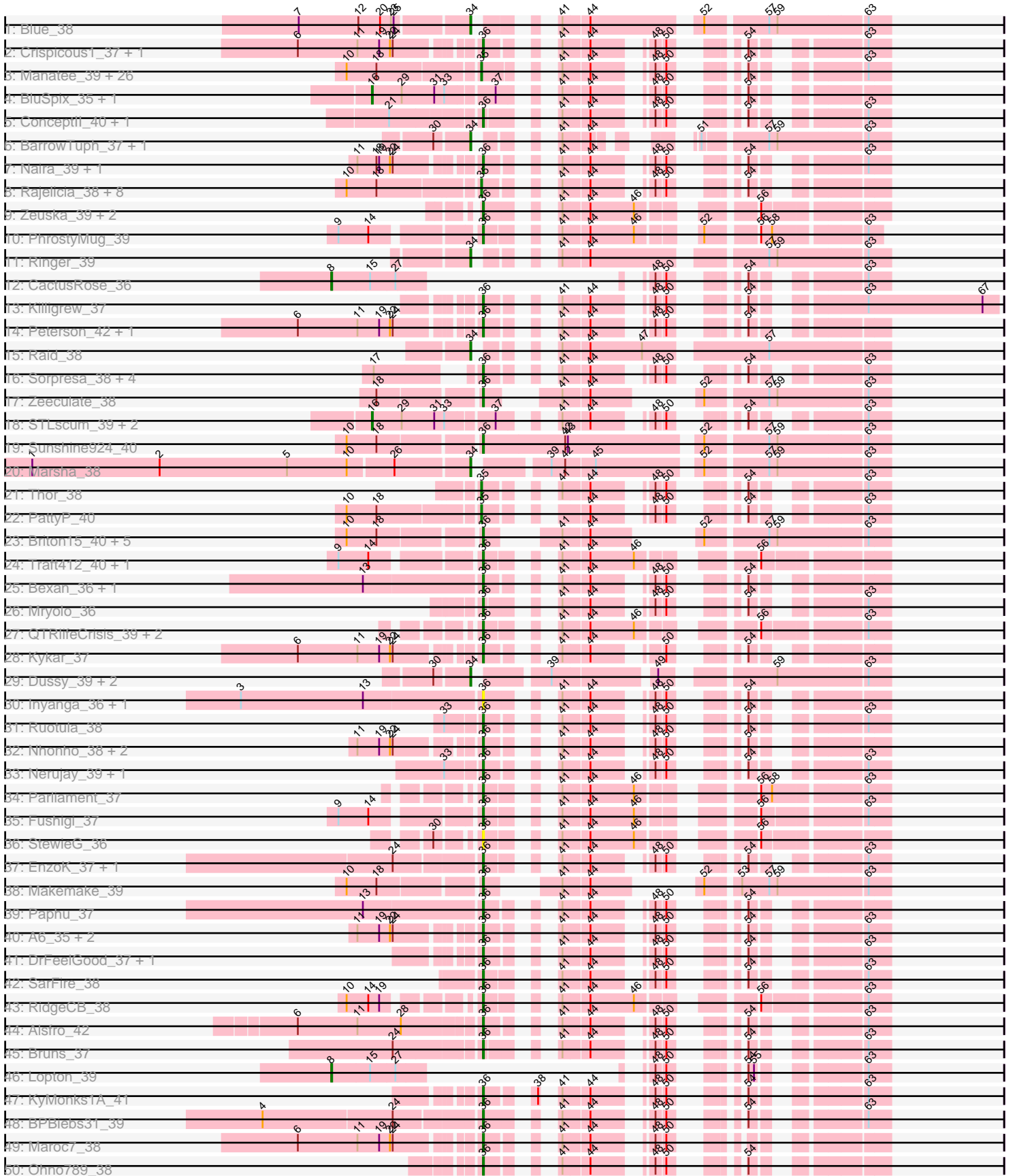


Pham 296359



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 296359 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296359 has 127 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Blue_38
- Track 2 : Crispicus1_37, Magnar_38
- Track 3 : Manatee_39, DirtDevil_40, Blesser_38, MPlant7149_38, Pinto_40, Violet_37, Gwendoluna_41, Marge_39, KikiBouba_40, Rufus_40, JuliaChild_40, GroundGoblin_40, CatBus_40, GMonster_37, Ichabod_39, McGuire_39, Dynamix_39, Rhynn_38, Mkhusele_39, Squee_39, Tripl3t_39, Smeagol_40, Noxious_40, Aldrich_40, Tote_35, Hermia_41, Swole_40
- Track 4 : BluSpix_35, IgnatiusPatJac_37
- Track 5 : ConceptII_40, Teodoridan_36
- Track 6 : BarrowTuph_37, Marco3_38
- Track 7 : Naira_39, Fenn_39
- Track 8 : Rajelicia_38, Michley_38, GrecoEtereo_40, Gachnar_40, Arcanine_38, TheloniousMonk_40, HarryOW_38, Slagathor_39, Beatrix_38
- Track 9 : Zeuska_39, Applejack_35, Abrogate_390
- Track 10 : PhrostyMug_39
- Track 11 : Ringer_39
- Track 12 : CactusRose_36
- Track 13 : Killigrew_37
- Track 14 : Peterson_42, ILeeKay_40
- Track 15 : Raid_38
- Track 16 : Sorpresa_38, Pita2_40, Sandaddy_38, BaconJack_41, PSullivan_37
- Track 17 : Zeeculate_38
- Track 18 : STLscum_39, SkiPole_41, Gandalf20_39
- Track 19 : Sunshine924_40
- Track 20 : Marsha_38
- Track 21 : Thor_38
- Track 22 : PattyP_40
- Track 23 : Briton15_40, PascalRango_39, Paraselene_37, ProMouse_36, Atkinbua_40, Arlo_37
- Track 24 : Traft412_40, Perseus_40
- Track 25 : Bexan_36, StrongArm_37
- Track 26 : Mryolo_36
- Track 27 : QTRlifeCrisis_39, Dexes_38, CartmannCramer_38
- Track 28 : Kykar_37
- Track 29 : Dussy_39, Abbyshoes_40, Kenmech_41
- Track 30 : Inyanga_36, Iqorha_36
- Track 31 : Ruotula_38

- Track 32 : Nhonho_38, Papez_40, Barriga_38
- Track 33 : Nerujay_39, Hope4ever_38
- Track 34 : Parliament_37
- Track 35 : Fushigi_37
- Track 36 : StewieG_36
- Track 37 : EnzoK_37, McSinger_39
- Track 38 : Makemake_39
- Track 39 : Paphu_37
- Track 40 : A6_35, Froghopper_38, BK1_35
- Track 41 : DrFeelGood_37, Rubeus_38
- Track 42 : SarFire_38
- Track 43 : RidgeCB_38
- Track 44 : Alsfro_42
- Track 45 : Bruns_37
- Track 46 : Lopton_39
- Track 47 : KyMonks1A_41
- Track 48 : BPBiebs31_39
- Track 49 : Maroc7_38
- Track 50 : Ohno789_38
- Track 51 : MilleFeuille_35
- Track 52 : Bxb1_36
- Track 53 : Target_40
- Track 54 : Niza_41
- Track 55 : Pelly_38
- Track 56 : Big3_38, Ajay_39
- Track 57 : MrGordo_38
- Track 58 : Sagefire_40
- Track 59 : 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 36, it was called in 60 of the 110 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A6_35, Abrogate_390, Alsfro_42, Applejack_35, Arlo_37, Atkinbua_40, BK1_35, BPBiebs31_39, BaconJack_41, Barriga_38, Bexan_36, Briton15_40, Bruns_37, CartmannCramer_38, ConceptII_40, Crispicous1_37, Dexes_38, DrFeelGood_37, EnzoK_37, Fenn_39, Froghopper_38, Fushigi_37, Hope4ever_38, ILeeKay_40, Inyanga_36, Iqorha_36, Jorgensen_38, Killigrew_37, KyMonks1A_41, Kykar_37, Magnar_38, Makemake_39, Maroc7_38, McSinger_39, MilleFeuille_35, Mryolo_36, Naira_39, Nerujay_39, Nhonho_38, Niza_41, Ohno789_38, PSullivan_37, Papez_40, Paphu_37, Paraselene_37, Parliament_37, PascalRango_39, Perseus_40, Peterson_42, PhrostyMug_39, Pita2_40, ProMouse_36, QTRlifeCrisis_39, RidgeCB_38, Rubeus_38, Ruotula_38, Sagefire_40, Sandaddy_38, SarFire_38, Sorpresa_38, StewieG_36, StrongArm_37, Sunshine924_40, Target_40, Teodoridan_36, Traft412_40, 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:

- Abbyshoes_40, Ajay_39, Aldrich_40, Arcanine_38, BarrowTuph_37, Beatrix_38, Big3_38, Blesser_38, BluSpix_35, Blue_38, Bxb1_36, CactusRose_36, CatBus_40, DirtDevil_40, Dussy_39, Dynamix_39, GMonster_37, Gachnar_40, Gandalf20_39, GrecoEtereo_40, GroundGoblin_40, Gwendoluna_41, HarryOW_38, Hermia_41, Ichabod_39, IgnatiusPatJac_37, JuliaChild_40, Kenmech_41, KikiBouba_40, Lopton_39, MPlant7149_38, Manatee_39, Marco3_38, Marge_39, Marsha_38, McGuire_39, Michley_38, Mkhuseleli_39, MrGordo_38, Noxious_40, PattyP_40, Pelly_38, Pinto_40, Raid_38, Rajelicia_38, Rhynn_38, Ringer_39, Rufus_40, STLscum_39, SkiPole_41, Slagathor_39, Smeagol_40, Squee_39, Swole_40, TheloniousMonk_40, Thor_38, Tote_35, Tripl3t_39, Violet_37,

Summary by start number:

Start 8:

- Found in 3 of 127 (2.4%) of genes in pham
- Manual Annotations of this start: 3 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CactusRose_36 (A1), Lopton_39 (A1), Pelly_38 (A1),

Start 16:

- Found in 5 of 127 (3.9%) of genes in pham
- Manual Annotations of this start: 5 of 110
- 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 34:

- Found in 9 of 127 (7.1%) of genes in pham
- Manual Annotations of this start: 9 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abbyshoes_40 (A1), BarrowTuph_37 (A1), Blue_38 (A1), Dussy_39 (A1), Kenmech_41 (A1), Marco3_38 (A1), Marsha_38 (A1), Raid_38 (A1), Ringer_39 (A1),

Start 35:

- Found in 42 of 127 (33.1%) of genes in pham
- Manual Annotations of this start: 33 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ajay_39 (A1), Aldrich_40 (A1), Arcanine_38 (A1), Beatrix_38 (A1), Big3_38 (A1), Blesser_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_40 (A1), MPlant7149_38 (A1), Manatee_39 (A1), Marge_39 (A1), McGuire_39 (A1), Michley_38 (A1), Mkhuseleli_39 (A1), MrGordo_38 (A1), Noxious_40 (A1), PattyP_40 (A1), Pinto_40 (A1), Rajelicia_38 (A1), Rhynn_38 (A1), Rufus_40 (A1), Slagathor_39 (A1), Smeagol_40 (A1), Squee_39 (A1), Swole_40 (A1), TheloniousMonk_40 (A1), Thor_38 (A1), Tote_35 (A1), Tripl3t_39 (A1), Violet_37 (A1),

Start 36:

- Found in 68 of 127 (53.5%) of genes in pham
- Manual Annotations of this start: 60 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A6_35 (A1), Abrogate_390 (A1), Alsfro_42 (A1), Applejack_35 (A1), Arlo_37 (A1), Atkinbua_40 (A1), BK1_35 (A1), BPBiabs31_39 (A1), BaconJack_41 (A1), Barriga_38 (A1), Bexan_36 (A1), Briton15_40 (A1), Bruns_37 (A1), CartmannCramer_38 (A1), ConceptII_40 (A1), Crispicious1_37 (A1), Dexes_38 (A1), DrFeelGood_37 (A1), EnzoK_37 (A1), Fenn_39 (A1), Froghopper_38 (A1), Fushigi_37 (A1), Hope4ever_38 (A1), ILeeKay_40 (A1), Inyanga_36 (A1), Iqorha_36 (A1), Jorgensen_38 (A1), Killigrew_37 (A1), KyMonks1A_41 (A1), Kykar_37 (A1), Magnar_38 (A1), Makemake_39 (A1), Maroc7_38 (A1), McSinger_39 (A1), MilleFeuille_35 (A1), Mryolo_36 (A1), Naira_39 (A1), Nerujay_39 (A1), Nhonho_38 (A1), Niza_41 (A1), Ohno789_38 (A1), PSullivan_37 (A1), Papez_40 (A1), Paphu_37 (A1), Paraselene_37 (A1), Parliament_37 (A1), PascalRango_39 (A1), Perseus_40 (A1), Peterson_42 (A1), PhrostyMug_39 (A1), Pita2_40 (A1), ProMouse_36 (A1), QTRlifeCrisis_39 (A1), RidgeCB_38 (A1), Rubeus_38 (A1), Ruotula_38 (A1), Sagefire_40 (A1), Sandaddy_38 (A1), SarFire_38 (A1), Sorpresa_38 (A1), StewieG_36 (A1), StrongArm_37 (A1), Sunshine924_40 (A1), Target_40 (A1), Teodoridan_36 (A1), Traft412_40 (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 8 was manually annotated 3 times for cluster A1.
- Start number 16 was manually annotated 5 times for cluster A1.
- Start number 34 was manually annotated 9 times for cluster A1.
- Start number 35 was manually annotated 33 times for cluster A1.
- Start number 36 was manually annotated 60 times for cluster A1.

Gene Information:

Gene: A6_35 Start: 30422, Stop: 30150, Start Num: 36

Candidate Starts for A6_35:

(11, 30536), (19, 30512), (22, 30500), (24, 30497), (Start: 36 @30422 has 60 MA's), (41, 30380), (44, 30353), (48, 30308), (50, 30299), (54, 30260), (63, 30173),

Gene: Abbyshoes_40 Start: 31568, Stop: 31185, Start Num: 34

Candidate Starts for Abbyshoes_40:

(30, 31604), (Start: 34 @31568 has 9 MA's), (39, 31502), (49, 31400), (59, 31301), (63, 31208),

Gene: Abrogate_390 Start: 32285, Stop: 31953, Start Num: 36

Candidate Starts for Abrogate_390:

(Start: 36 @32285 has 60 MA's), (41, 32243), (44, 32216), (46, 32168), (56, 32075),

Gene: Ajay_39 Start: 31439, Stop: 31167, Start Num: 35

Candidate Starts for Ajay_39:

(10, 31574), (18, 31541), (Start: 35 @31439 has 33 MA's), (44, 31370), (48, 31325), (50, 31316), (54, 31277),

Gene: Aldrich_40 Start: 32611, Stop: 32339, Start Num: 35

Candidate Starts for Aldrich_40:

(10, 32746), (18, 32713), (Start: 35 @32611 has 33 MA's), (41, 32569), (44, 32542), (48, 32497), (50, 32488), (54, 32449), (63, 32362),

Gene: Alsfro_42 Start: 31790, Stop: 31518, Start Num: 36

Candidate Starts for Alsfro_42:

(6, 31982), (11, 31916), (28, 31868), (Start: 36 @31790 has 60 MA's), (41, 31748), (44, 31721), (48, 31676), (50, 31667), (54, 31628), (63, 31541),

Gene: Applejack_35 Start: 28515, Stop: 28180, Start Num: 36

Candidate Starts for Applejack_35:

(Start: 36 @28515 has 60 MA's), (41, 28470), (44, 28443), (46, 28395), (56, 28302),

Gene: Arcanine_38 Start: 30821, Stop: 30549, Start Num: 35

Candidate Starts for Arcanine_38:

(10, 30956), (18, 30923), (Start: 35 @30821 has 33 MA's), (41, 30779), (44, 30752), (48, 30707), (50, 30698), (54, 30659),

Gene: Arlo_37 Start: 31329, Stop: 31018, Start Num: 36

Candidate Starts for Arlo_37:

(10, 31464), (18, 31431), (Start: 36 @31329 has 60 MA's), (41, 31287), (44, 31260), (52, 31206), (57, 31143), (59, 31134), (63, 31041),

Gene: Atkinbua_40 Start: 31777, Stop: 31466, Start Num: 36

Candidate Starts for Atkinbua_40:

(10, 31912), (18, 31879), (Start: 36 @31777 has 60 MA's), (41, 31735), (44, 31708), (52, 31654), (57, 31591), (59, 31582), (63, 31489),

Gene: BK1_35 Start: 30422, Stop: 30150, Start Num: 36

Candidate Starts for BK1_35:

(11, 30536), (19, 30512), (22, 30500), (24, 30497), (Start: 36 @30422 has 60 MA's), (41, 30380), (44, 30353), (48, 30308), (50, 30299), (54, 30260), (63, 30173),

Gene: BPBiebs31_39 Start: 31743, Stop: 31468, Start Num: 36

Candidate Starts for BPBiebs31_39:

(4, 31971), (24, 31830), (Start: 36 @31743 has 60 MA's), (41, 31698), (44, 31671), (48, 31626), (50, 31617), (54, 31578), (63, 31491),

Gene: BaconJack_41 Start: 31798, Stop: 31526, Start Num: 36

Candidate Starts for BaconJack_41:

(17, 31882), (Start: 36 @31798 has 60 MA's), (41, 31756), (44, 31729), (48, 31684), (50, 31675), (54, 31636), (63, 31549),

Gene: Barriga_38 Start: 30917, Stop: 30645, Start Num: 36

Candidate Starts for Barriga_38:

(11, 31031), (19, 31007), (22, 30995), (24, 30992), (Start: 36 @30917 has 60 MA's), (41, 30875), (44, 30848), (48, 30803), (50, 30794), (54, 30755),

Gene: BarrowTuph_37 Start: 31319, Stop: 31008, Start Num: 34

Candidate Starts for BarrowTuph_37:

(30, 31355), (Start: 34 @31319 has 9 MA's), (41, 31277), (44, 31250), (51, 31196), (57, 31133), (59, 31124), (63, 31031),

Gene: Beatrix_38 Start: 32774, Stop: 32502, Start Num: 35

Candidate Starts for Beatrix_38:

(10, 32909), (18, 32876), (Start: 35 @32774 has 33 MA's), (41, 32732), (44, 32705), (48, 32660), (50, 32651), (54, 32612),

Gene: Bexan_36 Start: 32268, Stop: 31996, Start Num: 36

Candidate Starts for Bexan_36:

(13, 32394), (Start: 36 @32268 has 60 MA's), (41, 32226), (44, 32199), (48, 32154), (50, 32145), (54, 32106),

Gene: Big3_38 Start: 31940, Stop: 31668, Start Num: 35

Candidate Starts for Big3_38:

(10, 32075), (18, 32042), (Start: 35 @31940 has 33 MA's), (44, 31871), (48, 31826), (50, 31817), (54, 31778),

Gene: Blesser_38 Start: 31835, Stop: 31563, Start Num: 35

Candidate Starts for Blesser_38:

(10, 31970), (18, 31937), (Start: 35 @31835 has 33 MA's), (41, 31793), (44, 31766), (48, 31721), (50, 31712), (54, 31673), (63, 31586),

Gene: BluSpix_35 Start: 27351, Stop: 26965, Start Num: 16

Candidate Starts for BluSpix_35:

(Start: 16 @27351 has 5 MA's), (29, 27318), (31, 27282), (33, 27273), (37, 27225), (41, 27195), (44, 27168), (48, 27123), (50, 27114), (54, 27075),

Gene: Blue_38 Start: 31834, Stop: 31469, Start Num: 34

Candidate Starts for Blue_38:

(7, 32014), (12, 31948), (20, 31924), (23, 31912), (25, 31909), (Start: 34 @31834 has 9 MA's), (41, 31789), (44, 31762), (52, 31657), (57, 31594), (59, 31585), (63, 31492),

Gene: Briton15_40 Start: 31612, Stop: 31301, Start Num: 36

Candidate Starts for Briton15_40:

(10, 31747), (18, 31714), (Start: 36 @31612 has 60 MA's), (41, 31570), (44, 31543), (52, 31489), (57, 31426), (59, 31417), (63, 31324),

Gene: Bruns_37 Start: 31253, Stop: 30981, Start Num: 36

Candidate Starts for Bruns_37:

(24, 31340), (Start: 36 @31253 has 60 MA's), (41, 31211), (44, 31184), (48, 31139), (50, 31130), (54, 31091), (63, 31004),

Gene: Bxb1_36 Start: 31386, Stop: 31114, Start Num: 35

Candidate Starts for Bxb1_36:

(10, 31521), (18, 31488), (Start: 35 @31386 has 33 MA's), (41, 31344), (44, 31317), (48, 31272), (50, 31263), (54, 31224), (62, 31149), (63, 31137),

Gene: CactusRose_36 Start: 30823, Stop: 30551, Start Num: 8

Candidate Starts for CactusRose_36:

(Start: 8 @30823 has 3 MA's), (15, 30781), (27, 30754), (48, 30709), (50, 30700), (54, 30661), (63, 30574),

Gene: CartmannCramer_38 Start: 33534, Stop: 33202, Start Num: 36

Candidate Starts for CartmannCramer_38:

(Start: 36 @33534 has 60 MA's), (41, 33492), (44, 33465), (46, 33417), (56, 33324), (63, 33225),

Gene: CatBus_40 Start: 32803, Stop: 32531, Start Num: 35

Candidate Starts for CatBus_40:

(10, 32938), (18, 32905), (Start: 35 @32803 has 33 MA's), (41, 32761), (44, 32734), (48, 32689), (50, 32680), (54, 32641), (63, 32554),

Gene: ConceptII_40 Start: 32357, Stop: 32085, Start Num: 36

Candidate Starts for ConceptII_40:

(21, 32447), (Start: 36 @32357 has 60 MA's), (41, 32315), (44, 32288), (48, 32243), (50, 32234), (54, 32195), (63, 32108),

Gene: Crispicious1_37 Start: 30836, Stop: 30564, Start Num: 36

Candidate Starts for Crispicious1_37:

(6, 31016), (11, 30950), (19, 30926), (22, 30914), (24, 30911), (Start: 36 @30836 has 60 MA's), (41, 30794), (44, 30767), (48, 30722), (50, 30713), (54, 30674), (63, 30587),

Gene: Dexes_38 Start: 31800, Stop: 31477, Start Num: 36

Candidate Starts for Dexes_38:

(Start: 36 @31800 has 60 MA's), (41, 31758), (44, 31731), (46, 31683), (56, 31590), (63, 31491),

Gene: DirtDevil_40 Start: 32611, Stop: 32339, Start Num: 35

Candidate Starts for DirtDevil_40:

(10, 32746), (18, 32713), (Start: 35 @32611 has 33 MA's), (41, 32569), (44, 32542), (48, 32497), (50, 32488), (54, 32449), (63, 32362),

Gene: DrFeelGood_37 Start: 31699, Stop: 31427, Start Num: 36

Candidate Starts for DrFeelGood_37:

(Start: 36 @31699 has 60 MA's), (41, 31657), (44, 31630), (48, 31585), (50, 31576), (54, 31537), (63, 31450),

Gene: Dussy_39 Start: 31588, Stop: 31205, Start Num: 34

Candidate Starts for Dussy_39:

(30, 31624), (Start: 34 @31588 has 9 MA's), (39, 31522), (49, 31420), (59, 31321), (63, 31228),

Gene: Dynamix_39 Start: 31345, Stop: 31073, Start Num: 35

Candidate Starts for Dynamix_39:

(10, 31480), (18, 31447), (Start: 35 @31345 has 33 MA's), (41, 31303), (44, 31276), (48, 31231), (50, 31222), (54, 31183), (63, 31096),

Gene: EnzoK_37 Start: 29448, Stop: 29176, Start Num: 36

Candidate Starts for EnzoK_37:

(24, 29535), (Start: 36 @29448 has 60 MA's), (41, 29406), (44, 29379), (48, 29334), (50, 29325), (54, 29286), (63, 29199),

Gene: Fenn_39 Start: 32892, Stop: 32620, Start Num: 36

Candidate Starts for Fenn_39:

(11, 33006), (18, 32985), (19, 32982), (22, 32970), (24, 32967), (Start: 36 @32892 has 60 MA's), (41, 32850), (44, 32823), (48, 32778), (50, 32769), (54, 32730), (63, 32643),

Gene: Froghopper_38 Start: 30873, Stop: 30601, Start Num: 36

Candidate Starts for Froghopper_38:

(11, 30987), (19, 30963), (22, 30951), (24, 30948), (Start: 36 @30873 has 60 MA's), (41, 30831), (44, 30804), (48, 30759), (50, 30750), (54, 30711), (63, 30624),

Gene: Fushigi_37 Start: 29564, Stop: 29232, Start Num: 36

Candidate Starts for Fushigi_37:

(9, 29699), (14, 29666), (Start: 36 @29564 has 60 MA's), (41, 29522), (44, 29495), (46, 29447), (56, 29354), (63, 29255),

Gene: GMonster_37 Start: 30681, Stop: 30409, Start Num: 35

Candidate Starts for GMonster_37:

(10, 30816), (18, 30783), (Start: 35 @30681 has 33 MA's), (41, 30639), (44, 30612), (48, 30567), (50, 30558), (54, 30519), (63, 30432),

Gene: Gachnar_40 Start: 31453, Stop: 31181, Start Num: 35

Candidate Starts for Gachnar_40:

(10, 31588), (18, 31555), (Start: 35 @31453 has 33 MA's), (41, 31411), (44, 31384), (48, 31339), (50, 31330), (54, 31291),

Gene: Gandalf20_39 Start: 32248, Stop: 31862, Start Num: 16

Candidate Starts for Gandalf20_39:

(Start: 16 @32248 has 5 MA's), (29, 32215), (31, 32179), (33, 32170), (37, 32122), (41, 32092), (44, 32065), (48, 32020), (50, 32011), (54, 31972), (63, 31885),

Gene: GrecoEtereo_40 Start: 32075, Stop: 31803, Start Num: 35

Candidate Starts for GrecoEtereo_40:

(10, 32210), (18, 32177), (Start: 35 @32075 has 33 MA's), (41, 32033), (44, 32006), (48, 31961), (50, 31952), (54, 31913),

Gene: GroundGoblin_40 Start: 32753, Stop: 32481, Start Num: 35

Candidate Starts for GroundGoblin_40:

(10, 32888), (18, 32855), (Start: 35 @32753 has 33 MA's), (41, 32711), (44, 32684), (48, 32639), (50, 32630), (54, 32591), (63, 32504),

Gene: Gwendoluna_41 Start: 33532, Stop: 33128, Start Num: 35

Candidate Starts for Gwendoluna_41:

(10, 33667), (18, 33634), (Start: 35 @33532 has 33 MA's), (41, 33490), (44, 33463), (48, 33418), (50, 33409), (54, 33370), (63, 33277),

Gene: HarryOW_38 Start: 31247, Stop: 30975, Start Num: 35

Candidate Starts for HarryOW_38:

(10, 31382), (18, 31349), (Start: 35 @31247 has 33 MA's), (41, 31205), (44, 31178), (48, 31133), (50, 31124), (54, 31085),

Gene: Hermia_41 Start: 32803, Stop: 32531, Start Num: 35

Candidate Starts for Hermia_41:

(10, 32938), (18, 32905), (Start: 35 @32803 has 33 MA's), (41, 32761), (44, 32734), (48, 32689), (50, 32680), (54, 32641), (63, 32554),

Gene: Hope4ever_38 Start: 31682, Stop: 31410, Start Num: 36

Candidate Starts for Hope4ever_38:

(33, 31718), (Start: 36 @31682 has 60 MA's), (41, 31640), (44, 31613), (48, 31568), (50, 31559), (54, 31520), (63, 31433),

Gene: ILeeKay_40 Start: 31449, Stop: 31177, Start Num: 36

Candidate Starts for ILeeKay_40:

(6, 31629), (11, 31563), (19, 31539), (22, 31527), (24, 31524), (Start: 36 @31449 has 60 MA's), (41, 31407), (44, 31380), (48, 31335), (50, 31326), (54, 31287),

Gene: Ichabod_39 Start: 31486, Stop: 31214, Start Num: 35

Candidate Starts for Ichabod_39:

(10, 31621), (18, 31588), (Start: 35 @31486 has 33 MA's), (41, 31444), (44, 31417), (48, 31372), (50, 31363), (54, 31324), (63, 31237),

Gene: IgnatiusPatJac_37 Start: 31296, Stop: 30910, Start Num: 16

Candidate Starts for IgnatiusPatJac_37:

(Start: 16 @31296 has 5 MA's), (29, 31263), (31, 31227), (33, 31218), (37, 31170), (41, 31140), (44, 31113), (48, 31068), (50, 31059), (54, 31020),

Gene: Inyanga_36 Start: 30633, Stop: 30358, Start Num: 36

Candidate Starts for Inyanga_36:

(3, 30894), (13, 30759), (Start: 36 @30633 has 60 MA's), (41, 30588), (44, 30561), (48, 30516), (50, 30507), (54, 30468),

Gene: Iqorha_36 Start: 30632, Stop: 30357, Start Num: 36

Candidate Starts for Iqorha_36:

(3, 30893), (13, 30758), (Start: 36 @30632 has 60 MA's), (41, 30587), (44, 30560), (48, 30515), (50, 30506), (54, 30467),

Gene: Jorgensen_38 Start: 31181, Stop: 30909, Start Num: 36

Candidate Starts for Jorgensen_38:

(Start: 36 @31181 has 60 MA's), (41, 31139), (44, 31112), (48, 31067), (50, 31058), (54, 31019),

Gene: JuliaChild_40 Start: 31921, Stop: 31649, Start Num: 35

Candidate Starts for JuliaChild_40:

(10, 32056), (18, 32023), (Start: 35 @31921 has 33 MA's), (41, 31879), (44, 31852), (48, 31807), (50, 31798), (54, 31759), (63, 31672),

Gene: Kenmech_41 Start: 32714, Stop: 32331, Start Num: 34

Candidate Starts for Kenmech_41:

(30, 32750), (Start: 34 @32714 has 9 MA's), (39, 32648), (49, 32546), (59, 32447), (63, 32354),

Gene: KikiBouba_40 Start: 32612, Stop: 32340, Start Num: 35

Candidate Starts for KikiBouba_40:

(10, 32747), (18, 32714), (Start: 35 @32612 has 33 MA's), (41, 32570), (44, 32543), (48, 32498), (50, 32489), (54, 32450), (63, 32363),

Gene: Killigrew_37 Start: 31321, Stop: 30923, Start Num: 36

Candidate Starts for Killigrew_37:

(Start: 36 @31321 has 60 MA's), (41, 31279), (44, 31252), (48, 31207), (50, 31198), (54, 31159), (63, 31066), (67, 30940),

Gene: KyMonks1A_41 Start: 31846, Stop: 31574, Start Num: 36

Candidate Starts for KyMonks1A_41:

(Start: 36 @31846 has 60 MA's), (38, 31810), (41, 31804), (44, 31777), (48, 31732), (50, 31723), (54, 31684), (63, 31597),

Gene: Kykar_37 Start: 30822, Stop: 30550, Start Num: 36

Candidate Starts for Kykar_37:

(6, 31002), (11, 30936), (19, 30912), (22, 30900), (24, 30897), (Start: 36 @30822 has 60 MA's), (41, 30780), (44, 30753), (50, 30699), (54, 30660),

Gene: Lopton_39 Start: 32717, Stop: 32445, Start Num: 8

Candidate Starts for Lopton_39:

(Start: 8 @32717 has 3 MA's), (15, 32675), (27, 32648), (48, 32603), (50, 32594), (54, 32555), (55, 32549), (63, 32468),

Gene: MPlant7149_38 Start: 30995, Stop: 30723, Start Num: 35

Candidate Starts for MPlant7149_38:

(10, 31130), (18, 31097), (Start: 35 @30995 has 33 MA's), (41, 30953), (44, 30926), (48, 30881), (50, 30872), (54, 30833), (63, 30746),

Gene: Magnar_38 Start: 31184, Stop: 30912, Start Num: 36

Candidate Starts for Magnar_38:

(6, 31364), (11, 31298), (19, 31274), (22, 31262), (24, 31259), (Start: 36 @31184 has 60 MA's), (41, 31142), (44, 31115), (48, 31070), (50, 31061), (54, 31022), (63, 30935),

Gene: Makemake_39 Start: 32642, Stop: 32331, Start Num: 36

Candidate Starts for Makemake_39:

(10, 32777), (18, 32744), (Start: 36 @32642 has 60 MA's), (41, 32600), (44, 32573), (52, 32519), (53, 32486), (57, 32456), (59, 32447), (63, 32354),

Gene: Manatee_39 Start: 31021, Stop: 30749, Start Num: 35

Candidate Starts for Manatee_39:

(10, 31156), (18, 31123), (Start: 35 @31021 has 33 MA's), (41, 30979), (44, 30952), (48, 30907), (50, 30898), (54, 30859), (63, 30772),

Gene: Marco3_38 Start: 31609, Stop: 31298, Start Num: 34

Candidate Starts for Marco3_38:

(30, 31645), (Start: 34 @31609 has 9 MA's), (41, 31567), (44, 31540), (51, 31486), (57, 31423), (59, 31414), (63, 31321),

Gene: Marge_39 Start: 32073, Stop: 31798, Start Num: 35

Candidate Starts for Marge_39:

(10, 32208), (18, 32175), (Start: 35 @32073 has 33 MA's), (41, 32028), (44, 32001), (48, 31956), (50, 31947), (54, 31908), (63, 31821),

Gene: Maroc7_38 Start: 31169, Stop: 30897, Start Num: 36

Candidate Starts for Maroc7_38:

(6, 31349), (11, 31283), (19, 31259), (22, 31247), (24, 31244), (Start: 36 @31169 has 60 MA's), (41, 31127), (44, 31100), (48, 31055), (50, 31046),

Gene: Marsha_38 Start: 32325, Stop: 31924, Start Num: 34

Candidate Starts for Marsha_38:

(1, 32799), (2, 32658), (5, 32517), (10, 32451), (26, 32403), (Start: 34 @32325 has 9 MA's), (39, 32259), (42, 32244), (45, 32214), (52, 32112), (57, 32049), (59, 32040), (63, 31947),

Gene: McGuire_39 Start: 31317, Stop: 31045, Start Num: 35

Candidate Starts for McGuire_39:

(10, 31452), (18, 31419), (Start: 35 @31317 has 33 MA's), (41, 31275), (44, 31248), (48, 31203), (50, 31194), (54, 31155), (63, 31068),

Gene: McSinger_39 Start: 31876, Stop: 31604, Start Num: 36

Candidate Starts for McSinger_39:

(24, 31963), (Start: 36 @31876 has 60 MA's), (41, 31834), (44, 31807), (48, 31762), (50, 31753), (54, 31714), (63, 31627),

Gene: Michley_38 Start: 31162, Stop: 30890, Start Num: 35

Candidate Starts for Michley_38:

(10, 31297), (18, 31264), (Start: 35 @31162 has 33 MA's), (41, 31120), (44, 31093), (48, 31048), (50, 31039), (54, 31000),

Gene: MilleFeuille_35 Start: 31338, Stop: 31066, Start Num: 36

Candidate Starts for MilleFeuille_35:

(6, 31488), (11, 31422), (28, 31374), (Start: 36 @31338 has 60 MA's), (41, 31296), (44, 31269), (48, 31224), (50, 31215), (54, 31176),

Gene: Mkhuseleli_39 Start: 31361, Stop: 31089, Start Num: 35

Candidate Starts for Mkhuseleli_39:

(10, 31496), (18, 31463), (Start: 35 @31361 has 33 MA's), (41, 31319), (44, 31292), (48, 31247), (50, 31238), (54, 31199), (63, 31112),

Gene: MrGordo_38 Start: 31025, Stop: 30753, Start Num: 35

Candidate Starts for MrGordo_38:

(Start: 35 @31025 has 33 MA's), (44, 30956), (48, 30911), (50, 30902), (54, 30863),

Gene: Mryolo_36 Start: 31035, Stop: 30763, Start Num: 36

Candidate Starts for Mryolo_36:

(Start: 36 @31035 has 60 MA's), (41, 30993), (44, 30966), (48, 30921), (50, 30912), (54, 30873), (63, 30786),

Gene: Naira_39 Start: 32939, Stop: 32667, Start Num: 36

Candidate Starts for Naira_39:

(11, 33053), (18, 33032), (19, 33029), (22, 33017), (24, 33014), (Start: 36 @32939 has 60 MA's), (41, 32897), (44, 32870), (48, 32825), (50, 32816), (54, 32777), (63, 32690),

Gene: Nerujay_39 Start: 31923, Stop: 31651, Start Num: 36

Candidate Starts for Nerujay_39:

(33, 31959), (Start: 36 @31923 has 60 MA's), (41, 31881), (44, 31854), (48, 31809), (50, 31800), (54, 31761), (63, 31674),

Gene: Nhonho_38 Start: 31661, Stop: 31389, Start Num: 36

Candidate Starts for Nhonho_38:

(11, 31775), (19, 31751), (22, 31739), (24, 31736), (Start: 36 @31661 has 60 MA's), (41, 31619), (44, 31592), (48, 31547), (50, 31538), (54, 31499),

Gene: Niza_41 Start: 32712, Stop: 32281, Start Num: 36

Candidate Starts for Niza_41:

(9, 32859), (14, 32826), (Start: 36 @32712 has 60 MA's), (41, 32673), (44, 32646), (46, 32598), (56, 32505), (60, 32439), (61, 32430), (64, 32391), (65, 32385), (66, 32304),

Gene: Noxious_40 Start: 32803, Stop: 32531, Start Num: 35

Candidate Starts for Noxious_40:

(10, 32938), (18, 32905), (Start: 35 @32803 has 33 MA's), (41, 32761), (44, 32734), (48, 32689), (50, 32680), (54, 32641), (63, 32554),

Gene: Ohno789_38 Start: 31317, Stop: 31045, Start Num: 36

Candidate Starts for Ohno789_38:

(Start: 36 @31317 has 60 MA's), (41, 31275), (44, 31248), (48, 31203), (50, 31194), (54, 31155),

Gene: PSullivan_37 Start: 30492, Stop: 30220, Start Num: 36

Candidate Starts for PSullivan_37:

(17, 30576), (Start: 36 @30492 has 60 MA's), (41, 30450), (44, 30423), (48, 30378), (50, 30369), (54, 30330), (63, 30243),

Gene: Papez_40 Start: 33003, Stop: 32731, Start Num: 36

Candidate Starts for Papez_40:

(11, 33117), (19, 33093), (22, 33081), (24, 33078), (Start: 36 @33003 has 60 MA's), (41, 32961), (44, 32934), (48, 32889), (50, 32880), (54, 32841),

Gene: Paphu_37 Start: 31244, Stop: 30972, Start Num: 36

Candidate Starts for Paphu_37:

(13, 31370), (Start: 36 @31244 has 60 MA's), (41, 31202), (44, 31175), (48, 31130), (50, 31121), (54, 31082),

Gene: Paraselene_37 Start: 31722, Stop: 31354, Start Num: 36

Candidate Starts for Paraselene_37:

(10, 31857), (18, 31824), (Start: 36 @31722 has 60 MA's), (41, 31677), (44, 31650), (52, 31542), (57, 31479), (59, 31470), (63, 31377),

Gene: Parliament_37 Start: 31469, Stop: 31134, Start Num: 36

Candidate Starts for Parliament_37:

(Start: 36 @31469 has 60 MA's), (41, 31427), (44, 31400), (46, 31352), (56, 31259), (58, 31247), (63, 31157),

Gene: PascalRango_39 Start: 31395, Stop: 31084, Start Num: 36

Candidate Starts for PascalRango_39:

(10, 31530), (18, 31497), (Start: 36 @31395 has 60 MA's), (41, 31353), (44, 31326), (52, 31272), (57, 31209), (59, 31200), (63, 31107),

Gene: PattyP_40 Start: 31585, Stop: 31313, Start Num: 35

Candidate Starts for PattyP_40:

(10, 31720), (18, 31687), (Start: 35 @31585 has 33 MA's), (44, 31516), (48, 31471), (50, 31462), (54, 31423), (63, 31336),

Gene: Pelly_38 Start: 31718, Stop: 31284, Start Num: 8

Candidate Starts for Pelly_38:

(Start: 8 @31718 has 3 MA's), (15, 31676), (27, 31649), (32, 31601), (43, 31508), (48, 31442), (50, 31433), (54, 31394), (55, 31388), (63, 31307),

Gene: Perseus_40 Start: 32401, Stop: 32072, Start Num: 36

Candidate Starts for Perseus_40:

(9, 32536), (14, 32503), (Start: 36 @32401 has 60 MA's), (41, 32362), (44, 32335), (46, 32287), (56, 32194),

Gene: Peterson_42 Start: 33587, Stop: 33315, Start Num: 36

Candidate Starts for Peterson_42:

(6, 33767), (11, 33701), (19, 33677), (22, 33665), (24, 33662), (Start: 36 @33587 has 60 MA's), (41, 33545), (44, 33518), (48, 33473), (50, 33464), (54, 33425),

Gene: PhrostyMug_39 Start: 31697, Stop: 31371, Start Num: 36

Candidate Starts for PhrostyMug_39:

(9, 31832), (14, 31799), (Start: 36 @31697 has 60 MA's), (41, 31655), (44, 31628), (46, 31580), (52, 31535), (56, 31487), (58, 31475), (63, 31385),

Gene: Pinto_40 Start: 31529, Stop: 31257, Start Num: 35

Candidate Starts for Pinto_40:

(10, 31664), (18, 31631), (Start: 35 @31529 has 33 MA's), (41, 31487), (44, 31460), (48, 31415), (50, 31406), (54, 31367), (63, 31280),

Gene: Pita2_40 Start: 31989, Stop: 31717, Start Num: 36

Candidate Starts for Pita2_40:

(17, 32073), (Start: 36 @31989 has 60 MA's), (41, 31947), (44, 31920), (48, 31875), (50, 31866), (54, 31827), (63, 31740),

Gene: ProMouse_36 Start: 31549, Stop: 31166, Start Num: 36

Candidate Starts for ProMouse_36:

(10, 31684), (18, 31651), (Start: 36 @31549 has 60 MA's), (41, 31507), (44, 31480), (52, 31354), (57, 31291), (59, 31282), (63, 31189),

Gene: QTRlifeCrisis_39 Start: 32125, Stop: 31793, Start Num: 36

Candidate Starts for QTRlifeCrisis_39:

(Start: 36 @32125 has 60 MA's), (41, 32083), (44, 32056), (46, 32008), (56, 31915), (63, 31816),

Gene: Raid_38 Start: 31585, Stop: 31214, Start Num: 34

Candidate Starts for Raid_38:

(Start: 34 @31585 has 9 MA's), (41, 31543), (44, 31516), (47, 31459), (57, 31339),

Gene: Rajelicia_38 Start: 31483, Stop: 31211, Start Num: 35

Candidate Starts for Rajelicia_38:

(10, 31618), (18, 31585), (Start: 35 @31483 has 33 MA's), (41, 31441), (44, 31414), (48, 31369), (50, 31360), (54, 31321),

Gene: Rhynn_38 Start: 31498, Stop: 31226, Start Num: 35

Candidate Starts for Rhynn_38:

(10, 31633), (18, 31600), (Start: 35 @31498 has 33 MA's), (41, 31456), (44, 31429), (48, 31384), (50, 31375), (54, 31336), (63, 31249),

Gene: RidgeCB_38 Start: 31144, Stop: 30812, Start Num: 36

Candidate Starts for RidgeCB_38:

(10, 31258), (14, 31234), (19, 31222), (Start: 36 @31144 has 60 MA's), (41, 31102), (44, 31075), (46, 31027), (56, 30934), (63, 30835),

Gene: Ringer_39 Start: 31985, Stop: 31623, Start Num: 34

Candidate Starts for Ringer_39:

(Start: 34 @31985 has 9 MA's), (41, 31943), (44, 31916), (57, 31748), (59, 31739), (63, 31646),

Gene: Rubeus_38 Start: 29616, Stop: 29344, Start Num: 36

Candidate Starts for Rubeus_38:

(Start: 36 @29616 has 60 MA's), (41, 29574), (44, 29547), (48, 29502), (50, 29493), (54, 29454), (63, 29367),

Gene: Rufus_40 Start: 31854, Stop: 31582, Start Num: 35

Candidate Starts for Rufus_40:

(10, 31989), (18, 31956), (Start: 35 @31854 has 33 MA's), (41, 31812), (44, 31785), (48, 31740), (50, 31731), (54, 31692), (63, 31605),

Gene: Ruotula_38 Start: 32043, Stop: 31771, Start Num: 36

Candidate Starts for Ruotula_38:

(33, 32079), (Start: 36 @32043 has 60 MA's), (41, 32001), (44, 31974), (48, 31929), (50, 31920), (54, 31881), (63, 31794),

Gene: STLscum_39 Start: 32385, Stop: 31999, Start Num: 16

Candidate Starts for STLscum_39:

(Start: 16 @32385 has 5 MA's), (29, 32352), (31, 32316), (33, 32307), (37, 32259), (41, 32229), (44, 32202), (48, 32157), (50, 32148), (54, 32109), (63, 32022),

Gene: Sagefire_40 Start: 32355, Stop: 32020, Start Num: 36

Candidate Starts for Sagefire_40:

(Start: 36 @32355 has 60 MA's), (41, 32313), (44, 32286), (46, 32238), (52, 32193), (56, 32145), (63, 32043),

Gene: Sandaddy_38 Start: 31382, Stop: 31110, Start Num: 36

Candidate Starts for Sandaddy_38:

(17, 31466), (Start: 36 @31382 has 60 MA's), (41, 31340), (44, 31313), (48, 31268), (50, 31259), (54, 31220), (63, 31133),

Gene: SarFire_38 Start: 31557, Stop: 31285, Start Num: 36

Candidate Starts for SarFire_38:

(Start: 36 @31557 has 60 MA's), (41, 31515), (44, 31488), (48, 31443), (50, 31434), (54, 31395), (63, 31308),

Gene: SkiPole_41 Start: 31904, Stop: 31518, Start Num: 16

Candidate Starts for SkiPole_41:

(Start: 16 @31904 has 5 MA's), (29, 31871), (31, 31835), (33, 31826), (37, 31778), (41, 31748), (44, 31721), (48, 31676), (50, 31667), (54, 31628), (63, 31541),

Gene: Slagathor_39 Start: 31408, Stop: 31136, Start Num: 35

Candidate Starts for Slagathor_39:

(10, 31543), (18, 31510), (Start: 35 @31408 has 33 MA's), (41, 31366), (44, 31339), (48, 31294), (50, 31285), (54, 31246),

Gene: Smeagol_40 Start: 32730, Stop: 32458, Start Num: 35

Candidate Starts for Smeagol_40:

(10, 32865), (18, 32832), (Start: 35 @32730 has 33 MA's), (41, 32688), (44, 32661), (48, 32616), (50, 32607), (54, 32568), (63, 32481),

Gene: Sorpresa_38 Start: 31384, Stop: 31112, Start Num: 36

Candidate Starts for Sorpresa_38:

(17, 31468), (Start: 36 @31384 has 60 MA's), (41, 31342), (44, 31315), (48, 31270), (50, 31261), (54, 31222), (63, 31135),

Gene: Squee_39 Start: 32135, Stop: 31863, Start Num: 35

Candidate Starts for Squee_39:

(10, 32270), (18, 32237), (Start: 35 @32135 has 33 MA's), (41, 32093), (44, 32066), (48, 32021), (50, 32012), (54, 31973), (63, 31886),

Gene: StewieG_36 Start: 29129, Stop: 28797, Start Num: 36

Candidate Starts for StewieG_36:

(30, 29165), (Start: 36 @29129 has 60 MA's), (41, 29087), (44, 29060), (46, 29012), (56, 28919),

Gene: StrongArm_37 Start: 32396, Stop: 32124, Start Num: 36

Candidate Starts for StrongArm_37:

(13, 32522), (Start: 36 @32396 has 60 MA's), (41, 32354), (44, 32327), (48, 32282), (50, 32273), (54, 32234),

Gene: Sunshine924_40 Start: 31419, Stop: 31006, Start Num: 36

Candidate Starts for Sunshine924_40:

(10, 31554), (18, 31521), (Start: 36 @31419 has 60 MA's), (42, 31329), (43, 31326), (52, 31194), (57, 31131), (59, 31122), (63, 31029),

Gene: Swole_40 Start: 31396, Stop: 31124, Start Num: 35

Candidate Starts for Swole_40:

(10, 31531), (18, 31498), (Start: 35 @31396 has 33 MA's), (41, 31354), (44, 31327), (48, 31282), (50, 31273), (54, 31234), (63, 31147),

Gene: Target_40 Start: 30793, Stop: 30395, Start Num: 36

Candidate Starts for Target_40:

(10, 30928), (18, 30895), (Start: 36 @30793 has 60 MA's), (38, 30742), (40, 30721), (57, 30520), (59, 30511),

Gene: Teodoridan_36 Start: 30785, Stop: 30513, Start Num: 36

Candidate Starts for Teodoridan_36:

(21, 30875), (Start: 36 @30785 has 60 MA's), (41, 30743), (44, 30716), (48, 30671), (50, 30662), (54, 30623), (63, 30536),

Gene: TheloniousMonk_40 Start: 32966, Stop: 32694, Start Num: 35

Candidate Starts for TheloniousMonk_40:

(10, 33101), (18, 33068), (Start: 35 @32966 has 33 MA's), (41, 32924), (44, 32897), (48, 32852), (50, 32843), (54, 32804),

Gene: Thor_38 Start: 30915, Stop: 30643, Start Num: 35

Candidate Starts for Thor_38:

(Start: 35 @30915 has 33 MA's), (41, 30873), (44, 30846), (48, 30801), (50, 30792), (54, 30753), (63, 30666),

Gene: Tote_35 Start: 28663, Stop: 28391, Start Num: 35

Candidate Starts for Tote_35:

(10, 28798), (18, 28765), (Start: 35 @28663 has 33 MA's), (41, 28621), (44, 28594), (48, 28549), (50, 28540), (54, 28501), (63, 28414),

Gene: Traft412_40 Start: 32486, Stop: 32154, Start Num: 36

Candidate Starts for Traft412_40:

(9, 32621), (14, 32588), (Start: 36 @32486 has 60 MA's), (41, 32444), (44, 32417), (46, 32369), (56, 32276),

Gene: Tripl3t_39 Start: 32414, Stop: 32145, Start Num: 35

Candidate Starts for Tripl3t_39:

(10, 32549), (18, 32516), (Start: 35 @32414 has 33 MA's), (41, 32369), (44, 32342), (48, 32297), (50, 32288), (54, 32249), (63, 32162),

Gene: Violet_37 Start: 31832, Stop: 31560, Start Num: 35

Candidate Starts for Violet_37:

(10, 31967), (18, 31934), (Start: 35 @31832 has 33 MA's), (41, 31790), (44, 31763), (48, 31718), (50, 31709), (54, 31670), (63, 31583),

Gene: Zeeculate_38 Start: 32108, Stop: 31794, Start Num: 36

Candidate Starts for Zeeculate_38:

(18, 32210), (Start: 36 @32108 has 60 MA's), (41, 32063), (44, 32036), (52, 31982), (57, 31919), (59, 31910), (63, 31817),

Gene: Zeuska_39 Start: 32058, Stop: 31723, Start Num: 36

Candidate Starts for Zeuska_39:

(Start: 36 @32058 has 60 MA's), (41, 32013), (44, 31986), (46, 31938), (56, 31845),