), (35, 32042), (38, 32021), (49, 31943), (50, 31934), (53, 31895),

Gene: Jasper_39 Start: 31172, Stop: 30864, Start Num: 32
Candidate Starts for Jasper_39:
(9, 31307), (15, 31274), (Start: 32 @31172 has 122 MA's), (35, 31121), (38, 31100), (49, 31022), (50, 31013), (53, 30974), (60, 30887),

Gene: Jorgensen_38 Start: 31181, Stop: 30909, Start Num: 32
Candidate Starts for Jorgensen_38:
(Start: 32 @31181 has 122 MA's), (39, 31139), (42, 31112), (49, 31067), (50, 31058), (53, 31019),

Gene: JuliaChild_40 Start: 31921, Stop: 31649, Start Num: 31
Candidate Starts for JuliaChild_40:
(9, 32056), (15, 32023), (Start: 31 @31921 has 51 MA's), (39, 31879), (42, 31852), (49, 31807), (50, 31798), (53, 31759), (60, 31672),

Gene: KBG_39 Start: 32392, Stop: 32120, Start Num: 32
Candidate Starts for KBG_39:
(12, 32506), (18, 32482), (22, 32470), (23, 32467), (Start: 32 @32392 has 122 MA's), (39, 32350), (42, 32323), (49, 32278), (50, 32269), (53, 32230), (60, 32143),

Gene: Kanely_39 Start: 32035, Stop: 31727, Start Num: 32
Candidate Starts for Kanely_39:
(22, 32122), (Start: 32 @32035 has 122 MA's), (34, 32002), (37, 31966), (39, 31957), (49, 31885), (50, 31876), (53, 31837), (60, 31750),

Gene: Kenmech_41 Start: 32714, Stop: 32331, Start Num: 32
Candidate Starts for Kenmech_41:

(26, 32750), (Start: 32 @32714 has 122 MA's), (36, 32648), (46, 32546), (55, 32447), (60, 32354),

Gene: KikiBouba_41 Start: 32612, Stop: 32340, Start Num: 31
Candidate Starts for KikiBouba_41:
(9, 32747), (15, 32714), (Start: 31 @32612 has 51 MA's), (39, 32570), (42, 32543), (49, 32498), (50, 32489), (53, 32450), (60, 32363),

Gene: Killigrew_37 Start: 31321, Stop: 30923, Start Num: 32
Candidate Starts for Killigrew_37:
(Start: 32 @31321 has 122 MA's), (39, 31279), (42, 31252), (49, 31207), (50, 31198), (53, 31159), (60, 31066), (64, 30940),

Gene: KyMonks1A_41 Start: 31846, Stop: 31574, Start Num: 32
Candidate Starts for KyMonks1A_41:
(Start: 32 @31846 has 122 MA's), (38, 31810), (39, 31804), (42, 31777), (49, 31732), (50, 31723), (53, 31684), (60, 31597),

Gene: Kykar_37 Start: 30822, Stop: 30550, Start Num: 32
Candidate Starts for Kykar_37:
(7, 31002), (12, 30936), (18, 30912), (22, 30900), (23, 30897), (Start: 32 @30822 has 122 MA's), (39, 30780), (42, 30753), (50, 30699), (53, 30660),

Gene: Lamina13_38 Start: 30935, Stop: 30663, Start Num: 32
Candidate Starts for Lamina13_38:
(Start: 32 @30935 has 122 MA's), (39, 30893), (42, 30866), (49, 30821), (50, 30812), (53, 30773), (60, 30686),

Gene: Lesedi_37 Start: 31210, Stop: 30938, Start Num: 31
Candidate Starts for Lesedi_37:
(9, 31345), (15, 31312), (Start: 31 @31210 has 51 MA's), (39, 31168), (42, 31141), (49, 31096), (50, 31087), (53, 31048),

Gene: Levia_35 Start: 31194, Stop: 30886, Start Num: 32
Candidate Starts for Levia_35:
(22, 31281), (Start: 32 @31194 has 122 MA's), (34, 31161), (37, 31125), (39, 31116), (49, 31044), (50, 31035), (53, 30996), (60, 30909),

Gene: Licorice_40 Start: 32280, Stop: 32008, Start Num: 32
Candidate Starts for Licorice_40:
(12, 32394), (18, 32370), (22, 32358), (23, 32355), (Start: 32 @32280 has 122 MA's), (39, 32238), (42, 32211), (49, 32166), (50, 32157), (53, 32118), (60, 32031),

Gene: LilBib_38 Start: 32107, Stop: 31799, Start Num: 32
Candidate Starts for LilBib_38:
(22, 32194), (Start: 32 @32107 has 122 MA's), (35, 32056), (38, 32035), (49, 31957), (50, 31948), (53, 31909),

Gene: Lopton_39 Start: 32717, Stop: 32445, Start Num: 32
Candidate Starts for Lopton_39:
(Start: 32 @32717 has 122 MA's), (39, 32675), (42, 32648), (49, 32603), (50, 32594), (53, 32555), (54, 32549), (60, 32468),

Gene: LunarLander_39 Start: 31403, Stop: 31131, Start Num: 32

Candidate Starts for LunarLander_39:
(12, 31517), (18, 31493), (22, 31481), (23, 31478), (Start: 32 @31403 has 122 MA's), (39, 31361), (42, 31334), (49, 31289), (50, 31280), (53, 31241), (60, 31154),

Gene: MPlant7149_38 Start: 30995, Stop: 30723, Start Num: 31
Candidate Starts for MPlant7149_38:
(9, 31130), (15, 31097), (Start: 31 @30995 has 51 MA's), (39, 30953), (42, 30926), (49, 30881), (50, 30872), (53, 30833), (60, 30746),

Gene: Magnar_38 Start: 31184, Stop: 30912, Start Num: 32
Candidate Starts for Magnar_38:
(7, 31364), (12, 31298), (18, 31274), (22, 31262), (23, 31259), (Start: 32 @31184 has 122 MA's), (39, 31142), (42, 31115), (49, 31070), (50, 31061), (53, 31022), (60, 30935),

Gene: Magnito_37 Start: 30988, Stop: 30716, Start Num: 31
Candidate Starts for Magnito_37:
(9, 31135), (15, 31102), (Start: 31 @30988 has 51 MA's), (39, 30946), (42, 30919), (49, 30874), (50, 30865), (53, 30826), (60, 30739),

Gene: Makemake_39 Start: 32642, Stop: 32331, Start Num: 32
Candidate Starts for Makemake_39:
(10, 32777), (15, 32744), (Start: 32 @32642 has 122 MA's), (39, 32600), (42, 32573), (48, 32519), (52, 32486), (53, 32456), (55, 32447), (60, 32354),

Gene: Manatee_39 Start: 31021, Stop: 30749, Start Num: 31
Candidate Starts for Manatee_39:
(9, 31156), (15, 31123), (Start: 31 @31021 has 51 MA's), (39, 30979), (42, 30952), (49, 30907), (50, 30898), (53, 30859), (60, 30772),

Gene: Marchy_33 Start: 28275, Stop: 27967, Start Num: 32
Candidate Starts for Marchy_33:
(22, 28362), (Start: 32 @28275 has 122 MA's), (34, 28242), (37, 28206), (39, 28197), (49, 28125), (50, 28116), (53, 28077), (60, 27990),

Gene: Marco3_38 Start: 31609, Stop: 31298, Start Num: 32
Candidate Starts for Marco3_38:
(26, 31645), (Start: 32 @31609 has 122 MA's), (39, 31567), (42, 31540), (47, 31486), (53, 31423), (55, 31414), (60, 31321),

Gene: Marge_39 Start: 32073, Stop: 31798, Start Num: 31
Candidate Starts for Marge_39:
(9, 32208), (15, 32175), (Start: 31 @32073 has 51 MA's), (39, 32028), (42, 32001), (49, 31956), (50, 31947), (53, 31908), (60, 31821),

Gene: Maroc7_38 Start: 31169, Stop: 30897, Start Num: 32
Candidate Starts for Maroc7_38:
(7, 31349), (12, 31283), (18, 31259), (22, 31247), (23, 31244), (Start: 32 @31169 has 122 MA's), (39, 31127), (42, 31100), (49, 31055), (50, 31046),

Gene: Marsha_38 Start: 32325, Stop: 31924, Start Num: 32
Candidate Starts for Marsha_38:
(1, 32799), (2, 32658), (5, 32517), (10, 32451), (19, 32403), (Start: 32 @32325 has 122 MA's), (36, 32259), (40, 32244), (43, 32214), (48, 32112), (53, 32049), (55, 32040), (60, 31947),

Gene: MaryBeth_38 Start: 31490, Stop: 31218, Start Num: 32
Candidate Starts for MaryBeth_38:
(Start: 32 @31490 has 122 MA's), (39, 31448), (42, 31421), (49, 31376), (50, 31367), (53, 31328), (60, 31241),

Gene: McGuire_39 Start: 31317, Stop: 31045, Start Num: 31
Candidate Starts for McGuire_39:
(9, 31452), (15, 31419), (Start: 31 @31317 has 51 MA's), (39, 31275), (42, 31248), (49, 31203), (50, 31194), (53, 31155), (60, 31068),

Gene: McSinger_39 Start: 31876, Stop: 31604, Start Num: 32
Candidate Starts for McSinger_39:
(22, 31963), (Start: 32 @31876 has 122 MA's), (39, 31834), (42, 31807), (49, 31762), (50, 31753), (53, 31714), (60, 31627),

Gene: MetalQZJ_38 Start: 31490, Stop: 31218, Start Num: 32
Candidate Starts for MetalQZJ_38:
(Start: 32 @31490 has 122 MA's), (39, 31448), (42, 31421), (49, 31376), (50, 31367), (53, 31328), (60, 31241),

Gene: Michley_38 Start: 31162, Stop: 30890, Start Num: 31
Candidate Starts for Michley_38:
(9, 31297), (15, 31264), (Start: 31 @31162 has 51 MA's), (39, 31120), (42, 31093), (49, 31048), (50, 31039), (53, 31000),

Gene: MilleFeuille_37 Start: 31338, Stop: 31066, Start Num: 32
Candidate Starts for MilleFeuille_37:
(8, 31488), (13, 31422), (25, 31374), (Start: 32 @31338 has 122 MA's), (39, 31296), (42, 31269), (49, 31224), (50, 31215), (53, 31176),

Gene: Mkhuseli_39 Start: 31361, Stop: 31089, Start Num: 31
Candidate Starts for Mkhuseli_39:
(9, 31496), (15, 31463), (Start: 31 @31361 has 51 MA's), (39, 31319), (42, 31292), (49, 31247), (50, 31238), (53, 31199), (60, 31112),

Gene: Moose_38 Start: 31551, Stop: 31243, Start Num: 32
Candidate Starts for Moose_38:
(22, 31638), (Start: 32 @31551 has 122 MA's), (34, 31518), (37, 31482), (39, 31473), (49, 31401), (50, 31392), (53, 31353), (60, 31266),

Gene: MrGordo_38 Start: 31025, Stop: 30753, Start Num: 31
Candidate Starts for MrGordo_38:
(Start: 31 @31025 has 51 MA's), (42, 30956), (49, 30911), (50, 30902), (53, 30863),

Gene: Mryolo_36 Start: 31035, Stop: 30763, Start Num: 32
Candidate Starts for Mryolo_36:
(Start: 32 @31035 has 122 MA's), (39, 30993), (42, 30966), (49, 30921), (50, 30912), (53, 30873), (60, 30786),

Gene: NEHalo_38 Start: 31254, Stop: 30982, Start Num: 31
Candidate Starts for NEHalo_38:

(9, 31389), (15, 31356), (Start: 31 @31254 has 51 MA's), (39, 31212), (42, 31185), (49, 31140), (50, 31131), (53, 31092), (60, 31005),

Gene: Naira_39 Start: 32939, Stop: 32667, Start Num: 32
Candidate Starts for Naira_39:
(12, 33053), (17, 33032), (18, 33029), (22, 33017), (23, 33014), (Start: 32 @32939 has 122 MA's), (39, 32897), (42, 32870), (49, 32825), (50, 32816), (53, 32777), (60, 32690),

Gene: Nerujay_39 Start: 31923, Stop: 31651, Start Num: 32
Candidate Starts for Nerujay_39:
(29, 31959), (Start: 32 @31923 has 122 MA's), (39, 31881), (42, 31854), (49, 31809), (50, 31800), (53, 31761), (60, 31674),

Gene: Nhonho_38 Start: 31661, Stop: 31389, Start Num: 32
Candidate Starts for Nhonho_38:
(12, 31775), (18, 31751), (22, 31739), (23, 31736), (Start: 32 @31661 has 122 MA's), (39, 31619), (42, 31592), (49, 31547), (50, 31538), (53, 31499),

Gene: Niza_41 Start: 32712, Stop: 32281, Start Num: 32
Candidate Starts for Niza_41:
(10, 32859), (15, 32826), (Start: 32 @32712 has 122 MA's), (39, 32673), (42, 32646), (44, 32598), (55, 32505), (57, 32439), (58, 32430), (61, 32391), (62, 32385), (63, 32304),

Gene: Norz_40 Start: 32172, Stop: 31900, Start Num: 31
Candidate Starts for Norz_40:
(9, 32307), (15, 32274), (Start: 31 @32172 has 51 MA's), (39, 32130), (42, 32103), (49, 32058), (50, 32049), (53, 32010), (60, 31923),

Gene: Noxious_41 Start: 32803, Stop: 32531, Start Num: 31
Candidate Starts for Noxious_41:
(9, 32938), (15, 32905), (Start: 31 @32803 has 51 MA's), (39, 32761), (42, 32734), (49, 32689), (50, 32680), (53, 32641), (60, 32554),

Gene: Ohno789_38 Start: 31317, Stop: 31045, Start Num: 32
Candidate Starts for Ohno789_38:
(Start: 32 @31317 has 122 MA's), (39, 31275), (42, 31248), (49, 31203), (50, 31194), (53, 31155),

Gene: Oogway_37 Start: 30855, Stop: 30583, Start Num: 31
Candidate Starts for Oogway_37:
(9, 30990), (15, 30957), (Start: 31 @30855 has 51 MA's), (39, 30813), (42, 30786), (49, 30741), (50, 30732), (53, 30693),

Gene: PSullivan_37 Start: 30492, Stop: 30220, Start Num: 32
Candidate Starts for PSullivan_37:
(21, 30576), (Start: 32 @30492 has 122 MA's), (39, 30450), (42, 30423), (49, 30378), (50, 30369), (53, 30330), (60, 30243),

Gene: PacerPaul_39 Start: 31313, Stop: 31041, Start Num: 32
Candidate Starts for PacerPaul_39:
(12, 31427), (18, 31403), (22, 31391), (23, 31388), (Start: 32 @31313 has 122 MA's), (39, 31271), (42, 31244), (49, 31199), (50, 31190), (53, 31151), (60, 31064),

Gene: Papez_40 Start: 33003, Stop: 32731, Start Num: 32

Candidate Starts for Papez_40:
(12, 33117), (18, 33093), (22, 33081), (23, 33078), (Start: 32 @33003 has 122 MA's), (39, 32961), (42, 32934), (49, 32889), (50, 32880), (53, 32841),

Gene: Paphu_37 Start: 31244, Stop: 30972, Start Num: 32
Candidate Starts for Paphu_37:
(14, 31370), (Start: 32 @31244 has 122 MA's), (39, 31202), (42, 31175), (49, 31130), (50, 31121), (53, 31082),

Gene: Paraselene_37 Start: 31722, Stop: 31354, Start Num: 32
Candidate Starts for Paraselene_37:
(10, 31857), (15, 31824), (Start: 32 @31722 has 122 MA's), (39, 31677), (42, 31650), (48, 31542), (53, 31479), (55, 31470), (60, 31377),

Gene: Parliament_37 Start: 31469, Stop: 31134, Start Num: 32
Candidate Starts for Parliament_37:
(Start: 32 @31469 has 122 MA's), (39, 31427), (42, 31400), (44, 31352), (55, 31259), (56, 31247), (60, 31157),

Gene: PascalRango_39 Start: 31395, Stop: 31084, Start Num: 32
Candidate Starts for PascalRango_39:
(10, 31530), (15, 31497), (Start: 32 @31395 has 122 MA's), (39, 31353), (42, 31326), (48, 31272), (53, 31209), (55, 31200), (60, 31107),

Gene: PattyP_40 Start: 31585, Stop: 31313, Start Num: 31
Candidate Starts for PattyP_40:
(9, 31720), (15, 31687), (Start: 31 @31585 has 51 MA's), (42, 31516), (49, 31471), (50, 31462), (53, 31423), (60, 31336),

Gene: Payneful_38 Start: 30992, Stop: 30684, Start Num: 32
Candidate Starts for Payneful_38:
(22, 31079), (Start: 32 @30992 has 122 MA's), (34, 30959), (37, 30923), (39, 30914), (49, 30842), (50, 30833), (53, 30794), (60, 30707),

Gene: Pelly_38 Start: 31718, Stop: 31284, Start Num: 32
Candidate Starts for Pelly_38:
(Start: 32 @31718 has 122 MA's), (39, 31676), (42, 31649), (44, 31601), (55, 31508), (57, 31442), (58, 31433), (61, 31394), (62, 31388), (63, 31307),

Gene: Perseus_40 Start: 32401, Stop: 32072, Start Num: 32
Candidate Starts for Perseus_40:
(10, 32536), (15, 32503), (Start: 32 @32401 has 122 MA's), (39, 32362), (42, 32335), (44, 32287), (55, 32194),

Gene: Peterson_42 Start: 33587, Stop: 33315, Start Num: 32
Candidate Starts for Peterson_42:
(7, 33767), (12, 33701), (18, 33677), (22, 33665), (23, 33662), (Start: 32 @33587 has 122 MA's), (39, 33545), (42, 33518), (49, 33473), (50, 33464), (53, 33425),

Gene: PherrisBueller_39 Start: 31183, Stop: 30875, Start Num: 32
Candidate Starts for PherrisBueller_39:
(9, 31318), (15, 31285), (Start: 32 @31183 has 122 MA's), (35, 31132), (38, 31111), (49, 31033), (50, 31024), (53, 30985), (60, 30898),

Gene: PhineBark_37 Start: 32212, Stop: 31904, Start Num: 32
Candidate Starts for PhineBark_37:
(22, 32299), (Start: 32 @32212 has 122 MA's), (34, 32179), (37, 32143), (39, 32134), (49, 32062), (50, 32053), (53, 32014), (60, 31927),

Gene: Phlippers_36 Start: 31867, Stop: 31595, Start Num: 32
Candidate Starts for Phlippers_36:
(12, 31981), (18, 31957), (22, 31945), (23, 31942), (Start: 32 @31867 has 122 MA's), (39, 31825), (42, 31798), (49, 31753), (50, 31744), (53, 31705), (60, 31618),

Gene: PhrostyMug_39 Start: 31697, Stop: 31371, Start Num: 32
Candidate Starts for PhrostyMug_39:
(10, 31832), (15, 31799), (Start: 32 @31697 has 122 MA's), (39, 31655), (42, 31628), (44, 31580), (51, 31535), (55, 31487), (56, 31475), (60, 31385),

Gene: Pinto_40 Start: 31529, Stop: 31257, Start Num: 31
Candidate Starts for Pinto_40:
(9, 31664), (15, 31631), (Start: 31 @31529 has 51 MA's), (39, 31487), (42, 31460), (49, 31415), (50, 31406), (53, 31367), (60, 31280),

Gene: Pita2_40 Start: 31989, Stop: 31717, Start Num: 32
Candidate Starts for Pita2_40:
(21, 32073), (Start: 32 @31989 has 122 MA's), (39, 31947), (42, 31920), (49, 31875), (50, 31866), (53, 31827), (60, 31740),

Gene: ProMouse_38 Start: 31549, Stop: 31166, Start Num: 32
Candidate Starts for ProMouse_38:
(10, 31684), (15, 31651), (Start: 32 @31549 has 122 MA's), (39, 31507), (42, 31480), (48, 31354), (53, 31291), (55, 31282), (60, 31189),

Gene: Puppet_38 Start: 31352, Stop: 31080, Start Num: 32
Candidate Starts for Puppet_38:
(12, 31466), (18, 31442), (22, 31430), (23, 31427), (Start: 32 @31352 has 122 MA's), (39, 31310), (42, 31283), (49, 31238), (50, 31229), (53, 31190), (60, 31103),

Gene: QTRlifeCrisis_39 Start: 32125, Stop: 31793, Start Num: 32
Candidate Starts for QTRlifeCrisis_39:
(Start: 32 @32125 has 122 MA's), (39, 32083), (42, 32056), (44, 32008), (55, 31915), (60, 31816),

Gene: Raid_38 Start: 31585, Stop: 31214, Start Num: 32
Candidate Starts for Raid_38:
(Start: 32 @31585 has 122 MA's), (39, 31543), (42, 31516), (45, 31459), (53, 31339),

Gene: Rajelicia_38 Start: 31483, Stop: 31211, Start Num: 31
Candidate Starts for Rajelicia_38:
(9, 31618), (15, 31585), (Start: 31 @31483 has 51 MA's), (39, 31441), (42, 31414), (49, 31369), (50, 31360), (53, 31321),

Gene: Rhynn_38 Start: 31498, Stop: 31226, Start Num: 31
Candidate Starts for Rhynn_38:
(9, 31633), (15, 31600), (Start: 31 @31498 has 51 MA's), (39, 31456), (42, 31429), (49, 31384), (50, 31375), (53, 31336), (60, 31249),

Gene: RidgeCB_38 Start: 31144, Stop: 30812, Start Num: 32
Candidate Starts for RidgeCB_38:
(11, 31258), (15, 31234), (18, 31222), (Start: 32 @31144 has 122 MA's), (39, 31102), (42, 31075), (44, 31027), (55, 30934), (60, 30835),

Gene: Ringer_39 Start: 31985, Stop: 31623, Start Num: 32
Candidate Starts for Ringer_39:
(Start: 32 @31985 has 122 MA's), (39, 31943), (42, 31916), (53, 31748), (55, 31739), (60, 31646),

Gene: Rubeus_38 Start: 29616, Stop: 29344, Start Num: 32
Candidate Starts for Rubeus_38:
(Start: 32 @29616 has 122 MA's), (39, 29574), (42, 29547), (49, 29502), (50, 29493), (53, 29454), (60, 29367),

Gene: Rufus_40 Start: 31854, Stop: 31582, Start Num: 31
Candidate Starts for Rufus_40:
(9, 31989), (15, 31956), (Start: 31 @31854 has 51 MA's), (39, 31812), (42, 31785), (49, 31740), (50, 31731), (53, 31692), (60, 31605),

Gene: Ruotula_38 Start: 32043, Stop: 31771, Start Num: 32
Candidate Starts for Ruotula_38:
(29, 32079), (Start: 32 @32043 has 122 MA's), (39, 32001), (42, 31974), (49, 31929), (50, 31920), (53, 31881), (60, 31794),

Gene: STLscum_39 Start: 32385, Stop: 31999, Start Num: 16
Candidate Starts for STLscum_39:
(Start: 16 @32385 has 5 MA's), (24, 32352), (28, 32316), (30, 32307), (33, 32259), (39, 32229), (42, 32202), (49, 32157), (50, 32148), (53, 32109), (60, 32022),

Gene: Sagefire_40 Start: 32355, Stop: 32020, Start Num: 32
Candidate Starts for Sagefire_40:
(Start: 32 @32355 has 122 MA's), (39, 32313), (42, 32286), (44, 32238), (51, 32193), (55, 32145), (60, 32043),

Gene: Sandaddy_38 Start: 31382, Stop: 31110, Start Num: 32
Candidate Starts for Sandaddy_38:
(21, 31466), (Start: 32 @31382 has 122 MA's), (39, 31340), (42, 31313), (49, 31268), (50, 31259), (53, 31220), (60, 31133),

Gene: SarFire_38 Start: 31557, Stop: 31285, Start Num: 31
Candidate Starts for SarFire_38:
(Start: 31 @31557 has 51 MA's), (39, 31515), (42, 31488), (49, 31443), (50, 31434), (53, 31395), (60, 31308),

Gene: ShortQueendom_34 Start: 28032, Stop: 27724, Start Num: 32
Candidate Starts for ShortQueendom_34:
(22, 28119), (Start: 32 @28032 has 122 MA's), (34, 27999), (37, 27963), (39, 27954), (49, 27882), (50, 27873), (53, 27834), (60, 27747),

Gene: Sibs6_39 Start: 30489, Stop: 30181, Start Num: 32
Candidate Starts for Sibs6_39:
(Start: 32 @30489 has 122 MA's), (35, 30438), (38, 30417), (49, 30339), (50, 30330), (53, 30291),

Gene: SkiPole_41 Start: 31904, Stop: 31518, Start Num: 16
Candidate Starts for SkiPole_41:
(Start: 16 @31904 has 5 MA's), (24, 31871), (28, 31835), (30, 31826), (33, 31778), (39, 31748), (42, 31721), (49, 31676), (50, 31667), (53, 31628), (60, 31541),

Gene: Slagathor_39 Start: 31408, Stop: 31136, Start Num: 31
Candidate Starts for Slagathor_39:
(9, 31543), (15, 31510), (Start: 31 @31408 has 51 MA's), (39, 31366), (42, 31339), (49, 31294), (50, 31285), (53, 31246),

Gene: Smairt_39 Start: 31500, Stop: 31228, Start Num: 32
Candidate Starts for Smairt_39:
(12, 31614), (18, 31590), (22, 31578), (23, 31575), (Start: 32 @31500 has 122 MA's), (39, 31458), (42, 31431), (49, 31386), (50, 31377), (53, 31338), (60, 31251),

Gene: Smeagol_40 Start: 32730, Stop: 32458, Start Num: 31
Candidate Starts for Smeagol_40:
(9, 32865), (15, 32832), (Start: 31 @32730 has 51 MA's), (39, 32688), (42, 32661), (49, 32616), (50, 32607), (53, 32568), (60, 32481),

Gene: Snazzy_37 Start: 31284, Stop: 31012, Start Num: 31
Candidate Starts for Snazzy_37:
(9, 31419), (15, 31386), (Start: 31 @31284 has 51 MA's), (39, 31242), (42, 31215), (49, 31170), (50, 31161), (53, 31122), (60, 31035),

Gene: Solon_38 Start: 31615, Stop: 31343, Start Num: 32
Candidate Starts for Solon_38:
(Start: 32 @31615 has 122 MA's), (39, 31573), (42, 31546), (49, 31501), (50, 31492), (53, 31453), (60, 31366),

Gene: Sorpresa_38 Start: 31384, Stop: 31112, Start Num: 32
Candidate Starts for Sorpresa_38:
(21, 31468), (Start: 32 @31384 has 122 MA's), (39, 31342), (42, 31315), (49, 31270), (50, 31261), (53, 31222), (60, 31135),

Gene: Squee_39 Start: 32135, Stop: 31863, Start Num: 31
Candidate Starts for Squee_39:
(9, 32270), (15, 32237), (Start: 31 @32135 has 51 MA's), (39, 32093), (42, 32066), (49, 32021), (50, 32012), (53, 31973), (60, 31886),

Gene: StewieG_35 Start: 29129, Stop: 28797, Start Num: 32
Candidate Starts for StewieG_35:
(27, 29165), (Start: 32 @29129 has 122 MA's), (39, 29087), (42, 29060), (44, 29012), (55, 28919),

Gene: StrongArm_37 Start: 32396, Stop: 32124, Start Num: 32
Candidate Starts for StrongArm_37:
(14, 32522), (Start: 32 @32396 has 122 MA's), (39, 32354), (42, 32327), (49, 32282), (50, 32273), (53, 32234),

Gene: Sumter_37 Start: 31344, Stop: 31072, Start Num: 32
Candidate Starts for Sumter_37:

(Start: 32 @31344 has 122 MA's), (39, 31302), (42, 31275), (49, 31230), (50, 31221), (53, 31182), (60, 31095),

Gene: Sunshine924_40 Start: 31419, Stop: 31006, Start Num: 32
Candidate Starts for Sunshine924_40:
(10, 31554), (15, 31521), (Start: 32 @31419 has 122 MA's), (40, 31329), (41, 31326), (48, 31194), (53, 31131), (55, 31122), (60, 31029),

Gene: SwissCheese_40 Start: 32051, Stop: 31743, Start Num: 32
Candidate Starts for SwissCheese_40:
(22, 32138), (Start: 32 @32051 has 122 MA's), (34, 32018), (37, 31982), (39, 31973), (49, 31901), (50, 31892), (53, 31853), (60, 31766),

Gene: Switzer_39 Start: 31424, Stop: 31152, Start Num: 31
Candidate Starts for Switzer_39:
(9, 31559), (15, 31526), (Start: 31 @31424 has 51 MA's), (39, 31382), (42, 31355), (49, 31310), (50, 31301), (53, 31262), (60, 31175),

Gene: Swole_40 Start: 31396, Stop: 31124, Start Num: 31
Candidate Starts for Swole_40:
(9, 31531), (15, 31498), (Start: 31 @31396 has 51 MA's), (39, 31354), (42, 31327), (49, 31282), (50, 31273), (53, 31234), (60, 31147),

Gene: Target_40 Start: 30793, Stop: 30395, Start Num: 32
Candidate Starts for Target_40:
(10, 30928), (15, 30895), (Start: 32 @30793 has 122 MA's), (35, 30742), (38, 30721), (53, 30520), (55, 30511),

Gene: Tasp14_39 Start: 31559, Stop: 31287, Start Num: 32
Candidate Starts for Tasp14_39:
(Start: 32 @31559 has 122 MA's), (39, 31517), (42, 31490), (49, 31445), (50, 31436), (53, 31397), (60, 31310),

Gene: Teodoridan_36 Start: 30785, Stop: 30513, Start Num: 32
Candidate Starts for Teodoridan_36:
(20, 30875), (Start: 32 @30785 has 122 MA's), (39, 30743), (42, 30716), (49, 30671), (50, 30662), (53, 30623), (60, 30536),

Gene: TheloniousMonk_40 Start: 32966, Stop: 32694, Start Num: 31
Candidate Starts for TheloniousMonk_40:
(9, 33101), (15, 33068), (Start: 31 @32966 has 51 MA's), (39, 32924), (42, 32897), (49, 32852), (50, 32843), (53, 32804),

Gene: Thor_38 Start: 30915, Stop: 30643, Start Num: 31
Candidate Starts for Thor_38:
(Start: 31 @30915 has 51 MA's), (39, 30873), (42, 30846), (49, 30801), (50, 30792), (53, 30753), (60, 30666),

Gene: Topgun_37 Start: 30806, Stop: 30534, Start Num: 32
Candidate Starts for Topgun_37:
(12, 30920), (18, 30896), (22, 30884), (23, 30881), (Start: 32 @30806 has 122 MA's), (39, 30764), (42, 30737), (49, 30692), (50, 30683), (53, 30644), (60, 30557),

Gene: Tote_35 Start: 28663, Stop: 28391, Start Num: 31
Candidate Starts for Tote_35:
(9, 28798), (15, 28765), (Start: 31 @28663 has 51 MA's), (39, 28621), (42, 28594), (49, 28549), (50, 28540), (53, 28501), (60, 28414),

Gene: Traft412_40 Start: 32486, Stop: 32154, Start Num: 32
Candidate Starts for Traft412_40:
(10, 32621), (15, 32588), (Start: 32 @32486 has 122 MA's), (39, 32444), (42, 32417), (44, 32369), (55, 32276),

Gene: Tripl3t_39 Start: 32414, Stop: 32145, Start Num: 31
Candidate Starts for Tripl3t_39:
(9, 32549), (15, 32516), (Start: 31 @32414 has 51 MA's), (39, 32369), (42, 32342), (49, 32297), (50, 32288), (53, 32249), (60, 32162),

Gene: Turj99_37 Start: 31258, Stop: 30986, Start Num: 31
Candidate Starts for Turj99_37:
(9, 31405), (15, 31372), (Start: 31 @31258 has 51 MA's), (39, 31216), (42, 31189), (49, 31144), (50, 31135), (53, 31096), (60, 31009),

Gene: Violet_37 Start: 31832, Stop: 31560, Start Num: 31
Candidate Starts for Violet_37:
(9, 31967), (15, 31934), (Start: 31 @31832 has 51 MA's), (39, 31790), (42, 31763), (49, 31718), (50, 31709), (53, 31670), (60, 31583),

Gene: Watermelon_40 Start: 32252, Stop: 31944, Start Num: 32
Candidate Starts for Watermelon_40:
(22, 32339), (Start: 32 @32252 has 122 MA's), (35, 32201), (38, 32180), (49, 32102), (50, 32093), (53, 32054), (60, 31967),

Gene: Wheeler_39 Start: 31744, Stop: 31472, Start Num: 32
Candidate Starts for Wheeler_39:
(7, 31924), (12, 31858), (18, 31834), (22, 31822), (23, 31819), (Start: 32 @31744 has 122 MA's), (39, 31702), (42, 31675), (49, 31630), (50, 31621), (53, 31582), (60, 31495),

Gene: Wilkins_37 Start: 30739, Stop: 30467, Start Num: 32
Candidate Starts for Wilkins_37:
(12, 30853), (18, 30829), (22, 30817), (23, 30814), (Start: 32 @30739 has 122 MA's), (39, 30697), (42, 30670), (49, 30625), (50, 30616), (53, 30577), (60, 30490),

Gene: Zeeculate_38 Start: 32108, Stop: 31794, Start Num: 32
Candidate Starts for Zeeculate_38:
(15, 32210), (Start: 32 @32108 has 122 MA's), (39, 32063), (42, 32036), (48, 31982), (53, 31919), (55, 31910), (60, 31817),

Gene: Zeuska_39 Start: 32058, Stop: 31723, Start Num: 32
Candidate Starts for Zeuska_39:
(Start: 32 @32058 has 122 MA's), (39, 32013), (42, 31986), (44, 31938), (55, 31845),