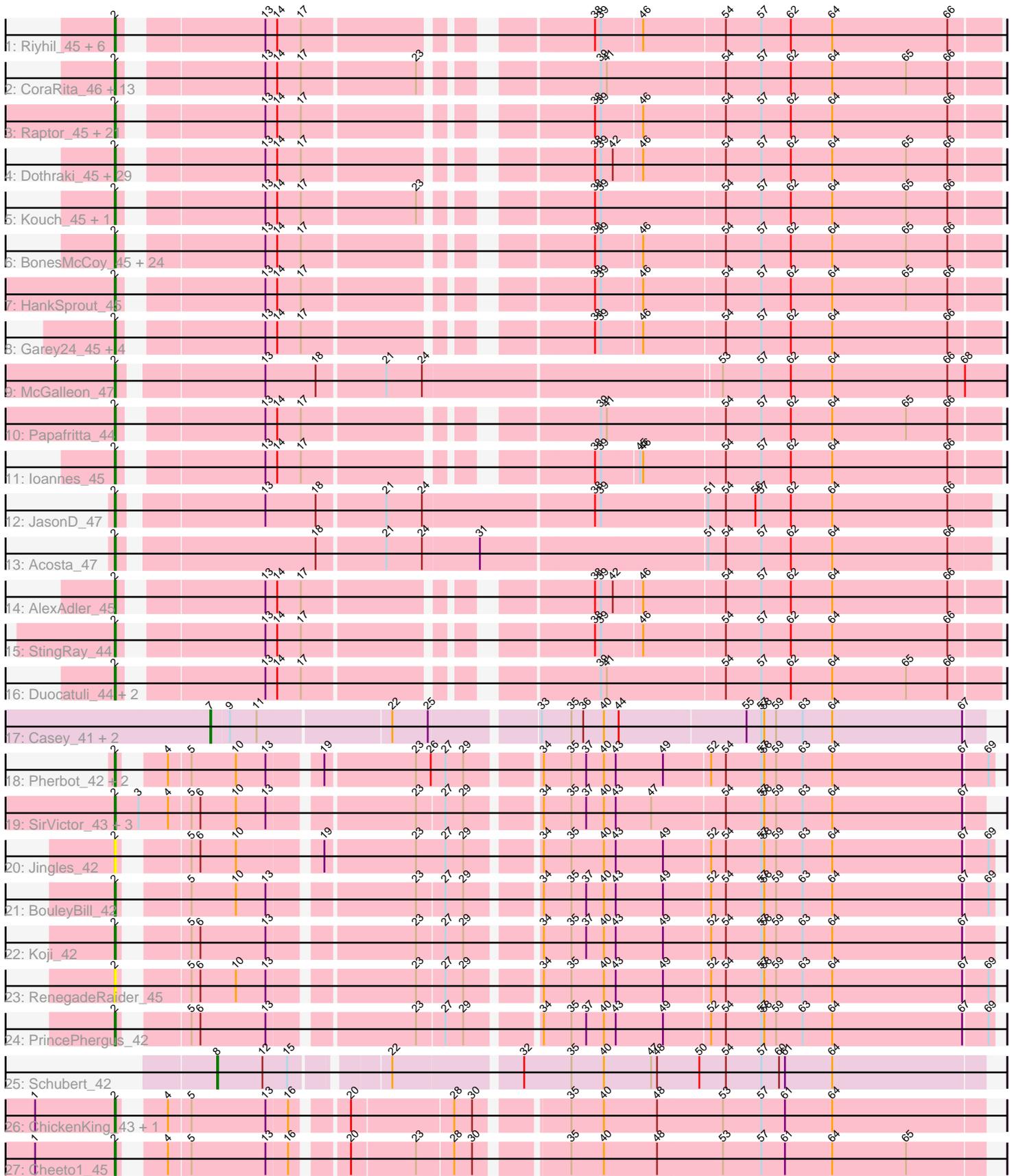# Pham 283592

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 283592 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283592 has 135 members, 9 are drafts.

Phages represented in each track:
• Track 1 : Riyhil_45, Renzie_45, Peep_45, Dave_45, Robinson_45, Superfresh_45, Antoinette_45
• Track 2 : CoraRita_46, StirfryIV_44, Benjalauren_45, Rog141_44, AranulaLuti_44, HanSolo_44, Ilzat_44, JeriBeth_46, Clancy_44, Symere_44, HungryHenry_44, Sedgewig_44, KannH_44, Jerbirus_46
• Track 3 : Raptor_45, Aubergine_44, Erla_44, KellyGreen_46, Kale_44, ManRay_44, Winzigespinne_44, Espinosa_44, Baines_44, Pocket_44, Bonino_44, Klimt_45, Chamuel_44, SonOfLevi_45, Calix_44, RosieMae_44, Christoph_44, Etta_44, Gelo_44, Oats_44, Tenda_44, Gubbabump_44
• Track 4 : Dothraki_45, NickSell_45, Martin_46, Kurt1_45, Bandik_45, TatarkaPM_45, SJay_45, BeautPeep30_45, Phireproof_45, SoilGremlin_46, Inventa_45, SolidSnake_47, Rapheph_45, ParleG_45, OldNelly_46, Stanktossa_45, MillyPhilly_45, Delphidian_45, Merida02_47, Zada_46, Phiderman_45, MrWorldwide_45, Nagem_45, Phriends_45, Byron23_46, Pherferi_45, Shee_45, PhredFlintston_45, MaeLinda_45, TinSulphur_46
• Track 5 : Kouch_45, Exploradora_44
• Track 6 : BonesMcCoy_45, Ludgate_45, Greys_45, Thorongil_45, Strathdee_45, Vispistious_45, Thompsone_45, WildNOut_45, Oxtober96_46, Convict_45, Blage_45, Alyxandracam_45, Knox_45, Velene_45, Teagan_45, Figueroism_45, Gargoyle_45, PuppyEggo_45, Janus167_44, GoingMerry_46, Lovelyunicorn_45, BigRedClifford_45, Den3_45, ShaiHulud_45, AxiPup_45
• Track 7 : HankSprout_45
• Track 8 : Garey24_45, Asta_44, Nattles_44, Gershwin_44, TeddyBear_44
• Track 9 : McGalleon_47
• Track 10 : Papafritta_44
• Track 11 : Ioannes_45
• Track 12 : JasonD_47
• Track 13 : Acosta_47
• Track 14 : AlexAdler_45
• Track 15 : StingRay_44
• Track 16 : Duocatuli_44, Chako_44, JasperRussell_44
• Track 17 : Casey_41, Pajaza_41, Pikmin_41
• Track 18 : Pherbot_42, Bustleton_42, Sinatra_43
• Track 19 : SirVictor_43, Lucky3_42, Golden_42, Guetzie_43
• Track 20 : Jingles_42
• Track 21 : BouleyBill_42
• Track 22 : Koji_42

- Track 23 : RenegadeRaider_45
- Track 24 : PrincePhergus_42
- Track 25 : Schubert_42
- Track 26 : ChickenKing_43, GaeCeo_45
- Track 27 : Cheeto1_45

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

The start number called the most often in the published annotations is 2, it was called in 122 of the 126 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Acosta_47, AlexAdler_45, Alyxandracam_45, Antoinette_45, AranulaLuti_44, Asta_44, Aubergine_44, AxiPup_45, Baines_44, Bandik_45, BeautPeep30_45, Benjalauren_45, BigRedClifford_45, Blage_45, BonesMcCoy_45, Bonino_44, BouleyBill_42, Bustleton_42, Byron23_46, Calix_44, Chako_44, Chamuel_44, Cheeto1_45, ChickenKing_43, Christoph_44, Clancy_44, Convict_45, CoraRita_46, Dave_45, Delphidian_45, Den3_45, Dothraki_45, Duocatuli_44, Erla_44, Espinosa_44, Etta_44, Exploradora_44, Figueroism_45, GaeCeo_45, Garey24_45, Gargoyle_45, Gelo_44, Gershwin_44, GoingMerry_46, Golden_42, Greys_45, Gubbabump_44, Guetzie_43, HanSolo_44, HankSprout_45, HungryHenry_44, Ilzat_44, Inventa_45, Ioannes_45, Janus167_44, JasonD_47, JasperRussell_44, Jerbirus_46, JeriBeth_46, Jingles_42, Kale_44, KannH_44, KellyGreen_46, Klimt_45, Knox_45, Koji_42, Kouch_45, Kurt1_45, Lovelyunicorn_45, Lucky3_42, Ludgate_45, MaeLinda_45, ManRay_44, Martin_46, McGalleon_47, Merida02_47, MillyPhilly_45, MrWorldwide_45, Nagem_45, Nattles_44, NickSell_45, Oats_44, OldNelly_46, Oxtober96_46, Papafritta_44, ParleG_45, Peep_45, Pherbot_42, Pherferi_45, Phiderman_45, Phireproof_45, PhredFlintston_45, Phriends_45, Pocket_44, PrincePhergus_42, PuppyEggo_45, Rapheph_45, Raptor_45, RenegadeRaider_45, Renzie_45, Riyhil_45, Robinson_45, Rog141_44, RosieMae_44, SJay_45, Sedgewig_44, ShaiHulud_45, Shee_45, Sinatra_43, SirVictor_43, SoilGremlin_46, SolidSnake_47, SonOfLevi_45, Stanktossa_45, StingRay_44, StirfryIV_44, Strathdee_45, Superfresh_45, Symere_44, TatarkaPM_45, Teagan_45, TeddyBear_44, Tenda_44, Thompsone_45, Thorongil_45, TinSulphur_46, Velene_45, Vispistious_45, WildNOut_45, Winzigespinne_44, Zada_46,

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

Genes that do not have the "Most Annotated" start:
- Casey_41, Pajaza_41, Pikmin_41, Schubert_42,

Summary by start number:

Start 2:
- Found in 131 of 135 (97.0%) of genes in pham
- Manual Annotations of this start: 122 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acosta_47 (EA1), AlexAdler_45 (EA1), Alyxandracam_45 (EA1), Antoinette_45 (EA1), AranulaLuti_44 (EA1), Asta_44 (EA1),

Aubergine_44 (EA1), AxiPup_45 (EA1), Baines_44 (EA1), Bandik_45 (EA1), BeautPeep30_45 (EA1), Benjalauren_45 (EA1), BigRedClifford_45 (EA1), Blage_45 (EA1), BonesMcCoy_45 (EA1), Bonino_44 (EA1), BouleyBill_42 (EA4), Bustleton_42 (EA4), Byron23_46 (EA1), Calix_44 (EA1), Chako_44 (EA1), Chamuel_44 (EA1), Cheeto1_45 (EA9), ChickenKing_43 (EA9), Christoph_44 (EA1), Clancy_44 (EA1), Convict_45 (EA1), CoraRita_46 (EA1), Dave_45 (EA1), Delphidian_45 (EA1), Den3_45 (EA1), Dothraki_45 (EA1), Duocatuli_44 (EA1), Erla_44 (EA1), Espinosa_44 (EA1), Etta_44 (EA1), Exploradora_44 (EA1), Figueroism_45 (EA1), GaeCeo_45 (EA9), Garey24_45 (EA1), Gargoyle_45 (EA1), Gelo_44 (EA1), Gershwin_44 (EA1), GoingMerry_46 (EA1), Golden_42 (EA4), Greys_45 (EA1), Gubbabump_44 (EA1), Guetzie_43 (EA4), HanSolo_44 (EA1), HankSprout_45 (EA1), HungryHenry_44 (EA1), Ilzat_44 (EA1), Inventa_45 (EA1), Ioannes_45 (EA1), Janus167_44 (EA1), JasonD_47 (EA1), JasperRussell_44 (EA1), Jerbirus_46 (EA1), JeriBeth_46 (EA1), Jingles_42 (EA4), Kale_44 (EA1), KannH_44 (EA1), KellyGreen_46 (EA1), Klimt_45 (EA1), Knox_45 (EA1), Koji_42 (EA4), Kouch_45 (EA1), Kurt1_45 (EA1), Lovelyunicorn_45 (EA1), Lucky3_42 (EA4), Ludgate_45 (EA1), MaeLinda_45 (EA1), ManRay_44 (EA1), Martin_46 (EA1), McGalleon_47 (EA1), Merida02_47 (EA1), MillyPhilly_45 (EA1), MrWorldwide_45 (EA1), Nagem_45 (EA1), Nattles_44 (EA1), NickSell_45 (EA1), Oats_44 (EA1), OldNelly_46 (EA1), Oxtober96_46 (EA1), Papafritta_44 (EA1), ParleG_45 (EA1), Peep_45 (EA1), Pherbot_42 (EA4), Pherferi_45 (EA1), Phiderman_45 (EA1), Phireproof_45 (EA1), PhredFlintston_45 (EA1), Phriends_45 (EA1), Pocket_44 (EA1), PrincePhergus_42 (EA4), PuppyEggo_45 (EA1), Rapheph_45 (EA1), Raptor_45 (EA1), RenegadeRaider_45 (EA4), Renzie_45 (EA1), Riyhil_45 (EA1), Robinson_45 (EA1), Rog141_44 (EA1), RosieMae_44 (EA1), SJay_45 (EA1), Sedgewig_44 (EA1), ShaiHulud_45 (EA1), Shee_45 (EA1), Sinatra_43 (EA4), SirVictor_43 (EA4), SoilGremlin_46 (EA1), SolidSnake_47 (EA1), SonOfLevi_45 (EA1), Stanktossa_45 (EA1), StingRay_44 (EA1), StirfryIV_44 (EA1), Strathdee_45 (EA1), Superfresh_45 (EA1), Symere_44 (EA1), TatarkaPM_45 (EA1), Teagan_45 (EA1), TeddyBear_44 (EA1), Tenda_44 (EA1), Thompsone_45 (EA1), Thorongil_45 (EA1), TinSulphur_46 (EA1), Velene_45 (EA1), Vispistious_45 (EA1), WildNOut_45 (EA1), Winzigespinne_44 (EA1), Zada_46 (EA1),

Start 7:
• Found in 3 of 135 (2.2%) of genes in pham
• Manual Annotations of this start: 3 of 126
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Casey_41 (EA3), Pajaza_41 (EA3), Pikmin_41 (EA3),

Start 8:
• Found in 1 of 135 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 126
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schubert_42 (EA8),

Summary by clusters:

There are 5 clusters represented in this pham: EA1, EA9, EA3, EA4, EA8,

Info for manual annotations of cluster EA1:
•Start number 2 was manually annotated 109 times for cluster EA1.

Info for manual annotations of cluster EA3:
•Start number 7 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:
•Start number 2 was manually annotated 10 times for cluster EA4.

Info for manual annotations of cluster EA8:
•Start number 8 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:
•Start number 2 was manually annotated 3 times for cluster EA9.

Gene Information:

Gene: Acosta_47 Start: 33265, Stop: 32417, Start Num: 2
Candidate Starts for Acosta_47:
(Start: 2 @33265 has 122 MA's), (18, 33082), (21, 33016), (24, 32980), (31, 32923), (51, 32701), (54, 32683), (57, 32647), (62, 32617), (64, 32575), (66, 32458),

Gene: AlexAdler_45 Start: 33079, Stop: 32273, Start Num: 2
Candidate Starts for AlexAdler_45:
(Start: 2 @33079 has 122 MA's), (13, 32953), (14, 32941), (17, 32917), (38, 32674), (39, 32668), (42, 32656), (46, 32629), (54, 32548), (57, 32512), (62, 32482), (64, 32440), (66, 32323),

Gene: Alyxandracam_45 Start: 33089, Stop: 32283, Start Num: 2
Candidate Starts for Alyxandracam_45:
(Start: 2 @33089 has 122 MA's), (13, 32963), (14, 32951), (17, 32927), (38, 32684), (39, 32678), (46, 32639), (54, 32558), (57, 32522), (62, 32492), (64, 32450), (65, 32375), (66, 32333),

Gene: Antoinette_45 Start: 33079, Stop: 32273, Start Num: 2
Candidate Starts for Antoinette_45:
(Start: 2 @33079 has 122 MA's), (13, 32953), (14, 32941), (17, 32917), (38, 32674), (39, 32668), (46, 32629), (54, 32548), (57, 32512), (62, 32482), (64, 32440), (66, 32323),

Gene: AranulaLuti_44 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for AranulaLuti_44:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (23, 32503), (39, 32365), (41, 32359), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: Asta_44 Start: 32786, Stop: 31980, Start Num: 2
Candidate Starts for Asta_44:
(Start: 2 @32786 has 122 MA's), (13, 32660), (14, 32648), (17, 32624), (38, 32381), (39, 32375), (46, 32336), (54, 32255), (57, 32219), (62, 32189), (64, 32147), (66, 32030),

Gene: Aubergine_44 Start: 32786, Stop: 31980, Start Num: 2
Candidate Starts for Aubergine_44:
(Start: 2 @32786 has 122 MA's), (13, 32660), (14, 32648), (17, 32624), (38, 32381), (39, 32375), (46, 32336), (54, 32255), (57, 32219), (62, 32189), (64, 32147), (66, 32030),

Gene: AxiPup_45 Start: 33058, Stop: 32252, Start Num: 2
Candidate Starts for AxiPup_45:

(Start: 2 @33058 has 122 MA's), (13, 32932), (14, 32920), (17, 32896), (38, 32653), (39, 32647), (46, 32608), (54, 32527), (57, 32491), (62, 32461), (64, 32419), (65, 32344), (66, 32302),

Gene: Baines_44 Start: 32779, Stop: 31973, Start Num: 2
Candidate Starts for Baines_44:
(Start: 2 @32779 has 122 MA's), (13, 32653), (14, 32641), (17, 32617), (38, 32374), (39, 32368), (46, 32329), (54, 32248), (57, 32212), (62, 32182), (64, 32140), (66, 32023),

Gene: Bandik_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for Bandik_45:
(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (42, 32661), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: BeautPeep30_45 Start: 33090, Stop: 32284, Start Num: 2
Candidate Starts for BeautPeep30_45:
(Start: 2 @33090 has 122 MA's), (13, 32964), (14, 32952), (17, 32928), (38, 32685), (39, 32679), (42, 32667), (46, 32640), (54, 32559), (57, 32523), (62, 32493), (64, 32451), (65, 32376), (66, 32334),

Gene: Benjalauren_45 Start: 32792, Stop: 31983, Start Num: 2
Candidate Starts for Benjalauren_45:
(Start: 2 @32792 has 122 MA's), (13, 32666), (14, 32654), (17, 32630), (23, 32519), (39, 32381), (41, 32375), (54, 32258), (57, 32222), (62, 32192), (64, 32150), (65, 32075), (66, 32033),

Gene: BigRedClifford_45 Start: 33088, Stop: 32282, Start Num: 2
Candidate Starts for BigRedClifford_45:
(Start: 2 @33088 has 122 MA's), (13, 32962), (14, 32950), (17, 32926), (38, 32683), (39, 32677), (46, 32638), (54, 32557), (57, 32521), (62, 32491), (64, 32449), (65, 32374), (66, 32332),

Gene: Blage_45 Start: 33088, Stop: 32282, Start Num: 2
Candidate Starts for Blage_45:
(Start: 2 @33088 has 122 MA's), (13, 32962), (14, 32950), (17, 32926), (38, 32683), (39, 32677), (46, 32638), (54, 32557), (57, 32521), (62, 32491), (64, 32449), (65, 32374), (66, 32332),

Gene: BonesMcCoy_45 Start: 33088, Stop: 32282, Start Num: 2
Candidate Starts for BonesMcCoy_45:
(Start: 2 @33088 has 122 MA's), (13, 32962), (14, 32950), (17, 32926), (38, 32683), (39, 32677), (46, 32638), (54, 32557), (57, 32521), (62, 32491), (64, 32449), (65, 32374), (66, 32332),

Gene: Bonino_44 Start: 32765, Stop: 31959, Start Num: 2
Candidate Starts for Bonino_44:
(Start: 2 @32765 has 122 MA's), (13, 32639), (14, 32627), (17, 32603), (38, 32360), (39, 32354), (46, 32315), (54, 32234), (57, 32198), (62, 32168), (64, 32126), (66, 32009),

Gene: BouleyBill_42 Start: 31954, Stop: 31139, Start Num: 2
Candidate Starts for BouleyBill_42:
(Start: 2 @31954 has 122 MA's), (5, 31903), (10, 31858), (13, 31828), (23, 31696), (27, 31669), (29, 31651), (34, 31588), (35, 31561), (37, 31546), (40, 31528), (43, 31516), (49, 31468), (52, 31423), (54, 31408), (57, 31372), (58, 31369), (59, 31357), (63, 31330), (64, 31300), (67, 31168), (69, 31144),

Gene: Bustleton_42 Start: 31748, Stop: 30930, Start Num: 2
Candidate Starts for Bustleton_42:
(Start: 2 @31748 has 122 MA's), (4, 31718), (5, 31697), (10, 31652), (13, 31622), (19, 31577), (23, 31490), (26, 31475), (27, 31460), (29, 31442), (34, 31379), (35, 31352), (37, 31337), (40, 31319), (43,

31307), (49, 31259), (52, 31214), (54, 31199), (57, 31163), (58, 31160), (59, 31148), (63, 31121), (64, 31091), (67, 30959), (69, 30935),

Gene: Byron23_46 Start: 33087, Stop: 32281, Start Num: 2
Candidate Starts for Byron23_46:
(Start: 2 @33087 has 122 MA's), (13, 32961), (14, 32949), (17, 32925), (38, 32682), (39, 32676), (42, 32664), (46, 32637), (54, 32556), (57, 32520), (62, 32490), (64, 32448), (65, 32373), (66, 32331),

Gene: Calix_44 Start: 32772, Stop: 31966, Start Num: 2
Candidate Starts for Calix_44:
(Start: 2 @32772 has 122 MA's), (13, 32646), (14, 32634), (17, 32610), (38, 32367), (39, 32361), (46, 32322), (54, 32241), (57, 32205), (62, 32175), (64, 32133), (66, 32016),

Gene: Casey_41 Start: 31268, Stop: 30519, Start Num: 7
Candidate Starts for Casey_41:
(Start: 7 @31268 has 3 MA's), (9, 31250), (11, 31223), (22, 31094), (25, 31058), (33, 30959), (35, 30932), (36, 30920), (40, 30899), (44, 30884), (55, 30758), (57, 30743), (58, 30740), (59, 30728), (63, 30701), (64, 30671), (67, 30539),

Gene: Chako_44 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for Chako_44:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (39, 32365), (41, 32359), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: Chamuel_44 Start: 32798, Stop: 31992, Start Num: 2
Candidate Starts for Chamuel_44:
(Start: 2 @32798 has 122 MA's), (13, 32672), (14, 32660), (17, 32636), (38, 32393), (39, 32387), (46, 32348), (54, 32267), (57, 32231), (62, 32201), (64, 32159), (66, 32042),

Gene: Cheeto1_45 Start: 32549, Stop: 31746, Start Num: 2
Candidate Starts for Cheeto1_45:
(1, 32630), (Start: 2 @32549 has 122 MA's), (4, 32519), (5, 32498), (13, 32423), (16, 32402), (20, 32357), (23, 32294), (28, 32258), (30, 32240), (35, 32162), (40, 32129), (48, 32075), (53, 32009), (57, 31970), (61, 31946), (64, 31898), (65, 31823),

Gene: ChickenKing_43 Start: 32442, Stop: 31639, Start Num: 2
Candidate Starts for ChickenKing_43:
(1, 32523), (Start: 2 @32442 has 122 MA's), (4, 32412), (5, 32391), (13, 32316), (16, 32295), (20, 32250), (28, 32151), (30, 32133), (35, 32055), (40, 32022), (48, 31968), (53, 31902), (57, 31863), (61, 31839), (64, 31791),

Gene: Christoph_44 Start: 32785, Stop: 31979, Start Num: 2
Candidate Starts for Christoph_44:
(Start: 2 @32785 has 122 MA's), (13, 32659), (14, 32647), (17, 32623), (38, 32380), (39, 32374), (46, 32335), (54, 32254), (57, 32218), (62, 32188), (64, 32146), (66, 32029),

Gene: Clancy_44 Start: 32821, Stop: 32012, Start Num: 2
Candidate Starts for Clancy_44:
(Start: 2 @32821 has 122 MA's), (13, 32695), (14, 32683), (17, 32659), (23, 32548), (39, 32410), (41, 32404), (54, 32287), (57, 32251), (62, 32221), (64, 32179), (65, 32104), (66, 32062),

Gene: Convict_45 Start: 33088, Stop: 32282, Start Num: 2
Candidate Starts for Convict_45:

(Start: 2 @33088 has 122 MA's), (13, 32962), (14, 32950), (17, 32926), (38, 32683), (39, 32677), (46, 32638), (54, 32557), (57, 32521), (62, 32491), (64, 32449), (65, 32374), (66, 32332),

Gene: CoraRita_46 Start: 32791, Stop: 31982, Start Num: 2
Candidate Starts for CoraRita_46:
(Start: 2 @32791 has 122 MA's), (13, 32665), (14, 32653), (17, 32629), (23, 32518), (39, 32380), (41, 32374), (54, 32257), (57, 32221), (62, 32191), (64, 32149), (65, 32074), (66, 32032),

Gene: Dave_45 Start: 33079, Stop: 32273, Start Num: 2
Candidate Starts for Dave_45:
(Start: 2 @33079 has 122 MA's), (13, 32953), (14, 32941), (17, 32917), (38, 32674), (39, 32668), (46, 32629), (54, 32548), (57, 32512), (62, 32482), (64, 32440), (66, 32323),

Gene: Delphidian_45 Start: 33087, Stop: 32281, Start Num: 2
Candidate Starts for Delphidian_45:
(Start: 2 @33087 has 122 MA's), (13, 32961), (14, 32949), (17, 32925), (38, 32682), (39, 32676), (42, 32664), (46, 32637), (54, 32556), (57, 32520), (62, 32490), (64, 32448), (65, 32373), (66, 32331),

Gene: Den3_45 Start: 33093, Stop: 32287, Start Num: 2
Candidate Starts for Den3_45:
(Start: 2 @33093 has 122 MA's), (13, 32967), (14, 32955), (17, 32931), (38, 32688), (39, 32682), (46, 32643), (54, 32562), (57, 32526), (62, 32496), (64, 32454), (65, 32379), (66, 32337),

Gene: Dothraki_45 Start: 33087, Stop: 32281, Start Num: 2
Candidate Starts for Dothraki_45:
(Start: 2 @33087 has 122 MA's), (13, 32961), (14, 32949), (17, 32925), (38, 32682), (39, 32676), (42, 32664), (46, 32637), (54, 32556), (57, 32520), (62, 32490), (64, 32448), (65, 32373), (66, 32331),

Gene: Duocatuli_44 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for Duocatuli_44:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (39, 32365), (41, 32359), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: Erla_44 Start: 32769, Stop: 31963, Start Num: 2
Candidate Starts for Erla_44:
(Start: 2 @32769 has 122 MA's), (13, 32643), (14, 32631), (17, 32607), (38, 32364), (39, 32358), (46, 32319), (54, 32238), (57, 32202), (62, 32172), (64, 32130), (66, 32013),

Gene: Espinosa_44 Start: 32784, Stop: 31978, Start Num: 2
Candidate Starts for Espinosa_44:
(Start: 2 @32784 has 122 MA's), (13, 32658), (14, 32646), (17, 32622), (38, 32379), (39, 32373), (46, 32334), (54, 32253), (57, 32217), (62, 32187), (64, 32145), (66, 32028),

Gene: Etta_44 Start: 32773, Stop: 31967, Start Num: 2
Candidate Starts for Etta_44:
(Start: 2 @32773 has 122 MA's), (13, 32647), (14, 32635), (17, 32611), (38, 32368), (39, 32362), (46, 32323), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (66, 32017),

Gene: Exploradora_44 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for Exploradora_44:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (23, 32503), (38, 32371), (39, 32365), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: Figueroism_45 Start: 33078, Stop: 32272, Start Num: 2
Candidate Starts for Figueroism_45:
(Start: 2 @33078 has 122 MA's), (13, 32952), (14, 32940), (17, 32916), (38, 32673), (39, 32667), (46, 32628), (54, 32547), (57, 32511), (62, 32481), (64, 32439), (65, 32364), (66, 32322),

Gene: GaeCeo_45 Start: 32675, Stop: 31872, Start Num: 2
Candidate Starts for GaeCeo_45:
(1, 32756), (Start: 2 @32675 has 122 MA's), (4, 32645), (5, 32624), (13, 32549), (16, 32528), (20, 32483), (28, 32384), (30, 32366), (35, 32288), (40, 32255), (48, 32201), (53, 32135), (57, 32096), (61, 32072), (64, 32024),

Gene: Garey24_45 Start: 32752, Stop: 31946, Start Num: 2
Candidate Starts for Garey24_45:
(Start: 2 @32752 has 122 MA's), (13, 32626), (14, 32614), (17, 32590), (38, 32347), (39, 32341), (46, 32302), (54, 32221), (57, 32185), (62, 32155), (64, 32113), (66, 31996),

Gene: Gargoyle_45 Start: 33093, Stop: 32287, Start Num: 2
Candidate Starts for Gargoyle_45:
(Start: 2 @33093 has 122 MA's), (13, 32967), (14, 32955), (17, 32931), (38, 32688), (39, 32682), (46, 32643), (54, 32562), (57, 32526), (62, 32496), (64, 32454), (65, 32379), (66, 32337),

Gene: Gelo_44 Start: 32779, Stop: 31973, Start Num: 2
Candidate Starts for Gelo_44:
(Start: 2 @32779 has 122 MA's), (13, 32653), (14, 32641), (17, 32617), (38, 32374), (39, 32368), (46, 32329), (54, 32248), (57, 32212), (62, 32182), (64, 32140), (66, 32023),

Gene: Gershwin_44 Start: 32786, Stop: 31980, Start Num: 2
Candidate Starts for Gershwin_44:
(Start: 2 @32786 has 122 MA's), (13, 32660), (14, 32648), (17, 32624), (38, 32381), (39, 32375), (46, 32336), (54, 32255), (57, 32219), (62, 32189), (64, 32147), (66, 32030),

Gene: GoingMerry_46 Start: 33071, Stop: 32265, Start Num: 2
Candidate Starts for GoingMerry_46:
(Start: 2 @33071 has 122 MA's), (13, 32945), (14, 32933), (17, 32909), (38, 32666), (39, 32660), (46, 32621), (54, 32540), (57, 32504), (62, 32474), (64, 32432), (65, 32357), (66, 32315),

Gene: Golden_42 Start: 31840, Stop: 31010, Start Num: 2
Candidate Starts for Golden_42:
(Start: 2 @31840 has 122 MA's), (3, 31816), (4, 31786), (5, 31765), (6, 31756), (10, 31720), (13, 31690), (23, 31558), (27, 31531), (29, 31513), (34, 31450), (35, 31423), (37, 31408), (40, 31390), (43, 31378), (47, 31342), (54, 31270), (57, 31234), (58, 31231), (59, 31219), (63, 31192), (64, 31162), (67, 31030),

Gene: Greys_45 Start: 33086, Stop: 32280, Start Num: 2
Candidate Starts for Greys_45:
(Start: 2 @33086 has 122 MA's), (13, 32960), (14, 32948), (17, 32924), (38, 32681), (39, 32675), (46, 32636), (54, 32555), (57, 32519), (62, 32489), (64, 32447), (65, 32372), (66, 32330),

Gene: Gubbabump_44 Start: 32766, Stop: 31960, Start Num: 2
Candidate Starts for Gubbabump_44:
(Start: 2 @32766 has 122 MA's), (13, 32640), (14, 32628), (17, 32604), (38, 32361), (39, 32355), (46, 32316), (54, 32235), (57, 32199), (62, 32169), (64, 32127), (66, 32010),

Gene: Guetzie_43 Start: 31825, Stop: 30995, Start Num: 2
Candidate Starts for Guetzie_43:
(Start: 2 @31825 has 122 MA's), (3, 31801), (4, 31771), (5, 31750), (6, 31741), (10, 31705), (13, 31675), (23, 31543), (27, 31516), (29, 31498), (34, 31435), (35, 31408), (37, 31393), (40, 31375), (43, 31363), (47, 31327), (54, 31255), (57, 31219), (58, 31216), (59, 31204), (63, 31177), (64, 31147), (67, 31015),

Gene: HanSolo_44 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for HanSolo_44:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (23, 32503), (39, 32365), (41, 32359), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: HankSprout_45 Start: 32653, Stop: 31847, Start Num: 2
Candidate Starts for HankSprout_45:
(Start: 2 @32653 has 122 MA's), (13, 32527), (14, 32515), (17, 32491), (38, 32248), (39, 32242), (46, 32203), (54, 32122), (57, 32086), (62, 32056), (64, 32014), (65, 31939), (66, 31897),

Gene: HungryHenry_44 Start: 32781, Stop: 31972, Start Num: 2
Candidate Starts for HungryHenry_44:
(Start: 2 @32781 has 122 MA's), (13, 32655), (14, 32643), (17, 32619), (23, 32508), (39, 32370), (41, 32364), (54, 32247), (57, 32211), (62, 32181), (64, 32139), (65, 32064), (66, 32022),

Gene: Ilzat_44 Start: 32792, Stop: 31983, Start Num: 2
Candidate Starts for Ilzat_44:
(Start: 2 @32792 has 122 MA's), (13, 32666), (14, 32654), (17, 32630), (23, 32519), (39, 32381), (41, 32375), (54, 32258), (57, 32222), (62, 32192), (64, 32150), (65, 32075), (66, 32033),

Gene: Inventa_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for Inventa_45:
(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (42, 32661), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: Ioannes_45 Start: 33088, Stop: 32282, Start Num: 2
Candidate Starts for Ioannes_45:
(Start: 2 @33088 has 122 MA's), (13, 32962), (14, 32950), (17, 32926), (38, 32683), (39, 32677), (45, 32641), (46, 32638), (54, 32557), (57, 32521), (62, 32491), (64, 32449), (66, 32332),

Gene: Janus167_44 Start: 32773, Stop: 31967, Start Num: 2
Candidate Starts for Janus167_44:
(Start: 2 @32773 has 122 MA's), (13, 32647), (14, 32635), (17, 32611), (38, 32368), (39, 32362), (46, 32323), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: JasonD_47 Start: 33193, Stop: 32345, Start Num: 2
Candidate Starts for JasonD_47:
(Start: 2 @33193 has 122 MA's), (13, 33061), (18, 33010), (21, 32944), (24, 32908), (38, 32740), (39, 32734), (51, 32629), (54, 32611), (56, 32581), (57, 32575), (62, 32545), (64, 32503), (66, 32386),

Gene: JasperRussell_44 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for JasperRussell_44:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (39, 32365), (41, 32359), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: Jerbirus_46 Start: 32776, Stop: 31967, Start Num: 2

Candidate Starts for Jerbirus_46:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (23, 32503), (39, 32365), (41, 32359), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: JeriBeth_46 Start: 32639, Stop: 31830, Start Num: 2
Candidate Starts for JeriBeth_46:
(Start: 2 @32639 has 122 MA's), (13, 32513), (14, 32501), (17, 32477), (23, 32366), (39, 32228), (41, 32222), (54, 32105), (57, 32069), (62, 32039), (64, 31997), (65, 31922), (66, 31880),

Gene: Jingles_42 Start: 31963, Stop: 31145, Start Num: 2
Candidate Starts for Jingles_42:
(Start: 2 @31963 has 122 MA's), (5, 31912), (6, 31903), (10, 31867), (19, 31792), (23, 31705), (27, 31675), (29, 31657), (34, 31594), (35, 31567), (40, 31534), (43, 31522), (49, 31474), (52, 31429), (54, 31414), (57, 31378), (58, 31375), (59, 31363), (63, 31336), (64, 31306), (67, 31174), (69, 31150),

Gene: Kale_44 Start: 32788, Stop: 31982, Start Num: 2
Candidate Starts for Kale_44:
(Start: 2 @32788 has 122 MA's), (13, 32662), (14, 32650), (17, 32626), (38, 32383), (39, 32377), (46, 32338), (54, 32257), (57, 32221), (62, 32191), (64, 32149), (66, 32032),

Gene: KannH_44 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for KannH_44:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (23, 32503), (39, 32365), (41, 32359), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: KellyGreen_46 Start: 32770, Stop: 31964, Start Num: 2
Candidate Starts for KellyGreen_46:
(Start: 2 @32770 has 122 MA's), (13, 32644), (14, 32632), (17, 32608), (38, 32365), (39, 32359), (46, 32320), (54, 32239), (57, 32203), (62, 32173), (64, 32131), (66, 32014),

Gene: Klimt_45 Start: 32804, Stop: 31998, Start Num: 2
Candidate Starts for Klimt_45:
(Start: 2 @32804 has 122 MA's), (13, 32678), (14, 32666), (17, 32642), (38, 32399), (39, 32393), (46, 32354), (54, 32273), (57, 32237), (62, 32207), (64, 32165), (66, 32048),

Gene: Knox_45 Start: 33088, Stop: 32282, Start Num: 2
Candidate Starts for Knox_45:
(Start: 2 @33088 has 122 MA's), (13, 32962), (14, 32950), (17, 32926), (38, 32683), (39, 32677), (46, 32638), (54, 32557), (57, 32521), (62, 32491), (64, 32449), (65, 32374), (66, 32332),

Gene: Koji_42 Start: 32119, Stop: 31304, Start Num: 2
Candidate Starts for Koji_42:
(Start: 2 @32119 has 122 MA's), (5, 32068), (6, 32059), (13, 31993), (23, 31861), (27, 31834), (29, 31816), (34, 31753), (35, 31726), (37, 31711), (40, 31693), (43, 31681), (49, 31633), (52, 31588), (54, 31573), (57, 31537), (58, 31534), (59, 31522), (63, 31495), (64, 31465), (67, 31333),

Gene: Kouch_45 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for Kouch_45:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (23, 32503), (38, 32371), (39, 32365), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: Kurt1_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for Kurt1_45:

(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (42, 32661), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: Lovelyunicorn_45 Start: 33089, Stop: 32283, Start Num: 2
Candidate Starts for Lovelyunicorn_45:
(Start: 2 @33089 has 122 MA's), (13, 32963), (14, 32951), (17, 32927), (38, 32684), (39, 32678), (46, 32639), (54, 32558), (57, 32522), (62, 32492), (64, 32450), (65, 32375), (66, 32333),

Gene: Lucky3_42 Start: 31840, Stop: 31010, Start Num: 2
Candidate Starts for Lucky3_42:
(Start: 2 @31840 has 122 MA's), (3, 31816), (4, 31786), (5, 31765), (6, 31756), (10, 31720), (13, 31690), (23, 31558), (27, 31531), (29, 31513), (34, 31450), (35, 31423), (37, 31408), (40, 31390), (43, 31378), (47, 31342), (54, 31270), (57, 31234), (58, 31231), (59, 31219), (63, 31192), (64, 31162), (67, 31030),

Gene: Ludgate_45 Start: 33087, Stop: 32281, Start Num: 2
Candidate Starts for Ludgate_45:
(Start: 2 @33087 has 122 MA's), (13, 32961), (14, 32949), (17, 32925), (38, 32682), (39, 32676), (46, 32637), (54, 32556), (57, 32520), (62, 32490), (64, 32448), (65, 32373), (66, 32331),

Gene: MaeLinda_45 Start: 33088, Stop: 32282, Start Num: 2
Candidate Starts for MaeLinda_45:
(Start: 2 @33088 has 122 MA's), (13, 32962), (14, 32950), (17, 32926), (38, 32683), (39, 32677), (42, 32665), (46, 32638), (54, 32557), (57, 32521), (62, 32491), (64, 32449), (65, 32374), (66, 32332),

Gene: ManRay_44 Start: 32786, Stop: 31980, Start Num: 2
Candidate Starts for ManRay_44:
(Start: 2 @32786 has 122 MA's), (13, 32660), (14, 32648), (17, 32624), (38, 32381), (39, 32375), (46, 32336), (54, 32255), (57, 32219), (62, 32189), (64, 32147), (66, 32030),

Gene: Martin_46 Start: 33093, Stop: 32287, Start Num: 2
Candidate Starts for Martin_46:
(Start: 2 @33093 has 122 MA's), (13, 32967), (14, 32955), (17, 32931), (38, 32688), (39, 32682), (42, 32670), (46, 32643), (54, 32562), (57, 32526), (62, 32496), (64, 32454), (65, 32379), (66, 32337),

Gene: McGalleon_47 Start: 34056, Stop: 33193, Start Num: 2
Candidate Starts for McGalleon_47:
(Start: 2 @34056 has 122 MA's), (13, 33924), (18, 33873), (21, 33807), (24, 33771), (53, 33480), (57, 33441), (62, 33411), (64, 33369), (66, 33252), (68, 33234),

Gene: Merida02_47 Start: 33087, Stop: 32281, Start Num: 2
Candidate Starts for Merida02_47:
(Start: 2 @33087 has 122 MA's), (13, 32961), (14, 32949), (17, 32925), (38, 32682), (39, 32676), (42, 32664), (46, 32637), (54, 32556), (57, 32520), (62, 32490), (64, 32448), (65, 32373), (66, 32331),

Gene: MillyPhilly_45 Start: 33081, Stop: 32275, Start Num: 2
Candidate Starts for MillyPhilly_45:
(Start: 2 @33081 has 122 MA's), (13, 32955), (14, 32943), (17, 32919), (38, 32676), (39, 32670), (42, 32658), (46, 32631), (54, 32550), (57, 32514), (62, 32484), (64, 32442), (65, 32367), (66, 32325),

Gene: MrWorldwide_45 Start: 33091, Stop: 32285, Start Num: 2
Candidate Starts for MrWorldwide_45:

(Start: 2 @33091 has 122 MA's), (13, 32965), (14, 32953), (17, 32929), (38, 32686), (39, 32680), (42, 32668), (46, 32641), (54, 32560), (57, 32524), (62, 32494), (64, 32452), (65, 32377), (66, 32335),

Gene: Nagem_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for Nagem_45:
(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (42, 32661), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: Nattles_44 Start: 32773, Stop: 31967, Start Num: 2
Candidate Starts for Nattles_44:
(Start: 2 @32773 has 122 MA's), (13, 32647), (14, 32635), (17, 32611), (38, 32368), (39, 32362), (46, 32323), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (66, 32017),

Gene: NickSell_45 Start: 33094, Stop: 32288, Start Num: 2
Candidate Starts for NickSell_45:
(Start: 2 @33094 has 122 MA's), (13, 32968), (14, 32956), (17, 32932), (38, 32689), (39, 32683), (42, 32671), (46, 32644), (54, 32563), (57, 32527), (62, 32497), (64, 32455), (65, 32380), (66, 32338),

Gene: Oats_44 Start: 32786, Stop: 31980, Start Num: 2
Candidate Starts for Oats_44:
(Start: 2 @32786 has 122 MA's), (13, 32660), (14, 32648), (17, 32624), (38, 32381), (39, 32375), (46, 32336), (54, 32255), (57, 32219), (62, 32189), (64, 32147), (66, 32030),

Gene: OldNelly_46 Start: 33090, Stop: 32284, Start Num: 2
Candidate Starts for OldNelly_46:
(Start: 2 @33090 has 122 MA's), (13, 32964), (14, 32952), (17, 32928), (38, 32685), (39, 32679), (42, 32667), (46, 32640), (54, 32559), (57, 32523), (62, 32493), (64, 32451), (65, 32376), (66, 32334),

Gene: Oxtober96_46 Start: 33089, Stop: 32283, Start Num: 2
Candidate Starts for Oxtober96_46:
(Start: 2 @33089 has 122 MA's), (13, 32963), (14, 32951), (17, 32927), (38, 32684), (39, 32678), (46, 32639), (54, 32558), (57, 32522), (62, 32492), (64, 32450), (65, 32375), (66, 32333),

Gene: Pajaza_41 Start: 31268, Stop: 30519, Start Num: 7
Candidate Starts for Pajaza_41:
(Start: 7 @31268 has 3 MA's), (9, 31250), (11, 31223), (22, 31094), (25, 31058), (33, 30959), (35, 30932), (36, 30920), (40, 30899), (44, 30884), (55, 30758), (57, 30743), (58, 30740), (59, 30728), (63, 30701), (64, 30671), (67, 30539),

Gene: Papafritta_44 Start: 32797, Stop: 31988, Start Num: 2
Candidate Starts for Papafritta_44:
(Start: 2 @32797 has 122 MA's), (13, 32671), (14, 32659), (17, 32635), (39, 32386), (41, 32380), (54, 32263), (57, 32227), (62, 32197), (64, 32155), (65, 32080), (66, 32038),

Gene: ParleG_45 Start: 33091, Stop: 32285, Start Num: 2
Candidate Starts for ParleG_45:
(Start: 2 @33091 has 122 MA's), (13, 32965), (14, 32953), (17, 32929), (38, 32686), (39, 32680), (42, 32668), (46, 32641), (54, 32560), (57, 32524), (62, 32494), (64, 32452), (65, 32377), (66, 32335),

Gene: Peep_45 Start: 33076, Stop: 32270, Start Num: 2
Candidate Starts for Peep_45:
(Start: 2 @33076 has 122 MA's), (13, 32950), (14, 32938), (17, 32914), (38, 32671), (39, 32665), (46, 32626), (54, 32545), (57, 32509), (62, 32479), (64, 32437), (66, 32320),

Gene: Pherbot_42 Start: 31735, Stop: 30917, Start Num: 2
Candidate Starts for Pherbot_42:
(Start: 2 @31735 has 122 MA's), (4, 31705), (5, 31684), (10, 31639), (13, 31609), (19, 31564), (23, 31477), (26, 31462), (27, 31447), (29, 31429), (34, 31366), (35, 31339), (37, 31324), (40, 31306), (43, 31294), (49, 31246), (52, 31201), (54, 31186), (57, 31150), (58, 31147), (59, 31135), (63, 31108), (64, 31078), (67, 30946), (69, 30922),

Gene: Pherferi_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for Pherferi_45:
(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (42, 32661), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: Phiderman_45 Start: 33081, Stop: 32275, Start Num: 2
Candidate Starts for Phiderman_45:
(Start: 2 @33081 has 122 MA's), (13, 32955), (14, 32943), (17, 32919), (38, 32676), (39, 32670), (42, 32658), (46, 32631), (54, 32550), (57, 32514), (62, 32484), (64, 32442), (65, 32367), (66, 32325),

Gene: Phireproof_45 Start: 33090, Stop: 32284, Start Num: 2
Candidate Starts for Phireproof_45:
(Start: 2 @33090 has 122 MA's), (13, 32964), (14, 32952), (17, 32928), (38, 32685), (39, 32679), (42, 32667), (46, 32640), (54, 32559), (57, 32523), (62, 32493), (64, 32451), (65, 32376), (66, 32334),

Gene: PhredFlintston_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for PhredFlintston_45:
(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (42, 32661), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: Phriends_45 Start: 33090, Stop: 32284, Start Num: 2
Candidate Starts for Phriends_45:
(Start: 2 @33090 has 122 MA's), (13, 32964), (14, 32952), (17, 32928), (38, 32685), (39, 32679), (42, 32667), (46, 32640), (54, 32559), (57, 32523), (62, 32493), (64, 32451), (65, 32376), (66, 32334),

Gene: Pikmin_41 Start: 31268, Stop: 30519, Start Num: 7
Candidate Starts for Pikmin_41:
(Start: 7 @31268 has 3 MA's), (9, 31250), (11, 31223), (22, 31094), (25, 31058), (33, 30959), (35, 30932), (36, 30920), (40, 30899), (44, 30884), (55, 30758), (57, 30743), (58, 30740), (59, 30728), (63, 30701), (64, 30671), (67, 30539),

Gene: Pocket_44 Start: 32813, Stop: 32007, Start Num: 2
Candidate Starts for Pocket_44:
(Start: 2 @32813 has 122 MA's), (13, 32687), (14, 32675), (17, 32651), (38, 32408), (39, 32402), (46, 32363), (54, 32282), (57, 32246), (62, 32216), (64, 32174), (66, 32057),

Gene: PrincePhergus_42 Start: 31751, Stop: 30936, Start Num: 2
Candidate Starts for PrincePhergus_42:
(Start: 2 @31751 has 122 MA's), (5, 31700), (6, 31691), (13, 31625), (23, 31493), (27, 31466), (29, 31448), (34, 31385), (35, 31358), (37, 31343), (40, 31325), (43, 31313), (49, 31265), (52, 31220), (54, 31205), (57, 31169), (58, 31166), (59, 31154), (63, 31127), (64, 31097), (67, 30965), (69, 30941),

Gene: PuppyEggo_45 Start: 33091, Stop: 32285, Start Num: 2
Candidate Starts for PuppyEggo_45:

(Start: 2 @33091 has 122 MA's), (13, 32965), (14, 32953), (17, 32929), (38, 32686), (39, 32680), (46, 32641), (54, 32560), (57, 32524), (62, 32494), (64, 32452), (65, 32377), (66, 32335),

Gene: Rapheph_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for Rapheph_45:
(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (42, 32661), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: Raptor_45 Start: 33091, Stop: 32285, Start Num: 2
Candidate Starts for Raptor_45:
(Start: 2 @33091 has 122 MA's), (13, 32965), (14, 32953), (17, 32929), (38, 32686), (39, 32680), (46, 32641), (54, 32560), (57, 32524), (62, 32494), (64, 32452), (66, 32335),

Gene: RenegadeRaider_45 Start: 31806, Stop: 30991, Start Num: 2
Candidate Starts for RenegadeRaider_45:
(Start: 2 @31806 has 122 MA's), (5, 31755), (6, 31746), (10, 31710), (13, 31680), (23, 31548), (27, 31521), (29, 31503), (34, 31440), (35, 31413), (40, 31380), (43, 31368), (49, 31320), (52, 31275), (54, 31260), (57, 31224), (58, 31221), (59, 31209), (63, 31182), (64, 31152), (67, 31020), (69, 30996),

Gene: Renzie_45 Start: 33079, Stop: 32273, Start Num: 2
Candidate Starts for Renzie_45:
(Start: 2 @33079 has 122 MA's), (13, 32953), (14, 32941), (17, 32917), (38, 32674), (39, 32668), (46, 32629), (54, 32548), (57, 32512), (62, 32482), (64, 32440), (66, 32323),

Gene: Riyhil_45 Start: 33094, Stop: 32288, Start Num: 2
Candidate Starts for Riyhil_45:
(Start: 2 @33094 has 122 MA's), (13, 32968), (14, 32956), (17, 32932), (38, 32689), (39, 32683), (46, 32644), (54, 32563), (57, 32527), (62, 32497), (64, 32455), (66, 32338),

Gene: Robinson_45 Start: 33082, Stop: 32276, Start Num: 2
Candidate Starts for Robinson_45:
(Start: 2 @33082 has 122 MA's), (13, 32956), (14, 32944), (17, 32920), (38, 32677), (39, 32671), (46, 32632), (54, 32551), (57, 32515), (62, 32485), (64, 32443), (66, 32326),

Gene: Rog141_44 Start: 32776, Stop: 31967, Start Num: 2
Candidate Starts for Rog141_44:
(Start: 2 @32776 has 122 MA's), (13, 32650), (14, 32638), (17, 32614), (23, 32503), (39, 32365), (41, 32359), (54, 32242), (57, 32206), (62, 32176), (64, 32134), (65, 32059), (66, 32017),

Gene: RosieMae_44 Start: 32831, Stop: 32025, Start Num: 2
Candidate Starts for RosieMae_44:
(Start: 2 @32831 has 122 MA's), (13, 32705), (14, 32693), (17, 32669), (38, 32426), (39, 32420), (46, 32381), (54, 32300), (57, 32264), (62, 32234), (64, 32192), (66, 32075),

Gene: SJay_45 Start: 33085, Stop: 32279, Start Num: 2
Candidate Starts for SJay_45:
(Start: 2 @33085 has 122 MA's), (13, 32959), (14, 32947), (17, 32923), (38, 32680), (39, 32674), (42, 32662), (46, 32635), (54, 32554), (57, 32518), (62, 32488), (64, 32446), (65, 32371), (66, 32329),

Gene: Schubert_42 Start: 31724, Stop: 30987, Start Num: 8
Candidate Starts for Schubert_42:
(Start: 8 @31724 has 1 MA's), (12, 31679), (15, 31655), (22, 31571), (32, 31451), (35, 31403), (40, 31370), (47, 31322), (48, 31316), (50, 31274), (54, 31247), (57, 31211), (60, 31193), (61, 31187), (64,

31139),

Gene: Sedgewig_44 Start: 32774, Stop: 31965, Start Num: 2
Candidate Starts for Sedgewig_44:
(Start: 2 @32774 has 122 MA's), (13, 32648), (14, 32636), (17, 32612), (23, 32501), (39, 32363), (41, 32357), (54, 32240), (57, 32204), (62, 32174), (64, 32132), (65, 32057), (66, 32015),

Gene: ShaiHulud_45 Start: 33100, Stop: 32294, Start Num: 2
Candidate Starts for ShaiHulud_45:
(Start: 2 @33100 has 122 MA's), (13, 32974), (14, 32962), (17, 32938), (38, 32695), (39, 32689), (46, 32650), (54, 32569), (57, 32533), (62, 32503), (64, 32461), (65, 32386), (66, 32344),

Gene: Shee_45 Start: 33081, Stop: 32275, Start Num: 2
Candidate Starts for Shee_45:
(Start: 2 @33081 has 122 MA's), (13, 32955), (14, 32943), (17, 32919), (38, 32676), (39, 32670), (42, 32658), (46, 32631), (54, 32550), (57, 32514), (62, 32484), (64, 32442), (65, 32367), (66, 32325),

Gene: Sinatra_43 Start: 31746, Stop: 30928, Start Num: 2
Candidate Starts for Sinatra_43:
(Start: 2 @31746 has 122 MA's), (4, 31716), (5, 31695), (10, 31650), (13, 31620), (19, 31575), (23, 31488), (26, 31473), (27, 31458), (29, 31440), (34, 31377), (35, 31350), (37, 31335), (40, 31317), (43, 31305), (49, 31257), (52, 31212), (54, 31197), (57, 31161), (58, 31158), (59, 31146), (63, 31119), (64, 31089), (67, 30957), (69, 30933),

Gene: SirVictor_43 Start: 31825, Stop: 30995, Start Num: 2
Candidate Starts for SirVictor_43:
(Start: 2 @31825 has 122 MA's), (3, 31801), (4, 31771), (5, 31750), (6, 31741), (10, 31705), (13, 31675), (23, 31543), (27, 31516), (29, 31498), (34, 31435), (35, 31408), (37, 31393), (40, 31375), (43, 31363), (47, 31327), (54, 31255), (57, 31219), (58, 31216), (59, 31204), (63, 31177), (64, 31147), (67, 31015),

Gene: SoilGremlin_46 Start: 33087, Stop: 32281, Start Num: 2
Candidate Starts for SoilGremlin_46:
(Start: 2 @33087 has 122 MA's), (13, 32961), (14, 32949), (17, 32925), (38, 32682), (39, 32676), (42, 32664), (46, 32637), (54, 32556), (57, 32520), (62, 32490), (64, 32448), (65, 32373), (66, 32331),

Gene: SolidSnake_47 Start: 33090, Stop: 32284, Start Num: 2
Candidate Starts for SolidSnake_47:
(Start: 2 @33090 has 122 MA's), (13, 32964), (14, 32952), (17, 32928), (38, 32685), (39, 32679), (42, 32667), (46, 32640), (54, 32559), (57, 32523), (62, 32493), (64, 32451), (65, 32376), (66, 32334),

Gene: SonOfLevi_45 Start: 32804, Stop: 31998, Start Num: 2
Candidate Starts for SonOfLevi_45:
(Start: 2 @32804 has 122 MA's), (13, 32678), (14, 32666), (17, 32642), (38, 32399), (39, 32393), (46, 32354), (54, 32273), (57, 32237), (62, 32207), (64, 32165), (66, 32048),

Gene: Stanktossa_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for Stanktossa_45:
(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (42, 32661), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: StingRay_44 Start: 32789, Stop: 31983, Start Num: 2
Candidate Starts for StingRay_44:

(Start: 2 @32789 has 122 MA's), (13, 32663), (14, 32651), (17, 32627), (38, 32384), (39, 32378), (46, 32339), (54, 32258), (57, 32222), (62, 32192), (64, 32150), (66, 32033),

Gene: StirfryIV_44 Start: 32785, Stop: 31976, Start Num: 2
Candidate Starts for StirfryIV_44:
(Start: 2 @32785 has 122 MA's), (13, 32659), (14, 32647), (17, 32623), (23, 32512), (39, 32374), (41, 32368), (54, 32251), (57, 32215), (62, 32185), (64, 32143), (65, 32068), (66, 32026),

Gene: Strathdee_45 Start: 33090, Stop: 32284, Start Num: 2
Candidate Starts for Strathdee_45:
(Start: 2 @33090 has 122 MA's), (13, 32964), (14, 32952), (17, 32928), (38, 32685), (39, 32679), (46, 32640), (54, 32559), (57, 32523), (62, 32493), (64, 32451), (65, 32376), (66, 32334),

Gene: Superfresh_45 Start: 33079, Stop: 32273, Start Num: 2
Candidate Starts for Superfresh_45:
(Start: 2 @33079 has 122 MA's), (13, 32953), (14, 32941), (17, 32917), (38, 32674), (39, 32668), (46, 32629), (54, 32548), (57, 32512), (62, 32482), (64, 32440), (66, 32323),

Gene: Symere_44 Start: 32784, Stop: 31975, Start Num: 2
Candidate Starts for Symere_44:
(Start: 2 @32784 has 122 MA's), (13, 32658), (14, 32646), (17, 32622), (23, 32511), (39, 32373), (41, 32367), (54, 32250), (57, 32214), (62, 32184), (64, 32142), (65, 32067), (66, 32025),

Gene: TatarkaPM_45 Start: 33094, Stop: 32288, Start Num: 2
Candidate Starts for TatarkaPM_45:
(Start: 2 @33094 has 122 MA's), (13, 32968), (14, 32956), (17, 32932), (38, 32689), (39, 32683), (42, 32671), (46, 32644), (54, 32563), (57, 32527), (62, 32497), (64, 32455), (65, 32380), (66, 32338),

Gene: Teagan_45 Start: 33084, Stop: 32278, Start Num: 2
Candidate Starts for Teagan_45:
(Start: 2 @33084 has 122 MA's), (13, 32958), (14, 32946), (17, 32922), (38, 32679), (39, 32673), (46, 32634), (54, 32553), (57, 32517), (62, 32487), (64, 32445), (65, 32370), (66, 32328),

Gene: TeddyBear_44 Start: 32786, Stop: 31980, Start Num: 2
Candidate Starts for TeddyBear_44:
(Start: 2 @32786 has 122 MA's), (13, 32660), (14, 32648), (17, 32624), (38, 32381), (39, 32375), (46, 32336), (54, 32255), (57, 32219), (62, 32189), (64, 32147), (66, 32030),

Gene: Tenda_44 Start: 32784, Stop: 31978, Start Num: 2
Candidate Starts for Tenda_44:
(Start: 2 @32784 has 122 MA's), (13, 32658), (14, 32646), (17, 32622), (38, 32379), (39, 32373), (46, 32334), (54, 32253), (57, 32217), (62, 32187), (64, 32145), (66, 32028),

Gene: Thompsone_45 Start: 33091, Stop: 32285, Start Num: 2
Candidate Starts for Thompsone_45:
(Start: 2 @33091 has 122 MA's), (13, 32965), (14, 32953), (17, 32929), (38, 32686), (39, 32680), (46, 32641), (54, 32560), (57, 32524), (62, 32494), (64, 32452), (65, 32377), (66, 32335),

Gene: Thorongil_45 Start: 32605, Stop: 31799, Start Num: 2
Candidate Starts for Thorongil_45:
(Start: 2 @32605 has 122 MA's), (13, 32479), (14, 32467), (17, 32443), (38, 32200), (39, 32194), (46, 32155), (54, 32074), (57, 32038), (62, 32008), (64, 31966), (65, 31891), (66, 31849),

Gene: TinSulphur_46 Start: 33090, Stop: 32284, Start Num: 2
Candidate Starts for TinSulphur_46:
(Start: 2 @33090 has 122 MA's), (13, 32964), (14, 32952), (17, 32928), (38, 32685), (39, 32679), (42, 32667), (46, 32640), (54, 32559), (57, 32523), (62, 32493), (64, 32451), (65, 32376), (66, 32334),

Gene: Velene_45 Start: 33089, Stop: 32283, Start Num: 2
Candidate Starts for Velene_45:
(Start: 2 @33089 has 122 MA's), (13, 32963), (14, 32951), (17, 32927), (38, 32684), (39, 32678), (46, 32639), (54, 32558), (57, 32522), (62, 32492), (64, 32450), (65, 32375), (66, 32333),

Gene: Vispistious_45 Start: 33091, Stop: 32285, Start Num: 2
Candidate Starts for Vispistious_45:
(Start: 2 @33091 has 122 MA's), (13, 32965), (14, 32953), (17, 32929), (38, 32686), (39, 32680), (46, 32641), (54, 32560), (57, 32524), (62, 32494), (64, 32452), (65, 32377), (66, 32335),

Gene: WildNOut_45 Start: 33087, Stop: 32281, Start Num: 2
Candidate Starts for WildNOut_45:
(Start: 2 @33087 has 122 MA's), (13, 32961), (14, 32949), (17, 32925), (38, 32682), (39, 32676), (46, 32637), (54, 32556), (57, 32520), (62, 32490), (64, 32448), (65, 32373), (66, 32331),

Gene: Winzigespinne_44 Start: 32772, Stop: 31966, Start Num: 2
Candidate Starts for Winzigespinne_44:
(Start: 2 @32772 has 122 MA's), (13, 32646), (14, 32634), (17, 32610), (38, 32367), (39, 32361), (46, 32322), (54, 32241), (57, 32205), (62, 32175), (64, 32133), (66, 32016),

Gene: Zada_46 Start: 33060, Stop: 32254, Start Num: 2
Candidate Starts for Zada_46:
(Start: 2 @33060 has 122 MA's), (13, 32934), (14, 32922), (17, 32898), (38, 32655), (39, 32649), (42, 32637), (46, 32610), (54, 32529), (57, 32493), (62, 32463), (64, 32421), (65, 32346), (66, 32304),