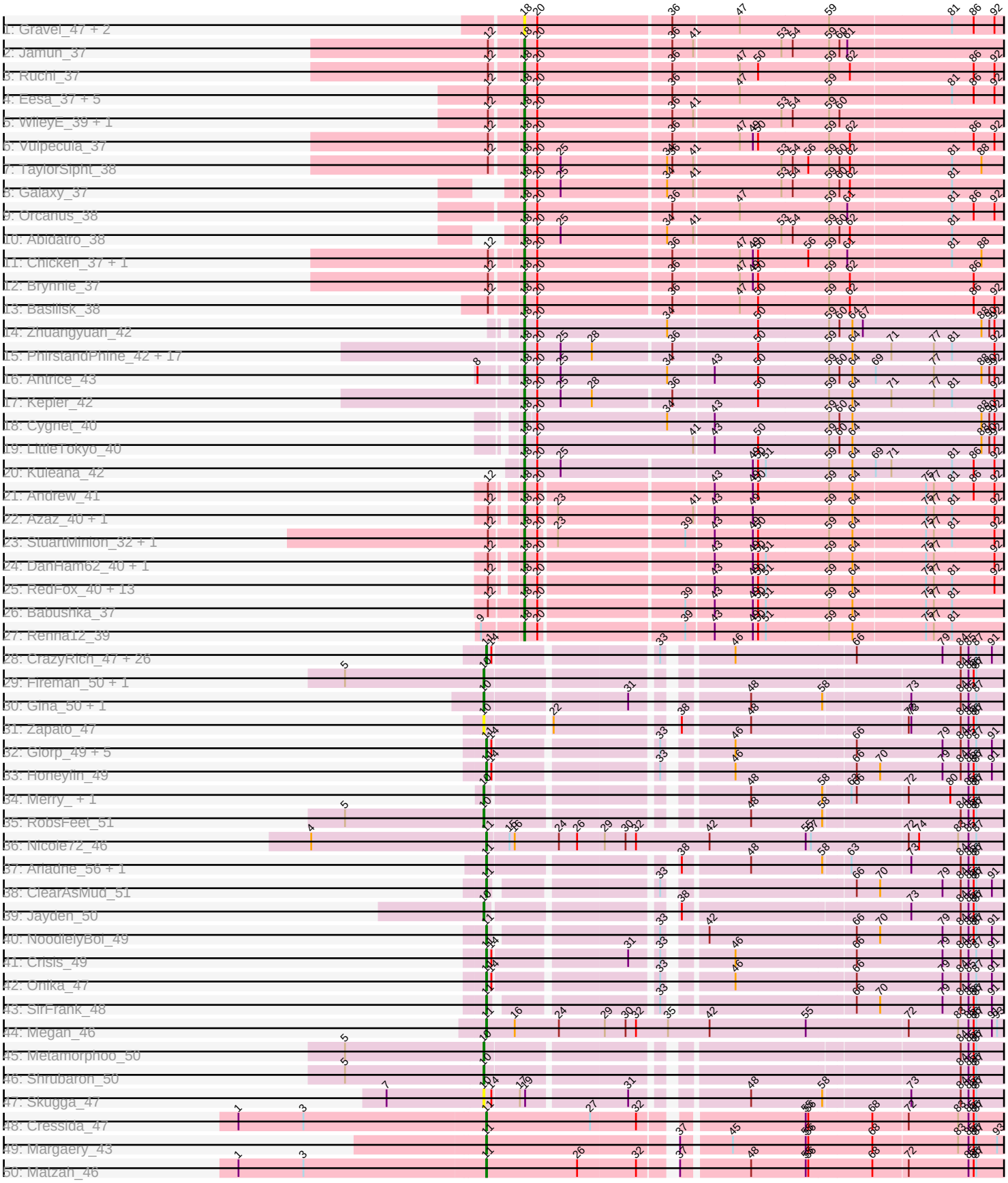
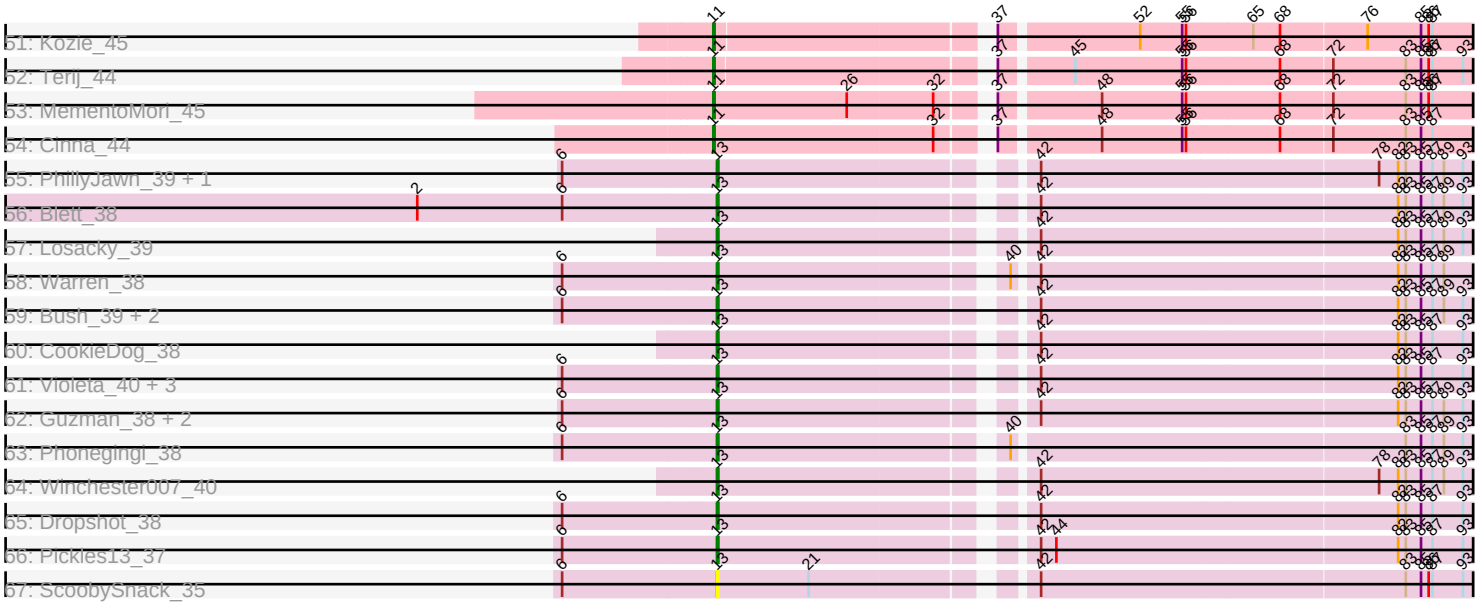
Zoomed Pham 347344



Zoomed Pham 347344



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 347344 Report

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

Pham number 347344 has 152 members, 23 are drafts.

Phages represented in each track:
• Track 1 : Gravel_47, Pelletreau_47, Westrich_46
• Track 2 : Jamun_37
• Track 3 : Ruchi_37
• Track 4 : Eesa_37, KendraB23_48, Amanises_40, Shen_35, Toad24_40, Zixiang_37
• Track 5 : WileyE_39, Chickaboom_39
• Track 6 : Vulpecula_37
• Track 7 : TaylorSipht_38
• Track 8 : Galaxy_37
• Track 9 : Orcanus_38
• Track 10 : Abidatro_38
• Track 11 : Chicken_37, Niblet_37
• Track 12 : Brynnie_37
• Track 13 : Basilisk_38
• Track 14 : Zhuangyuan_42
• Track 15 : PhirstandPhine_42, Coral_40, Bedetta_45, Colusalem_41, GramZayde_42, OtsoOtso_41, BadWillHunting_47, Amelia_40, Melons_42, Bibble12_44, HannahPhantana_41, Pineda_42, Lunar_42, Damocles_44, Daob_42, Jerole_41, Cote_42, Polka_40
• Track 16 : Antrice_43
• Track 17 : Kepler_42
• Track 18 : Cygnet_40
• Track 19 : LittleTokyo_40
• Track 20 : Kuleana_42
• Track 21 : Andrew_41
• Track 22 : Azaz_40, Leona_39
• Track 23 : StuartMinion_32, AlexMinion_40
• Track 24 : DanHam62_40, AmiCi24_39
• Track 25 : RedFox_40, AdoptaAdorbs_39, HamCheese_40, Fingolfin_40, Atlantica_40, Oppalora_39, Camara_40, Rattail_40, Laphuphu24k_38, PhluffyCoco_40, Amphitrite_40, Glotell_41, Juno112_39, KHumphrey_40
• Track 26 : Babushka_37
• Track 27 : Renna12_39
• Track 28 : CrazyRich_47, Germa_49, Selwyn23_49, Lucretia_48, Ramiel05_47, PierreOrion_48, Kowalski_47, Busephilis_47, Jefe_48, Ganandorf_47, BeagleBug_47, Cranjis_49, Antares_48, EarickHC_48, KaiHaiDragon_48, Phrancesco_48, Pulchra_49, Shotgun_47, Quhwah_51, Rockwell_47,

BrazzalePHS_47, PhedwardCullen_47, Paschalis_47, Savannah_47, Yeti_48, Jollipop_48, PiperSansNom_48
• Track 29 : Fireman_50, Tyrumbra_48
• Track 30 : Gina_50, Teamocil_50
• Track 31 : Zapato_47
• Track 32 : Glorp_49, Hermeonysus_47, Piperis_48, Scumberland_49, Phorgeous_47, LittleFortune_49
• Track 33 : Honeyfin_49
• Track 34 : Merry_, Sunny_
• Track 35 : RobsFeet_51
• Track 36 : Nicole72_46
• Track 37 : Ariadne_56, Smarties_56
• Track 38 : ClearAsMud_51
• Track 39 : Jayden_50
• Track 40 : NoodlelyBoi_49
• Track 41 : Crisis_49
• Track 42 : Onika_47
• Track 43 : SirFrank_48
• Track 44 : Megan_46
• Track 45 : Metamorphoo_50
• Track 46 : Shrubaron_50
• Track 47 : Skugga_47
• Track 48 : Cressida_47
• Track 49 : Margaery_43
• Track 50 : Matzah_46
• Track 51 : Kozie_45
• Track 52 : Terij_44
• Track 53 : MementoMori_45
• Track 54 : Cinna_44
• Track 55 : PhillyJawn_39, Appa_38
• Track 56 : Blett_38
• Track 57 : Losacky_39
• Track 58 : Warren_38
• Track 59 : Bush_39, NCRodriguez_39, Phingu_41
• Track 60 : CookieDog_38
• Track 61 : Violeta_40, MenE_39, Carrillo_40, Antuna_39
• Track 62 : Guzman_38, Jakelyne_40, Mariel_39
• Track 63 : Phonegingi_38
• Track 64 : Winchester007_40
• Track 65 : Dropshot_38
• Track 66 : Pickles13_37
• Track 67 : ScoobySnack_35

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

The start number called the most often in the published annotations is 18, it was called in 56 of the 129 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Abidatro_38, AdoptaAdorbs_39, AlexMinion_40, Amanises_40, Amelia_40, AmiCi24_39, Amphitrite_40, Andrew_41, Antrice_43, Atlantica_40, Azaz_40, Babushka_37, BadWillHunting_47, Basilisk_38, Bedetta_45, Bibble12_44, Brynnie_37, Camara_40, Chickaboom_39, Chicken_37, Colusalem_41, Coral_40, Cote_42, Cygnet_40, Damocles_44, DanHam62_40, Daob_42, Eesa_37, Fingolfin_40, Galaxy_37, Glotell_41, GramZayde_42, Gravel_47, HamCheese_40, HannahPhantana_41, Jamun_37, Jerole_41, Juno112_39, KHumphrey_40, KendraB23_48, Kepler_42, Kuleana_42, Laphuphu24k_38, Leona_39, LittleTokyo_40, Lunar_42, Melons_42, Niblet_37, Oppalora_39, Orcanus_38, OtsoOtso_41, Pelletreau_47, PhirstandPhine_42, PhluffyCoco_40, Pineda_42, Polka_40, Rattail_40, RedFox_40, Renna12_39, Ruchi_37, Shen_35, StuartMinion_32, TaylorSipht_38, Toad24_40, Vulpecula_37, Westrich_46, WileyE_39, Zhuangyuan_42, Zixiang_37,

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

Genes that do not have the "Most Annotated" start:
• Antares_48, Antuna_39, Appa_38, Ariadne_56, BeagleBug_47, Blett_38, BrazzalePHS_47, Busephilis_47, Bush_39, Carrillo_40, Cinna_44, ClearAsMud_51, CookieDog_38, Cranjis_49, CrazyRich_47, Cressida_47, Crisis_49, Dropshot_38, EarickHC_48, Fireman_50, Ganandorf_47, Germa_49, Gina_50, Glorp_49, Guzman_38, Hermeonysus_47, Honeyfin_49, Jakelyne_40, Jayden_50, Jefe_48, Jollipop_48, KaiHaiDragon_48, Kowalski_47, Kozie_45, LittleFortune_49, Losacky_39, Lucretia_48, Margaery_43, Mariel_39, Matzah_46, Megan_46, MementoMori_45, MenE_39, Merry_, Metamorphoo_50, NCRodriguez_39, Nicole72_46, NoodlelyBoi_49, Onika_47, Paschalis_47, PhedwardCullen_47, PhillyJawn_39, Phingu_41, Phonegingi_38, Phorgeous_47, Phrancesco_48, Pickles13_37, PierreOrion_48, PiperSansNom_48, Piperis_48, Pulchra_49, Quhwah_51, Ramiel05_47, RobsFeet_51, Rockwell_47, Savannah_47, ScoobySnack_35, Scumberland_49, Selwyn23_49, Shotgun_47, Shrubaron_50, SirFrank_48, Skugga_47, Smarties_56, Sunny_, Teamocil_50, Terij_44, Tyrumbra_48, Violeta_40, Warren_38, Winchester007_40, Yeti_48, Zapato_47,

Summary by start number:

Start 10:
• Found in 12 of 152 (7.9%) of genes in pham
• Manual Annotations of this start: 10 of 129
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fireman_50 (EC), Gina_50 (EC), Jayden_50 (EC), Merry_ (EC), Metamorphoo_50 (EC), RobsFeet_51 (EC), Shrubaron_50 (EC), Skugga_47 (EC), Sunny_ (EC), Teamocil_50 (EC), Tyrumbra_48 (EC), Zapato_47 (EC),

Start 11:
• Found in 50 of 152 (32.9%) of genes in pham
• Manual Annotations of this start: 46 of 129
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antares_48 (EC), Ariadne_56 (EC), BeagleBug_47 (EC), BrazzalePHS_47 (EC), Busephilis_47 (EC), Cinna_44 (EI), ClearAsMud_51 (EC), Cranjis_49 (EC), CrazyRich_47 (EC), Cressida_47 (EI), Crisis_49 (EC), EarickHC_48 (EC), Ganandorf_47 (EC), Germa_49 (EC), Glorp_49

(EC), Hermeonysus_47 (EC), Honeyfin_49 (EC), Jefe_48 (EC), Jollipop_48 (EC), KaiHaiDragon_48 (EC), Kowalski_47 (EC), Kozie_45 (EI), LittleFortune_49 (EC), Lucretia_48 (EC), Margaery_43 (EI), Matzah_46 (EI), Megan_46 (EC), MementoMori_45 (EI), Nicole72_46 (EC), NoodlelyBoi_49 (EC), Onika_47 (EC), Paschalis_47 (EC), PhedwardCullen_47 (EC), Phorgeous_47 (EC), Phrancesco_48 (EC), PierreOrion_48 (EC), PiperSansNom_48 (EC), Piperis_48 (EC), Pulchra_49 (EC), Quhwah_51 (EC), Ramiel05_47 (EC), Rockwell_47 (EC), Savannah_47 (EC), Scumberland_49 (EC), Selwyn23_49 (EC), Shotgun_47 (EC), SirFrank_48 (EC), Smarties_56 (EC), Terij_44 (EI), Yeti_48 (EC),

Start 13:
• Found in 21 of 152 (13.8%) of genes in pham
• Manual Annotations of this start: 17 of 129
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antuna_39 (GA), Appa_38 (GA), Blett_38 (GA), Bush_39 (GA), Carrillo_40 (GA), CookieDog_38 (GA), Dropshot_38 (GA), Guzman_38 (GA), Jakelyne_40 (GA), Losacky_39 (GA), Mariel_39 (GA), MenE_39 (GA), NCRodriguez_39 (GA), PhillyJawn_39 (GA), Phingu_41 (GA), Phonegingi_38 (GA), Pickles13_37 (GA), ScoobySnack_35 (GA), Violeta_40 (GA), Warren_38 (GA), Winchester007_40 (GA),

Start 18:
• Found in 69 of 152 (45.4%) of genes in pham
• Manual Annotations of this start: 56 of 129
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abidatro_38 (AS1), AdoptaAdorbs_39 (AS3), AlexMinion_40 (AS3), Amanises_40 (AS1), Amelia_40 (AS2), AmiCi24_39 (AS3), Amphitrite_40 (AS3), Andrew_41 (AS3), Antrice_43 (AS2), Atlantica_40 (AS3), Azaz_40 (AS3), Babushka_37 (AS3), BadWillHunting_47 (AS2), Basilisk_38 (AS1), Bedetta_45 (AS2), Bibble12_44 (AS2), Brynnie_37 (AS1), Camara_40 (AS3), Chickaboom_39 (AS1), Chicken_37 (AS1), Colusalem_41 (AS2), Coral_40 (AS2), Cote_42 (AS2), Cygnet_40 (AS2), Damocles_44 (AS2), DanHam62_40 (AS3), Daob_42 (AS2), Eesa_37 (AS1), Fingolfin_40 (AS3), Galaxy_37 (AS1), Glotell_41 (AS3), GramZayde_42 (AS2), Gravel_47 (AS1), HamCheese_40 (AS3), HannahPhantana_41 (AS2), Jamun_37 (AS1), Jerole_41 (AS2), Juno112_39 (AS3), KHumphrey_40 (AS3), KendraB23_48 (AS1), Kepler_42 (AS2), Kuleana_42 (AS2), Laphuphu24k_38 (AS3), Leona_39 (AS3), LittleTokyo_40 (AS2), Lunar_42 (AS2), Melons_42 (AS2), Niblet_37 (AS1), Oppalora_39 (AS3), Orcanus_38 (AS1), OtsoOtso_41 (AS2), Pelletreau_47 (AS1), PhirstandPhine_42 (AS2), PhluffyCoco_40 (AS3), Pineda_42 (AS2), Polka_40 (AS2), Rattail_40 (AS3), RedFox_40 (AS3), Renna12_39 (AS3), Ruchi_37 (AS1), Shen_35 (AS1), StuartMinion_32 (AS3), TaylorSipht_38 (AS1), Toad24_40 (AS1), Vulpecula_37 (AS1), Westrich_46 (AS1), WileyE_39 (AS1), Zhuangyuan_42 (AS2), Zixiang_37 (AS1),

Summary by clusters:

There are 6 clusters represented in this pham: AS3, AS2, AS1, EI, EC, GA,

Info for manual annotations of cluster AS1:
•Start number 18 was manually annotated 18 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 18 was manually annotated 19 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 18 was manually annotated 19 times for cluster AS3.

Info for manual annotations of cluster EC:
•Start number 10 was manually annotated 10 times for cluster EC.
•Start number 11 was manually annotated 39 times for cluster EC.

Info for manual annotations of cluster EI:
•Start number 11 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster GA:
•Start number 13 was manually annotated 17 times for cluster GA.

Gene Information:

Gene: Abidatro_38 Start: 25301, Stop: 26326, Start Num: 18
Candidate Starts for Abidatro_38:
(Start: 18 @25301 has 56 MA's), (20, 25316), (25, 25343), (34, 25460), (41, 25490), (53, 25586), (54, 25598), (59, 25640), (60, 25652), (62, 25664), (81, 25778), (97, 25865), (98, 25871), (103, 25919), (122, 26090), (127, 26138), (144, 26291),

Gene: AdoptaAdorbs_39 Start: 25001, Stop: 26014, Start Num: 18
Candidate Starts for AdoptaAdorbs_39:
(12, 24977), (Start: 18 @25001 has 56 MA's), (20, 25016), (43, 25205), (49, 25247), (50, 25253), (51, 25262), (59, 25334), (64, 25361), (75, 25442), (77, 25451), (81, 25472), (92, 25520), (111, 25691), (114, 25721), (118, 25748), (122, 25787), (127, 25835), (133, 25880),

Gene: AlexMinion_40 Start: 25167, Stop: 26180, Start Num: 18
Candidate Starts for AlexMinion_40:
(12, 25134), (Start: 18 @25167 has 56 MA's), (20, 25182), (23, 25200), (39, 25341), (43, 25371), (49, 25413), (50, 25419), (59, 25500), (64, 25527), (75, 25608), (77, 25617), (81, 25638), (92, 25686), (111, 25857), (114, 25887), (127, 26001), (133, 26046), (146, 26157),

Gene: Amanises_40 Start: 26357, Stop: 27385, Start Num: 18
Candidate Starts for Amanises_40:
(12, 26315), (Start: 18 @26357 has 56 MA's), (20, 26372), (36, 26522), (47, 26594), (59, 26696), (81, 26834), (86, 26858), (92, 26882), (96, 26915), (103, 26978), (106, 27005), (111, 27053), (127, 27197),

Gene: Amelia_40 Start: 25064, Stop: 26086, Start Num: 18
Candidate Starts for Amelia_40:
(Start: 18 @25064 has 56 MA's), (20, 25079), (25, 25106), (28, 25142), (36, 25229), (50, 25322), (59, 25403), (64, 25430), (71, 25475), (77, 25523), (81, 25544), (92, 25592), (103, 25688), (106, 25715), (127, 25907), (129, 25928), (133, 25952),

Gene: AmiCi24_39 Start: 24999, Stop: 26012, Start Num: 18
Candidate Starts for AmiCi24_39:
(12, 24975), (Start: 18 @24999 has 56 MA's), (20, 25014), (43, 25203), (49, 25245), (50, 25251), (51, 25260), (59, 25332), (64, 25359), (75, 25440), (77, 25449), (92, 25518), (111, 25689), (114, 25719), (118, 25746), (122, 25785), (127, 25833), (133, 25878),

Gene: Amphitrite_40 Start: 25000, Stop: 26013, Start Num: 18
Candidate Starts for Amphitrite_40:
(12, 24976), (Start: 18 @25000 has 56 MA's), (20, 25015), (43, 25204), (49, 25246), (50, 25252), (51, 25261), (59, 25333), (64, 25360), (75, 25441), (77, 25450), (81, 25471), (92, 25519), (111, 25690), (114, 25720), (118, 25747), (122, 25786), (127, 25834), (133, 25879),

Gene: Andrew_41 Start: 24893, Stop: 25906, Start Num: 18
Candidate Starts for Andrew_41:
(12, 24869), (Start: 18 @24893 has 56 MA's), (20, 24908), (43, 25097), (49, 25139), (50, 25145), (59, 25226), (64, 25253), (75, 25334), (77, 25343), (81, 25364), (86, 25388), (92, 25412), (114, 25613), (122, 25679), (127, 25727), (133, 25772), (146, 25883),

Gene: Antares_48 Start: 32715, Stop: 33788, Start Num: 11
Candidate Starts for Antares_48:
(Start: 11 @32715 has 46 MA's), (14, 32721), (33, 32889), (46, 32952), (66, 33087), (79, 33186), (84, 33207), (85, 33216), (87, 33225), (91, 33243), (104, 33348), (112, 33435), (115, 33462), (120, 33498), (121, 33504), (131, 33600), (132, 33609), (135, 33627), (149, 33741),

Gene: Antrice_43 Start: 26254, Stop: 27282, Start Num: 18
Candidate Starts for Antrice_43:
(8, 26218), (Start: 18 @26254 has 56 MA's), (20, 26269), (25, 26296), (34, 26419), (43, 26470), (50, 26518), (59, 26599), (60, 26611), (64, 26626), (69, 26653), (77, 26719), (88, 26773), (90, 26782), (92, 26788), (98, 26836), (107, 26929), (119, 27019), (127, 27103), (129, 27124), (133, 27148),

Gene: Antuna_39 Start: 23251, Stop: 24342, Start Num: 13
Candidate Starts for Antuna_39:
(6, 23131), (Start: 13 @23251 has 17 MA's), (42, 23473), (82, 23749), (83, 23755), (85, 23767), (87, 23776), (93, 23800), (100, 23860), (105, 23911), (111, 23971), (124, 24085), (128, 24130), (130, 24142), (134, 24166), (136, 24187),

Gene: Appa_38 Start: 23128, Stop: 24219, Start Num: 13
Candidate Starts for Appa_38:
(6, 23008), (Start: 13 @23128 has 17 MA's), (42, 23350), (78, 23611), (82, 23626), (83, 23632), (85, 23644), (87, 23653), (89, 23662), (93, 23677), (100, 23737), (105, 23788), (111, 23848), (124, 23962), (128, 24007), (130, 24019), (134, 24043), (136, 24064),

Gene: Ariadne_56 Start: 34302, Stop: 35345, Start Num: 11
Candidate Starts for Ariadne_56:
(Start: 11 @34302 has 46 MA's), (38, 34488), (48, 34560), (58, 34641), (63, 34668), (73, 34734), (84, 34791), (85, 34800), (86, 34806), (87, 34809), (104, 34932), (112, 35010), (132, 35175), (139, 35229), (142, 35274), (145, 35292),

Gene: Atlantica_40 Start: 25001, Stop: 26014, Start Num: 18
Candidate Starts for Atlantica_40:
(12, 24977), (Start: 18 @25001 has 56 MA's), (20, 25016), (43, 25205), (49, 25247), (50, 25253), (51, 25262), (59, 25334), (64, 25361), (75, 25442), (77, 25451), (81, 25472), (92, 25520), (111, 25691), (114, 25721), (118, 25748), (122, 25787), (127, 25835), (133, 25880),

Gene: Azaz_40 Start: 25073, Stop: 26086, Start Num: 18
Candidate Starts for Azaz_40:
(12, 25049), (Start: 18 @25073 has 56 MA's), (20, 25088), (23, 25106), (41, 25256), (43, 25277), (49, 25319), (59, 25406), (64, 25433), (75, 25514), (77, 25523), (81, 25544), (92, 25592), (111, 25763), (114, 25793), (118, 25820), (122, 25859), (127, 25907), (133, 25952),

Gene: Babushka_37 Start: 24932, Stop: 25945, Start Num: 18
Candidate Starts for Babushka_37:
(12, 24899), (Start: 18 @24932 has 56 MA's), (20, 24947), (39, 25106), (43, 25136), (49, 25178), (50, 25184), (51, 25193), (59, 25265), (64, 25292), (75, 25373), (77, 25382), (81, 25403), (111, 25622), (114, 25652), (127, 25766), (133, 25811), (142, 25904), (143, 25913),

Gene: BadWillHunting_47 Start: 25543, Stop: 26565, Start Num: 18
Candidate Starts for BadWillHunting_47:
(Start: 18 @25543 has 56 MA's), (20, 25558), (25, 25585), (28, 25621), (36, 25708), (50, 25801), (59, 25882), (64, 25909), (71, 25954), (77, 26002), (81, 26023), (92, 26071), (103, 26167), (106, 26194), (127, 26386), (129, 26407), (133, 26431),

Gene: Basilisk_38 Start: 25812, Stop: 26840, Start Num: 18
Candidate Starts for Basilisk_38:
(12, 25779), (Start: 18 @25812 has 56 MA's), (20, 25827), (36, 25977), (47, 26049), (50, 26070), (59, 26151), (62, 26175), (86, 26313), (92, 26337), (96, 26370), (110, 26505), (127, 26652),

Gene: BeagleBug_47 Start: 32496, Stop: 33569, Start Num: 11
Candidate Starts for BeagleBug_47:
(Start: 11 @32496 has 46 MA's), (14, 32502), (33, 32670), (46, 32733), (66, 32868), (79, 32967), (84, 32988), (85, 32997), (87, 33006), (91, 33024), (104, 33129), (112, 33216), (115, 33243), (120, 33279), (121, 33285), (131, 33381), (132, 33390), (135, 33408), (149, 33522),

Gene: Bedetta_45 Start: 25211, Stop: 26233, Start Num: 18
Candidate Starts for Bedetta_45:
(Start: 18 @25211 has 56 MA's), (20, 25226), (25, 25253), (28, 25289), (36, 25376), (50, 25469), (59, 25550), (64, 25577), (71, 25622), (77, 25670), (81, 25691), (92, 25739), (103, 25835), (106, 25862), (127, 26054), (129, 26075), (133, 26099),

Gene: Bibble12_44 Start: 25059, Stop: 26081, Start Num: 18
Candidate Starts for Bibble12_44:
(Start: 18 @25059 has 56 MA's), (20, 25074), (25, 25101), (28, 25137), (36, 25224), (50, 25317), (59, 25398), (64, 25425), (71, 25470), (77, 25518), (81, 25539), (92, 25587), (103, 25683), (106, 25710), (127, 25902), (129, 25923), (133, 25947),

Gene: Blett_38 Start: 23308, Stop: 24399, Start Num: 13
Candidate Starts for Blett_38:
(2, 23074), (6, 23188), (Start: 13 @23308 has 17 MA's), (42, 23530), (82, 23806), (83, 23812), (85, 23824), (87, 23833), (89, 23842), (93, 23857), (100, 23917), (105, 23968), (111, 24028), (124, 24142), (128, 24187), (130, 24199), (134, 24223), (136, 24244),

Gene: BrazzalePHS_47 Start: 32510, Stop: 33583, Start Num: 11
Candidate Starts for BrazzalePHS_47:
(Start: 11 @32510 has 46 MA's), (14, 32516), (33, 32684), (46, 32747), (66, 32882), (79, 32981), (84, 33002), (85, 33011), (87, 33020), (91, 33038), (104, 33143), (112, 33230), (115, 33257), (120, 33293), (121, 33299), (131, 33395), (132, 33404), (135, 33422), (149, 33536),

Gene: Brynnie_37 Start: 25690, Stop: 26718, Start Num: 18
Candidate Starts for Brynnie_37:
(12, 25657), (Start: 18 @25690 has 56 MA's), (20, 25705), (36, 25855), (47, 25927), (49, 25942), (50, 25948), (59, 26029), (62, 26053), (86, 26191), (96, 26248), (103, 26311), (110, 26383), (127, 26530),

Gene: Busephilis_47 Start: 32451, Stop: 33524, Start Num: 11
Candidate Starts for Busephilis_47:
(Start: 11 @32451 has 46 MA's), (14, 32457), (33, 32625), (46, 32688), (66, 32823), (79, 32922), (84, 32943), (85, 32952), (87, 32961), (91, 32979), (104, 33084), (112, 33171), (115, 33198), (120, 33234), (121, 33240), (131, 33336), (132, 33345), (135, 33363), (149, 33477),

Gene: Bush_39 Start: 23256, Stop: 24347, Start Num: 13
Candidate Starts for Bush_39:
(6, 23136), (Start: 13 @23256 has 17 MA's), (42, 23478), (82, 23754), (83, 23760), (85, 23772), (87, 23781), (89, 23790), (93, 23805), (100, 23865), (105, 23916), (111, 23976), (124, 24090), (128, 24135), (130, 24147), (134, 24171), (136, 24192),

Gene: Camara_40 Start: 25003, Stop: 26016, Start Num: 18
Candidate Starts for Camara_40:
(12, 24979), (Start: 18 @25003 has 56 MA's), (20, 25018), (43, 25207), (49, 25249), (50, 25255), (51, 25264), (59, 25336), (64, 25363), (75, 25444), (77, 25453), (81, 25474), (92, 25522), (111, 25693), (114, 25723), (118, 25750), (122, 25789), (127, 25837), (133, 25882),

Gene: Carrillo_40 Start: 23229, Stop: 24320, Start Num: 13
Candidate Starts for Carrillo_40:
(6, 23109), (Start: 13 @23229 has 17 MA's), (42, 23451), (82, 23727), (83, 23733), (85, 23745), (87, 23754), (93, 23778), (100, 23838), (105, 23889), (111, 23949), (124, 24063), (128, 24108), (130, 24120), (134, 24144), (136, 24165),

Gene: Chickaboom_39 Start: 25312, Stop: 26337, Start Num: 18
Candidate Starts for Chickaboom_39:
(12, 25279), (Start: 18 @25312 has 56 MA's), (20, 25327), (36, 25477), (41, 25501), (53, 25597), (54, 25609), (59, 25651), (60, 25663), (97, 25876), (103, 25930), (127, 26149), (144, 26302),

Gene: Chicken_37 Start: 25652, Stop: 26680, Start Num: 18
Candidate Starts for Chicken_37:
(12, 25619), (Start: 18 @25652 has 56 MA's), (20, 25667), (36, 25817), (47, 25889), (49, 25904), (50, 25910), (56, 25967), (59, 25991), (61, 26012), (81, 26129), (88, 26162), (96, 26210), (103, 26273), (106, 26300), (111, 26348), (127, 26492),

Gene: Cinna_44 Start: 32757, Stop: 33833, Start Num: 11
Candidate Starts for Cinna_44:
(Start: 11 @32757 has 46 MA's), (32, 32928), (37, 32958), (48, 33030), (55, 33093), (56, 33096), (68, 33168), (72, 33207), (83, 33264), (85, 33276), (87, 33285), (95, 33333), (101, 33381), (105, 33420), (112, 33495), (113, 33507), (116, 33531), (121, 33567), (126, 33618), (128, 33639), (137, 33699), (138, 33702), (139, 33717), (140, 33741), (147, 33783), (152, 33810),

Gene: ClearAsMud_51 Start: 32933, Stop: 33994, Start Num: 11
Candidate Starts for ClearAsMud_51:
(Start: 11 @32933 has 46 MA's), (33, 33098), (66, 33296), (70, 33323), (79, 33395), (84, 33416), (85, 33425), (86, 33431), (87, 33434), (91, 33452), (104, 33557), (109, 33626), (111, 33635), (120, 33707), (121, 33713), (131, 33806), (132, 33815), (149, 33947),

Gene: Colusalem_41 Start: 25041, Stop: 26063, Start Num: 18
Candidate Starts for Colusalem_41:
(Start: 18 @25041 has 56 MA's), (20, 25056), (25, 25083), (28, 25119), (36, 25206), (50, 25299), (59, 25380), (64, 25407), (71, 25452), (77, 25500), (81, 25521), (92, 25569), (103, 25665), (106, 25692), (127, 25884), (129, 25905), (133, 25929),

Gene: CookieDog_38 Start: 23229, Stop: 24320, Start Num: 13
Candidate Starts for CookieDog_38:
(Start: 13 @23229 has 17 MA's), (42, 23451), (82, 23727), (83, 23733), (85, 23745), (87, 23754), (93, 23778), (100, 23838), (105, 23889), (111, 23949), (124, 24063), (128, 24108), (130, 24120), (134, 24144), (136, 24165),

Gene: Coral_40 Start: 24912, Stop: 25934, Start Num: 18
Candidate Starts for Coral_40:
(Start: 18 @24912 has 56 MA's), (20, 24927), (25, 24954), (28, 24990), (36, 25077), (50, 25170), (59, 25251), (64, 25278), (71, 25323), (77, 25371), (81, 25392), (92, 25440), (103, 25536), (106, 25563), (127, 25755), (129, 25776), (133, 25800),

Gene: Cote_42 Start: 25389, Stop: 26411, Start Num: 18
Candidate Starts for Cote_42:
(Start: 18 @25389 has 56 MA's), (20, 25404), (25, 25431), (28, 25467), (36, 25554), (50, 25647), (59, 25728), (64, 25755), (71, 25800), (77, 25848), (81, 25869), (92, 25917), (103, 26013), (106, 26040), (127, 26232), (129, 26253), (133, 26277),

Gene: Cranjis_49 Start: 32670, Stop: 33743, Start Num: 11
Candidate Starts for Cranjis_49:
(Start: 11 @32670 has 46 MA's), (14, 32676), (33, 32844), (46, 32907), (66, 33042), (79, 33141), (84, 33162), (85, 33171), (87, 33180), (91, 33198), (104, 33303), (112, 33390), (115, 33417), (120, 33453), (121, 33459), (131, 33555), (132, 33564), (135, 33582), (149, 33696),

Gene: CrazyRich_47 Start: 32479, Stop: 33552, Start Num: 11
Candidate Starts for CrazyRich_47:
(Start: 11 @32479 has 46 MA's), (14, 32485), (33, 32653), (46, 32716), (66, 32851), (79, 32950), (84, 32971), (85, 32980), (87, 32989), (91, 33007), (104, 33112), (112, 33199), (115, 33226), (120, 33262), (121, 33268), (131, 33364), (132, 33373), (135, 33391), (149, 33505),

Gene: Cressida_47 Start: 32382, Stop: 33458, Start Num: 11
Candidate Starts for Cressida_47:
(1, 32100), (3, 32175), (Start: 11 @32382 has 46 MA's), (27, 32502), (32, 32553), (55, 32718), (56, 32721), (68, 32793), (72, 32832), (83, 32889), (85, 32901), (86, 32907), (87, 32910), (95, 32958), (101, 33006), (111, 33111), (112, 33120), (113, 33132), (116, 33156), (117, 33165), (121, 33192), (126, 33243), (128, 33264), (138, 33327), (139, 33342), (140, 33366), (147, 33408), (152, 33435),

Gene: Crisis_49 Start: 32470, Stop: 33543, Start Num: 11
Candidate Starts for Crisis_49:
(Start: 11 @32470 has 46 MA's), (14, 32476), (31, 32617), (33, 32644), (46, 32707), (66, 32842), (79, 32941), (84, 32962), (85, 32971), (87, 32980), (91, 32998), (104, 33103), (112, 33190), (115, 33217), (120, 33253), (131, 33355), (132, 33364), (135, 33382), (149, 33496),

Gene: Cygnet_40 Start: 25852, Stop: 26877, Start Num: 18
Candidate Starts for Cygnet_40:
(Start: 18 @25852 has 56 MA's), (20, 25864), (34, 26014), (43, 26065), (59, 26194), (60, 26206), (64, 26221), (88, 26368), (90, 26377), (92, 26383), (98, 26431), (107, 26524), (119, 26614), (127, 26698), (129, 26719), (133, 26743),

Gene: Damocles_44 Start: 25200, Stop: 26222, Start Num: 18
Candidate Starts for Damocles_44:

(Start: 18 @25200 has 56 MA's), (20, 25215), (25, 25242), (28, 25278), (36, 25365), (50, 25458), (59, 25539), (64, 25566), (71, 25611), (77, 25659), (81, 25680), (92, 25728), (103, 25824), (106, 25851), (127, 26043), (129, 26064), (133, 26088),

Gene: DanHam62_40 Start: 25000, Stop: 26013, Start Num: 18
Candidate Starts for DanHam62_40:
(12, 24976), (Start: 18 @25000 has 56 MA's), (20, 25015), (43, 25204), (49, 25246), (50, 25252), (51, 25261), (59, 25333), (64, 25360), (75, 25441), (77, 25450), (92, 25519), (111, 25690), (114, 25720), (118, 25747), (122, 25786), (127, 25834), (133, 25879),

Gene: Daob_42 Start: 25397, Stop: 26419, Start Num: 18
Candidate Starts for Daob_42:
(Start: 18 @25397 has 56 MA's), (20, 25412), (25, 25439), (28, 25475), (36, 25562), (50, 25655), (59, 25736), (64, 25763), (71, 25808), (77, 25856), (81, 25877), (92, 25925), (103, 26021), (106, 26048), (127, 26240), (129, 26261), (133, 26285),

Gene: Dropshot_38 Start: 22963, Stop: 24054, Start Num: 13
Candidate Starts for Dropshot_38:
(6, 22843), (Start: 13 @22963 has 17 MA's), (42, 23185), (82, 23461), (83, 23467), (85, 23479), (87, 23488), (93, 23512), (100, 23572), (105, 23623), (111, 23683), (124, 23797), (128, 23842), (130, 23854), (134, 23878), (136, 23899),

Gene: EarickHC_48 Start: 32393, Stop: 33466, Start Num: 11
Candidate Starts for EarickHC_48:
(Start: 11 @32393 has 46 MA's), (14, 32399), (33, 32567), (46, 32630), (66, 32765), (79, 32864), (84, 32885), (85, 32894), (87, 32903), (91, 32921), (104, 33026), (112, 33113), (115, 33140), (120, 33176), (121, 33182), (131, 33278), (132, 33287), (135, 33305), (149, 33419),

Gene: Eesa_37 Start: 26191, Stop: 27219, Start Num: 18
Candidate Starts for Eesa_37:
(12, 26149), (Start: 18 @26191 has 56 MA's), (20, 26206), (36, 26356), (47, 26428), (59, 26530), (81, 26668), (86, 26692), (92, 26716), (96, 26749), (103, 26812), (106, 26839), (111, 26887), (127, 27031),

Gene: Fingolfin_40 Start: 25003, Stop: 26016, Start Num: 18
Candidate Starts for Fingolfin_40:
(12, 24979), (Start: 18 @25003 has 56 MA's), (20, 25018), (43, 25207), (49, 25249), (50, 25255), (51, 25264), (59, 25336), (64, 25363), (75, 25444), (77, 25453), (81, 25474), (92, 25522), (111, 25693), (114, 25723), (118, 25750), (122, 25789), (127, 25837), (133, 25882),

Gene: Fireman_50 Start: 34343, Stop: 35389, Start Num: 10
Candidate Starts for Fireman_50:
(5, 34184), (Start: 10 @34343 has 10 MA's), (84, 34835), (85, 34844), (86, 34850), (87, 34853), (104, 34976), (105, 34991), (112, 35054), (132, 35219), (139, 35273), (142, 35318), (151, 35366),

Gene: Galaxy_37 Start: 25067, Stop: 26092, Start Num: 18
Candidate Starts for Galaxy_37:
(Start: 18 @25067 has 56 MA's), (20, 25082), (25, 25109), (34, 25226), (41, 25256), (53, 25352), (54, 25364), (59, 25406), (60, 25418), (62, 25430), (81, 25544), (97, 25631), (103, 25685), (106, 25712), (127, 25904),

Gene: Ganandorf_47 Start: 32532, Stop: 33605, Start Num: 11
Candidate Starts for Ganandorf_47:

(Start: 11 @32532 has 46 MA's), (14, 32538), (33, 32706), (46, 32769), (66, 32904), (79, 33003), (84, 33024), (85, 33033), (87, 33042), (91, 33060), (104, 33165), (112, 33252), (115, 33279), (120, 33315), (121, 33321), (131, 33417), (132, 33426), (135, 33444), (149, 33558),

Gene: Germa_49 Start: 32361, Stop: 33434, Start Num: 11
Candidate Starts for Germa_49:
(Start: 11 @32361 has 46 MA's), (14, 32367), (33, 32535), (46, 32598), (66, 32733), (79, 32832), (84, 32853), (85, 32862), (87, 32871), (91, 32889), (104, 32994), (112, 33081), (115, 33108), (120, 33144), (121, 33150), (131, 33246), (132, 33255), (135, 33273), (149, 33387),

Gene: Gina_50 Start: 32486, Stop: 33529, Start Num: 10
Candidate Starts for Gina_50:
(Start: 10 @32486 has 10 MA's), (31, 32639), (48, 32747), (58, 32828), (73, 32921), (84, 32978), (85, 32987), (87, 32996), (104, 33119), (105, 33134), (112, 33197), (120, 33260), (123, 33284), (138, 33398), (139, 33413),

Gene: Glorp_49 Start: 32533, Stop: 33606, Start Num: 11
Candidate Starts for Glorp_49:
(Start: 11 @32533 has 46 MA's), (14, 32539), (33, 32707), (46, 32770), (66, 32905), (79, 33004), (84, 33025), (85, 33034), (87, 33043), (91, 33061), (104, 33166), (112, 33253), (115, 33280), (120, 33316), (131, 33418), (132, 33427), (135, 33445), (149, 33559),

Gene: Glotell_41 Start: 25159, Stop: 26172, Start Num: 18
Candidate Starts for Glotell_41:
(12, 25135), (Start: 18 @25159 has 56 MA's), (20, 25174), (43, 25363), (49, 25405), (50, 25411), (51, 25420), (59, 25492), (64, 25519), (75, 25600), (77, 25609), (81, 25630), (92, 25678), (111, 25849), (114, 25879), (118, 25906), (122, 25945), (127, 25993), (133, 26038),

Gene: GramZayde_42 Start: 25225, Stop: 26247, Start Num: 18
Candidate Starts for GramZayde_42:
(Start: 18 @25225 has 56 MA's), (20, 25240), (25, 25267), (28, 25303), (36, 25390), (50, 25483), (59, 25564), (64, 25591), (71, 25636), (77, 25684), (81, 25705), (92, 25753), (103, 25849), (106, 25876), (127, 26068), (129, 26089), (133, 26113),

Gene: Gravel_47 Start: 26164, Stop: 27192, Start Num: 18
Candidate Starts for Gravel_47:
(Start: 18 @26164 has 56 MA's), (20, 26179), (36, 26329), (47, 26401), (59, 26503), (81, 26641), (86, 26665), (92, 26689), (96, 26722), (103, 26785), (106, 26812), (111, 26860), (127, 27004),

Gene: Guzman_38 Start: 23227, Stop: 24318, Start Num: 13
Candidate Starts for Guzman_38:
(6, 23107), (Start: 13 @23227 has 17 MA's), (42, 23449), (82, 23725), (83, 23731), (85, 23743), (87, 23752), (89, 23761), (93, 23776), (100, 23836), (105, 23887), (111, 23947), (124, 24061), (128, 24106), (130, 24118), (134, 24142), (136, 24163),

Gene: HamCheese_40 Start: 24987, Stop: 26000, Start Num: 18
Candidate Starts for HamCheese_40:
(12, 24963), (Start: 18 @24987 has 56 MA's), (20, 25002), (43, 25191), (49, 25233), (50, 25239), (51, 25248), (59, 25320), (64, 25347), (75, 25428), (77, 25437), (81, 25458), (92, 25506), (111, 25677), (114, 25707), (118, 25734), (122, 25773), (127, 25821), (133, 25866),

Gene: HannahPhantana_41 Start: 25059, Stop: 26081, Start Num: 18
Candidate Starts for HannahPhantana_41:

(Start: 18 @25059 has 56 MA's), (20, 25074), (25, 25101), (28, 25137), (36, 25224), (50, 25317), (59, 25398), (64, 25425), (71, 25470), (77, 25518), (81, 25539), (92, 25587), (103, 25683), (106, 25710), (127, 25902), (129, 25923), (133, 25947),

Gene: Hermeonysus_47 Start: 32399, Stop: 33472, Start Num: 11
Candidate Starts for Hermeonysus_47:
(Start: 11 @32399 has 46 MA's), (14, 32405), (33, 32573), (46, 32636), (66, 32771), (79, 32870), (84, 32891), (85, 32900), (87, 32909), (91, 32927), (104, 33032), (112, 33119), (115, 33146), (120, 33182), (131, 33284), (132, 33293), (135, 33311), (149, 33425),

Gene: Honeyfin_49 Start: 32720, Stop: 33793, Start Num: 11
Candidate Starts for Honeyfin_49:
(Start: 11 @32720 has 46 MA's), (14, 32726), (33, 32894), (46, 32957), (66, 33092), (70, 33119), (79, 33191), (84, 33212), (85, 33221), (86, 33227), (87, 33230), (91, 33248), (104, 33353), (109, 33422), (112, 33440), (115, 33467), (120, 33503), (121, 33509), (131, 33605), (135, 33632), (149, 33746),

Gene: Jakelyne_40 Start: 23368, Stop: 24459, Start Num: 13
Candidate Starts for Jakelyne_40:
(6, 23248), (Start: 13 @23368 has 17 MA's), (42, 23590), (82, 23866), (83, 23872), (85, 23884), (87, 23893), (89, 23902), (93, 23917), (100, 23977), (105, 24028), (111, 24088), (124, 24202), (128, 24247), (130, 24259), (134, 24283), (136, 24304),

Gene: Jamun_37 Start: 25352, Stop: 26377, Start Num: 18
Candidate Starts for Jamun_37:
(12, 25319), (Start: 18 @25352 has 56 MA's), (20, 25367), (36, 25517), (41, 25541), (53, 25637), (54, 25649), (59, 25691), (60, 25703), (61, 25712), (97, 25916), (103, 25970), (127, 26189), (144, 26342),

Gene: Jayden_50 Start: 33182, Stop: 34231, Start Num: 10
Candidate Starts for Jayden_50:
(Start: 10 @33182 has 10 MA's), (38, 33368), (73, 33614), (84, 33671), (85, 33680), (86, 33686), (87, 33689), (104, 33812), (105, 33827), (112, 33890), (123, 33977), (138, 34091), (139, 34106),

Gene: Jefe_48 Start: 32457, Stop: 33530, Start Num: 11
Candidate Starts for Jefe_48:
(Start: 11 @32457 has 46 MA's), (14, 32463), (33, 32631), (46, 32694), (66, 32829), (79, 32928), (84, 32949), (85, 32958), (87, 32967), (91, 32985), (104, 33090), (112, 33177), (115, 33204), (120, 33240), (121, 33246), (131, 33342), (132, 33351), (135, 33369), (149, 33483),

Gene: Jerole_41 Start: 25183, Stop: 26205, Start Num: 18
Candidate Starts for Jerole_41:
(Start: 18 @25183 has 56 MA's), (20, 25198), (25, 25225), (28, 25261), (36, 25348), (50, 25441), (59, 25522), (64, 25549), (71, 25594), (77, 25642), (81, 25663), (92, 25711), (103, 25807), (106, 25834), (127, 26026), (129, 26047), (133, 26071),

Gene: Jollipop_48 Start: 32796, Stop: 33869, Start Num: 11
Candidate Starts for Jollipop_48:
(Start: 11 @32796 has 46 MA's), (14, 32802), (33, 32970), (46, 33033), (66, 33168), (79, 33267), (84, 33288), (85, 33297), (87, 33306), (91, 33324), (104, 33429), (112, 33516), (115, 33543), (120, 33579), (121, 33585), (131, 33681), (132, 33690), (135, 33708), (149, 33822),

Gene: Juno112_39 Start: 25003, Stop: 26016, Start Num: 18
Candidate Starts for Juno112_39:

(12, 24979), (Start: 18 @25003 has 56 MA's), (20, 25018), (43, 25207), (49, 25249), (50, 25255), (51, 25264), (59, 25336), (64, 25363), (75, 25444), (77, 25453), (81, 25474), (92, 25522), (111, 25693), (114, 25723), (118, 25750), (122, 25789), (127, 25837), (133, 25882),

Gene: KHumphrey_40 Start: 25002, Stop: 26015, Start Num: 18
Candidate Starts for KHumphrey_40:
(12, 24978), (Start: 18 @25002 has 56 MA's), (20, 25017), (43, 25206), (49, 25248), (50, 25254), (51, 25263), (59, 25335), (64, 25362), (75, 25443), (77, 25452), (81, 25473), (92, 25521), (111, 25692), (114, 25722), (118, 25749), (122, 25788), (127, 25836), (133, 25881),

Gene: KaiHaiDragon_48 Start: 32393, Stop: 33466, Start Num: 11
Candidate Starts for KaiHaiDragon_48:
(Start: 11 @32393 has 46 MA's), (14, 32399), (33, 32567), (46, 32630), (66, 32765), (79, 32864), (84, 32885), (85, 32894), (87, 32903), (91, 32921), (104, 33026), (112, 33113), (115, 33140), (120, 33176), (121, 33182), (131, 33278), (132, 33287), (135, 33305), (149, 33419),

Gene: KendraB23_48 Start: 26357, Stop: 27385, Start Num: 18
Candidate Starts for KendraB23_48:
(12, 26315), (Start: 18 @26357 has 56 MA's), (20, 26372), (36, 26522), (47, 26594), (59, 26696), (81, 26834), (86, 26858), (92, 26882), (96, 26915), (103, 26978), (106, 27005), (111, 27053), (127, 27197),

Gene: Kepler_42 Start: 25807, Stop: 26829, Start Num: 18
Candidate Starts for Kepler_42:
(Start: 18 @25807 has 56 MA's), (20, 25822), (25, 25849), (28, 25885), (36, 25972), (50, 26065), (59, 26146), (64, 26173), (71, 26218), (77, 26266), (81, 26287), (92, 26335), (103, 26431), (106, 26458), (118, 26563), (127, 26650), (129, 26671), (133, 26695),

Gene: Kowalski_47 Start: 32506, Stop: 33579, Start Num: 11
Candidate Starts for Kowalski_47:
(Start: 11 @32506 has 46 MA's), (14, 32512), (33, 32680), (46, 32743), (66, 32878), (79, 32977), (84, 32998), (85, 33007), (87, 33016), (91, 33034), (104, 33139), (112, 33226), (115, 33253), (120, 33289), (121, 33295), (131, 33391), (132, 33400), (135, 33418), (149, 33532),

Gene: Kozie_45 Start: 32730, Stop: 33875, Start Num: 11
Candidate Starts for Kozie_45:
(Start: 11 @32730 has 46 MA's), (37, 32928), (52, 33030), (55, 33063), (56, 33066), (65, 33117), (68, 33138), (76, 33204), (85, 33246), (86, 33252), (87, 33255), (102, 33360), (116, 33501), (128, 33609), (134, 33642), (138, 33672), (148, 33774), (153, 33849),

Gene: Kuleana_42 Start: 25383, Stop: 26405, Start Num: 18
Candidate Starts for Kuleana_42:
(Start: 18 @25383 has 56 MA's), (20, 25398), (25, 25425), (49, 25635), (50, 25641), (51, 25650), (59, 25722), (64, 25749), (69, 25776), (71, 25794), (81, 25863), (86, 25887), (92, 25911), (103, 26007), (106, 26034), (108, 26073), (127, 26226), (129, 26247), (133, 26271),

Gene: Laphuphu24k_38 Start: 24987, Stop: 26000, Start Num: 18
Candidate Starts for Laphuphu24k_38:
(12, 24963), (Start: 18 @24987 has 56 MA's), (20, 25002), (43, 25191), (49, 25233), (50, 25239), (51, 25248), (59, 25320), (64, 25347), (75, 25428), (77, 25437), (81, 25458), (92, 25506), (111, 25677), (114, 25707), (118, 25734), (122, 25773), (127, 25821), (133, 25866),

Gene: Leona_39 Start: 25074, Stop: 26087, Start Num: 18
Candidate Starts for Leona_39:

(12, 25050), (Start: 18 @25074 has 56 MA's), (20, 25089), (23, 25107), (41, 25257), (43, 25278), (49, 25320), (59, 25407), (64, 25434), (75, 25515), (77, 25524), (81, 25545), (92, 25593), (111, 25764), (114, 25794), (118, 25821), (122, 25860), (127, 25908), (133, 25953),

Gene: LittleFortune_49 Start: 32762, Stop: 33835, Start Num: 11
Candidate Starts for LittleFortune_49:
(Start: 11 @32762 has 46 MA's), (14, 32768), (33, 32936), (46, 32999), (66, 33134), (79, 33233), (84, 33254), (85, 33263), (87, 33272), (91, 33290), (104, 33395), (112, 33482), (115, 33509), (120, 33545), (131, 33647), (132, 33656), (135, 33674), (149, 33788),

Gene: LittleTokyo_40 Start: 24933, Stop: 25961, Start Num: 18
Candidate Starts for LittleTokyo_40:
(Start: 18 @24933 has 56 MA's), (20, 24948), (41, 25128), (43, 25149), (50, 25197), (59, 25278), (60, 25290), (64, 25305), (88, 25452), (90, 25461), (92, 25467), (98, 25515), (107, 25608), (127, 25782), (129, 25803), (133, 25827), (138, 25857),

Gene: Losacky_39 Start: 23393, Stop: 24484, Start Num: 13
Candidate Starts for Losacky_39:
(Start: 13 @23393 has 17 MA's), (42, 23615), (82, 23891), (83, 23897), (85, 23909), (87, 23918), (89, 23927), (93, 23942), (100, 24002), (105, 24053), (111, 24113), (124, 24227), (128, 24272), (130, 24284), (134, 24308), (136, 24329),

Gene: Lucretia_48 Start: 32449, Stop: 33522, Start Num: 11
Candidate Starts for Lucretia_48:
(Start: 11 @32449 has 46 MA's), (14, 32455), (33, 32623), (46, 32686), (66, 32821), (79, 32920), (84, 32941), (85, 32950), (87, 32959), (91, 32977), (104, 33082), (112, 33169), (115, 33196), (120, 33232), (121, 33238), (131, 33334), (132, 33343), (135, 33361), (149, 33475),

Gene: Lunar_42 Start: 25723, Stop: 26745, Start Num: 18
Candidate Starts for Lunar_42:
(Start: 18 @25723 has 56 MA's), (20, 25738), (25, 25765), (28, 25801), (36, 25888), (50, 25981), (59, 26062), (64, 26089), (71, 26134), (77, 26182), (81, 26203), (92, 26251), (103, 26347), (106, 26374), (127, 26566), (129, 26587), (133, 26611),

Gene: Margaery_43 Start: 32008, Stop: 33084, Start Num: 11
Candidate Starts for Margaery_43:
(Start: 11 @32008 has 46 MA's), (37, 32209), (45, 32260), (55, 32344), (56, 32347), (68, 32419), (83, 32515), (85, 32527), (86, 32533), (87, 32536), (93, 32560), (95, 32584), (101, 32632), (113, 32758), (116, 32782), (121, 32818), (126, 32869), (128, 32890), (138, 32953), (139, 32968), (140, 32992), (147, 33034),

Gene: Mariel_39 Start: 23697, Stop: 24788, Start Num: 13
Candidate Starts for Mariel_39:
(6, 23577), (Start: 13 @23697 has 17 MA's), (42, 23919), (82, 24195), (83, 24201), (85, 24213), (87, 24222), (89, 24231), (93, 24246), (100, 24306), (105, 24357), (111, 24417), (124, 24531), (128, 24576), (130, 24588), (134, 24612), (136, 24633),

Gene: Matzah_46 Start: 32852, Stop: 33928, Start Num: 11
Candidate Starts for Matzah_46:
(1, 32570), (3, 32645), (Start: 11 @32852 has 46 MA's), (26, 32957), (32, 33023), (37, 33053), (48, 33125), (55, 33188), (56, 33191), (68, 33263), (72, 33302), (85, 33371), (86, 33377), (87, 33380), (101, 33476), (112, 33590), (113, 33602), (116, 33626), (121, 33662), (126, 33713), (128, 33734), (138, 33797), (139, 33812), (140, 33836), (147, 33878), (152, 33905),

Gene: Megan_46 Start: 35850, Stop: 36962, Start Num: 11
Candidate Starts for Megan_46:
(Start: 11 @35850 has 46 MA's), (16, 35883), (24, 35934), (29, 35985), (30, 36009), (32, 36021), (35, 36057), (42, 36105), (55, 36216), (72, 36330), (83, 36387), (85, 36399), (86, 36405), (87, 36408), (91, 36426), (93, 36432), (94, 36441), (99, 36480), (105, 36543), (113, 36627), (123, 36705), (124, 36723), (127, 36750), (129, 36765), (137, 36819), (139, 36837), (140, 36861), (150, 36924),

Gene: Melons_42 Start: 25537, Stop: 26559, Start Num: 18
Candidate Starts for Melons_42:
(Start: 18 @25537 has 56 MA's), (20, 25552), (25, 25579), (28, 25615), (36, 25702), (50, 25795), (59, 25876), (64, 25903), (71, 25948), (77, 25996), (81, 26017), (92, 26065), (103, 26161), (106, 26188), (127, 26380), (129, 26401), (133, 26425),

Gene: MementoMori_45 Start: 32445, Stop: 33521, Start Num: 11
Candidate Starts for MementoMori_45:
(Start: 11 @32445 has 46 MA's), (26, 32550), (32, 32616), (37, 32646), (48, 32718), (55, 32781), (56, 32784), (68, 32856), (72, 32895), (83, 32952), (85, 32964), (86, 32970), (87, 32973), (95, 33021), (101, 33069), (105, 33108), (112, 33183), (113, 33195), (116, 33219), (121, 33255), (126, 33306), (128, 33327), (138, 33390), (139, 33405), (140, 33429), (147, 33471), (152, 33498),

Gene: MenE_39 Start: 23273, Stop: 24364, Start Num: 13
Candidate Starts for MenE_39:
(6, 23153), (Start: 13 @23273 has 17 MA's), (42, 23495), (82, 23771), (83, 23777), (85, 23789), (87, 23798), (93, 23822), (100, 23882), (105, 23933), (111, 23993), (124, 24107), (128, 24152), (130, 24164), (134, 24188), (136, 24209),

Gene: Merry_ Start: 34028, Stop: 35068, Start Num: 10
Candidate Starts for Merry_:
(Start: 10 @34028 has 10 MA's), (48, 34286), (58, 34367), (63, 34394), (66, 34400), (72, 34457), (80, 34505), (85, 34526), (86, 34532), (87, 34535), (104, 34658), (105, 34673), (112, 34736), (120, 34799), (132, 34898), (140, 34976), (141, 34985), (142, 34997), (144, 35012), (146, 35018),

Gene: Metamorphoo_50 Start: 33605, Stop: 34651, Start Num: 10
Candidate Starts for Metamorphoo_50:
(5, 33446), (Start: 10 @33605 has 10 MA's), (84, 34097), (85, 34106), (86, 34112), (87, 34115), (104, 34238), (112, 34316), (125, 34424), (132, 34481), (139, 34535), (142, 34580), (151, 34628),

Gene: NCRodriguez_39 Start: 23450, Stop: 24541, Start Num: 13
Candidate Starts for NCRodriguez_39:
(6, 23330), (Start: 13 @23450 has 17 MA's), (42, 23672), (82, 23948), (83, 23954), (85, 23966), (87, 23975), (89, 23984), (93, 23999), (100, 24059), (105, 24110), (111, 24170), (124, 24284), (128, 24329), (130, 24341), (134, 24365), (136, 24386),

Gene: Niblet_37 Start: 25739, Stop: 26767, Start Num: 18
Candidate Starts for Niblet_37:
(12, 25706), (Start: 18 @25739 has 56 MA's), (20, 25754), (36, 25904), (47, 25976), (49, 25991), (50, 25997), (56, 26054), (59, 26078), (61, 26099), (81, 26216), (88, 26249), (96, 26297), (103, 26360), (106, 26387), (111, 26435), (127, 26579),

Gene: Nicole72_46 Start: 36271, Stop: 37380, Start Num: 11
Candidate Starts for Nicole72_46:

(4, 36070), (Start: 11 @36271 has 46 MA's), (15, 36295), (16, 36301), (24, 36352), (26, 36373), (29, 36403), (30, 36427), (32, 36439), (42, 36523), (55, 36634), (57, 36640), (72, 36748), (74, 36760), (83, 36805), (85, 36817), (87, 36826), (94, 36859), (105, 36961), (113, 37045), (123, 37123), (124, 37141), (127, 37168), (139, 37255), (140, 37279), (150, 37342),

Gene: NoodlelyBoi_49 Start: 33145, Stop: 34206, Start Num: 11
Candidate Starts for NoodlelyBoi_49:
(Start: 11 @33145 has 46 MA's), (33, 33310), (42, 33343), (66, 33508), (70, 33535), (79, 33607), (84, 33628), (85, 33637), (86, 33643), (87, 33646), (91, 33664), (104, 33769), (109, 33838), (111, 33847), (120, 33919), (121, 33925), (131, 34018), (132, 34027), (149, 34159),

Gene: Onika_47 Start: 32481, Stop: 33554, Start Num: 11
Candidate Starts for Onika_47:
(Start: 11 @32481 has 46 MA's), (14, 32487), (33, 32655), (46, 32718), (66, 32853), (79, 32952), (84, 32973), (85, 32982), (87, 32991), (91, 33009), (104, 33114), (115, 33228), (120, 33264), (121, 33270), (131, 33366), (132, 33375), (135, 33393), (149, 33507),

Gene: Oppalora_39 Start: 25001, Stop: 26014, Start Num: 18
Candidate Starts for Oppalora_39:
(12, 24977), (Start: 18 @25001 has 56 MA's), (20, 25016), (43, 25205), (49, 25247), (50, 25253), (51, 25262), (59, 25334), (64, 25361), (75, 25442), (77, 25451), (81, 25472), (92, 25520), (111, 25691), (114, 25721), (118, 25748), (122, 25787), (127, 25835), (133, 25880),

Gene: Orcanus_38 Start: 25714, Stop: 26742, Start Num: 18
Candidate Starts for Orcanus_38:
(Start: 18 @25714 has 56 MA's), (20, 25729), (36, 25879), (47, 25951), (59, 26053), (61, 26074), (81, 26191), (86, 26215), (92, 26239), (96, 26272), (103, 26335), (106, 26362), (111, 26410), (127, 26554),

Gene: OtsoOtso_41 Start: 24913, Stop: 25935, Start Num: 18
Candidate Starts for OtsoOtso_41:
(Start: 18 @24913 has 56 MA's), (20, 24928), (25, 24955), (28, 24991), (36, 25078), (50, 25171), (59, 25252), (64, 25279), (71, 25324), (77, 25372), (81, 25393), (92, 25441), (103, 25537), (106, 25564), (127, 25756), (129, 25777), (133, 25801),

Gene: Paschalis_47 Start: 32488, Stop: 33561, Start Num: 11
Candidate Starts for Paschalis_47:
(Start: 11 @32488 has 46 MA's), (14, 32494), (33, 32662), (46, 32725), (66, 32860), (79, 32959), (84, 32980), (85, 32989), (87, 32998), (91, 33016), (104, 33121), (112, 33208), (115, 33235), (120, 33271), (121, 33277), (131, 33373), (132, 33382), (135, 33400), (149, 33514),

Gene: Pelletreau_47 Start: 26164, Stop: 27192, Start Num: 18
Candidate Starts for Pelletreau_47:
(Start: 18 @26164 has 56 MA's), (20, 26179), (36, 26329), (47, 26401), (59, 26503), (81, 26641), (86, 26665), (92, 26689), (96, 26722), (103, 26785), (106, 26812), (111, 26860), (127, 27004),

Gene: PhedwardCullen_47 Start: 32239, Stop: 33312, Start Num: 11
Candidate Starts for PhedwardCullen_47:
(Start: 11 @32239 has 46 MA's), (14, 32245), (33, 32413), (46, 32476), (66, 32611), (79, 32710), (84, 32731), (85, 32740), (87, 32749), (91, 32767), (104, 32872), (112, 32959), (115, 32986), (120, 33022), (121, 33028), (131, 33124), (132, 33133), (135, 33151), (149, 33265),

Gene: PhillyJawn_39 Start: 23125, Stop: 24216, Start Num: 13
Candidate Starts for PhillyJawn_39:

(6, 23005), (Start: 13 @23125 has 17 MA's), (42, 23347), (78, 23608), (82, 23623), (83, 23629), (85, 23641), (87, 23650), (89, 23659), (93, 23674), (100, 23734), (105, 23785), (111, 23845), (124, 23959), (128, 24004), (130, 24016), (134, 24040), (136, 24061),

Gene: Phingu_41 Start: 23341, Stop: 24432, Start Num: 13
Candidate Starts for Phingu_41:
(6, 23221), (Start: 13 @23341 has 17 MA's), (42, 23563), (82, 23839), (83, 23845), (85, 23857), (87, 23866), (89, 23875), (93, 23890), (100, 23950), (105, 24001), (111, 24061), (124, 24175), (128, 24220), (130, 24232), (134, 24256), (136, 24277),

Gene: PhirstandPhine_42 Start: 25683, Stop: 26705, Start Num: 18
Candidate Starts for PhirstandPhine_42:
(Start: 18 @25683 has 56 MA's), (20, 25698), (25, 25725), (28, 25761), (36, 25848), (50, 25941), (59, 26022), (64, 26049), (71, 26094), (77, 26142), (81, 26163), (92, 26211), (103, 26307), (106, 26334), (127, 26526), (129, 26547), (133, 26571),

Gene: PhluffyCoco_40 Start: 24999, Stop: 26012, Start Num: 18
Candidate Starts for PhluffyCoco_40:
(12, 24975), (Start: 18 @24999 has 56 MA's), (20, 25014), (43, 25203), (49, 25245), (50, 25251), (51, 25260), (59, 25332), (64, 25359), (75, 25440), (77, 25449), (81, 25470), (92, 25518), (111, 25689), (114, 25719), (118, 25746), (122, 25785), (127, 25833), (133, 25878),

Gene: Phonegingi_38 Start: 23165, Stop: 24256, Start Num: 13
Candidate Starts for Phonegingi_38:
(6, 23045), (Start: 13 @23165 has 17 MA's), (40, 23372), (83, 23669), (85, 23681), (87, 23690), (89, 23699), (93, 23714), (100, 23774), (105, 23825), (111, 23885), (124, 23999), (128, 24044), (130, 24056), (134, 24080), (136, 24101),

Gene: Phorgeous_47 Start: 32351, Stop: 33424, Start Num: 11
Candidate Starts for Phorgeous_47:
(Start: 11 @32351 has 46 MA's), (14, 32357), (33, 32525), (46, 32588), (66, 32723), (79, 32822), (84, 32843), (85, 32852), (87, 32861), (91, 32879), (104, 32984), (112, 33071), (115, 33098), (120, 33134), (131, 33236), (132, 33245), (135, 33263), (149, 33377),

Gene: Phrancesco_48 Start: 32641, Stop: 33714, Start Num: 11
Candidate Starts for Phrancesco_48:
(Start: 11 @32641 has 46 MA's), (14, 32647), (33, 32815), (46, 32878), (66, 33013), (79, 33112), (84, 33133), (85, 33142), (87, 33151), (91, 33169), (104, 33274), (112, 33361), (115, 33388), (120, 33424), (121, 33430), (131, 33526), (132, 33535), (135, 33553), (149, 33667),

Gene: Pickles13_37 Start: 23435, Stop: 24526, Start Num: 13
Candidate Starts for Pickles13_37:
(6, 23315), (Start: 13 @23435 has 17 MA's), (42, 23657), (44, 23669), (82, 23933), (83, 23939), (85, 23951), (87, 23960), (93, 23984), (105, 24095), (111, 24155), (124, 24269), (126, 24284), (128, 24314), (130, 24326), (134, 24350), (136, 24371), (152, 24488),

Gene: PierreOrion_48 Start: 32655, Stop: 33728, Start Num: 11
Candidate Starts for PierreOrion_48:
(Start: 11 @32655 has 46 MA's), (14, 32661), (33, 32829), (46, 32892), (66, 33027), (79, 33126), (84, 33147), (85, 33156), (87, 33165), (91, 33183), (104, 33288), (112, 33375), (115, 33402), (120, 33438), (121, 33444), (131, 33540), (132, 33549), (135, 33567), (149, 33681),

Gene: Pineda_42 Start: 25209, Stop: 26231, Start Num: 18

Candidate Starts for Pineda_42:
(Start: 18 @25209 has 56 MA's), (20, 25224), (25, 25251), (28, 25287), (36, 25374), (50, 25467), (59, 25548), (64, 25575), (71, 25620), (77, 25668), (81, 25689), (92, 25737), (103, 25833), (106, 25860), (127, 26052), (129, 26073), (133, 26097),

Gene: PiperSansNom_48 Start: 32795, Stop: 33868, Start Num: 11
Candidate Starts for PiperSansNom_48:
(Start: 11 @32795 has 46 MA's), (14, 32801), (33, 32969), (46, 33032), (66, 33167), (79, 33266), (84, 33287), (85, 33296), (87, 33305), (91, 33323), (104, 33428), (112, 33515), (115, 33542), (120, 33578), (121, 33584), (131, 33680), (132, 33689), (135, 33707), (149, 33821),

Gene: Piperis_48 Start: 32474, Stop: 33547, Start Num: 11
Candidate Starts for Piperis_48:
(Start: 11 @32474 has 46 MA's), (14, 32480), (33, 32648), (46, 32711), (66, 32846), (79, 32945), (84, 32966), (85, 32975), (87, 32984), (91, 33002), (104, 33107), (112, 33194), (115, 33221), (120, 33257), (131, 33359), (132, 33368), (135, 33386), (149, 33500),

Gene: Polka_40 Start: 24913, Stop: 25935, Start Num: 18
Candidate Starts for Polka_40:
(Start: 18 @24913 has 56 MA's), (20, 24928), (25, 24955), (28, 24991), (36, 25078), (50, 25171), (59, 25252), (64, 25279), (71, 25324), (77, 25372), (81, 25393), (92, 25441), (103, 25537), (106, 25564), (127, 25756), (129, 25777), (133, 25801),

Gene: Pulchra_49 Start: 32871, Stop: 33944, Start Num: 11
Candidate Starts for Pulchra_49:
(Start: 11 @32871 has 46 MA's), (14, 32877), (33, 33045), (46, 33108), (66, 33243), (79, 33342), (84, 33363), (85, 33372), (87, 33381), (91, 33399), (104, 33504), (112, 33591), (115, 33618), (120, 33654), (121, 33660), (131, 33756), (132, 33765), (135, 33783), (149, 33897),

Gene: Quhwah_51 Start: 33103, Stop: 34176, Start Num: 11
Candidate Starts for Quhwah_51:
(Start: 11 @33103 has 46 MA's), (14, 33109), (33, 33277), (46, 33340), (66, 33475), (79, 33574), (84, 33595), (85, 33604), (87, 33613), (91, 33631), (104, 33736), (112, 33823), (115, 33850), (120, 33886), (121, 33892), (131, 33988), (132, 33997), (135, 34015), (149, 34129),

Gene: Ramiel05_47 Start: 32506, Stop: 33579, Start Num: 11
Candidate Starts for Ramiel05_47:
(Start: 11 @32506 has 46 MA's), (14, 32512), (33, 32680), (46, 32743), (66, 32878), (79, 32977), (84, 32998), (85, 33007), (87, 33016), (91, 33034), (104, 33139), (112, 33226), (115, 33253), (120, 33289), (121, 33295), (131, 33391), (132, 33400), (135, 33418), (149, 33532),

Gene: Rattail_40 Start: 25085, Stop: 26098, Start Num: 18
Candidate Starts for Rattail_40:
(12, 25061), (Start: 18 @25085 has 56 MA's), (20, 25100), (43, 25289), (49, 25331), (50, 25337), (51, 25346), (59, 25418), (64, 25445), (75, 25526), (77, 25535), (81, 25556), (92, 25604), (111, 25775), (114, 25805), (118, 25832), (122, 25871), (127, 25919), (133, 25964),

Gene: RedFox_40 Start: 24998, Stop: 26011, Start Num: 18
Candidate Starts for RedFox_40:
(12, 24974), (Start: 18 @24998 has 56 MA's), (20, 25013), (43, 25202), (49, 25244), (50, 25250), (51, 25259), (59, 25331), (64, 25358), (75, 25439), (77, 25448), (81, 25469), (92, 25517), (111, 25688), (114, 25718), (118, 25745), (122, 25784), (127, 25832), (133, 25877),

Gene: Renna12_39 Start: 25056, Stop: 26069, Start Num: 18
Candidate Starts for Renna12_39:
(9, 25014), (Start: 18 @25056 has 56 MA's), (20, 25071), (39, 25230), (43, 25260), (49, 25302), (50, 25308), (51, 25317), (59, 25389), (64, 25416), (75, 25497), (77, 25506), (81, 25527), (111, 25746), (114, 25776), (118, 25803), (127, 25890), (133, 25935), (143, 26037), (146, 26046),

Gene: RobsFeet_51 Start: 33886, Stop: 34932, Start Num: 10
Candidate Starts for RobsFeet_51:
(5, 33727), (Start: 10 @33886 has 10 MA's), (48, 34147), (58, 34228), (84, 34378), (85, 34387), (86, 34393), (87, 34396), (104, 34519), (105, 34534), (112, 34597), (132, 34762), (139, 34816), (142, 34861), (151, 34909),

Gene: Rockwell_47 Start: 32506, Stop: 33579, Start Num: 11
Candidate Starts for Rockwell_47:
(Start: 11 @32506 has 46 MA's), (14, 32512), (33, 32680), (46, 32743), (66, 32878), (79, 32977), (84, 32998), (85, 33007), (87, 33016), (91, 33034), (104, 33139), (112, 33226), (115, 33253), (120, 33289), (121, 33295), (131, 33391), (132, 33400), (135, 33418), (149, 33532),

Gene: Ruchi_37 Start: 25758, Stop: 26786, Start Num: 18
Candidate Starts for Ruchi_37:
(12, 25725), (Start: 18 @25758 has 56 MA's), (20, 25773), (36, 25923), (47, 25995), (50, 26016), (59, 26097), (62, 26121), (86, 26259), (92, 26283), (96, 26316), (103, 26379), (110, 26451), (127, 26598),

Gene: Savannah_47 Start: 32533, Stop: 33606, Start Num: 11
Candidate Starts for Savannah_47:
(Start: 11 @32533 has 46 MA's), (14, 32539), (33, 32707), (46, 32770), (66, 32905), (79, 33004), (84, 33025), (85, 33034), (87, 33043), (91, 33061), (104, 33166), (112, 33253), (115, 33280), (120, 33316), (121, 33322), (131, 33418), (132, 33427), (135, 33445), (149, 33559),

Gene: ScoobySnack_35 Start: 22946, Stop: 24037, Start Num: 13
Candidate Starts for ScoobySnack_35:
(6, 22826), (Start: 13 @22946 has 17 MA's), (21, 23018), (42, 23168), (83, 23450), (85, 23462), (86, 23468), (87, 23471), (93, 23495), (100, 23555), (105, 23606), (111, 23666), (124, 23780), (126, 23795), (128, 23825), (130, 23837), (136, 23882), (152, 23999),

Gene: Scumberland_49 Start: 32728, Stop: 33801, Start Num: 11
Candidate Starts for Scumberland_49:
(Start: 11 @32728 has 46 MA's), (14, 32734), (33, 32902), (46, 32965), (66, 33100), (79, 33199), (84, 33220), (85, 33229), (87, 33238), (91, 33256), (104, 33361), (112, 33448), (115, 33475), (120, 33511), (131, 33613), (132, 33622), (135, 33640), (149, 33754),

Gene: Selwyn23_49 Start: 32705, Stop: 33778, Start Num: 11
Candidate Starts for Selwyn23_49:
(Start: 11 @32705 has 46 MA's), (14, 32711), (33, 32879), (46, 32942), (66, 33077), (79, 33176), (84, 33197), (85, 33206), (87, 33215), (91, 33233), (104, 33338), (112, 33425), (115, 33452), (120, 33488), (121, 33494), (131, 33590), (132, 33599), (135, 33617), (149, 33731),

Gene: Shen_35 Start: 24271, Stop: 25299, Start Num: 18
Candidate Starts for Shen_35:
(12, 24229), (Start: 18 @24271 has 56 MA's), (20, 24286), (36, 24436), (47, 24508), (59, 24610), (81, 24748), (86, 24772), (92, 24796), (96, 24829), (103, 24892), (106, 24919), (111, 24967), (127, 25111),

Gene: Shotgun_47 Start: 32332, Stop: 33405, Start Num: 11

Candidate Starts for Shotgun_47:
(Start: 11 @32332 has 46 MA's), (14, 32338), (33, 32506), (46, 32569), (66, 32704), (79, 32803), (84, 32824), (85, 32833), (87, 32842), (91, 32860), (104, 32965), (112, 33052), (115, 33079), (120, 33115), (121, 33121), (131, 33217), (132, 33226), (135, 33244), (149, 33358),

Gene: Shrubaron_50 Start: 33520, Stop: 34566, Start Num: 10
Candidate Starts for Shrubaron_50:
(5, 33361), (Start: 10 @33520 has 10 MA's), (84, 34012), (85, 34021), (86, 34027), (87, 34030), (104, 34153), (105, 34168), (112, 34231), (125, 34339), (132, 34396), (139, 34450), (142, 34495), (151, 34543),

Gene: SirFrank_48 Start: 32715, Stop: 33776, Start Num: 11
Candidate Starts for SirFrank_48:
(Start: 11 @32715 has 46 MA's), (33, 32880), (66, 33078), (70, 33105), (79, 33177), (84, 33198), (85, 33207), (86, 33213), (87, 33216), (91, 33234), (104, 33339), (109, 33408), (111, 33417), (120, 33489), (121, 33495), (131, 33588), (132, 33597), (145, 33714), (149, 33729),

Gene: Skugga_47 Start: 32507, Stop: 33550, Start Num: 10
Candidate Starts for Skugga_47:
(7, 32396), (Start: 10 @32507 has 10 MA's), (14, 32516), (17, 32546), (19, 32552), (31, 32660), (48, 32768), (58, 32849), (73, 32942), (84, 32999), (85, 33008), (86, 33014), (87, 33017), (104, 33140), (105, 33155), (112, 33218), (120, 33281), (123, 33305), (132, 33380), (138, 33419), (139, 33434),

Gene: Smarties_56 Start: 34302, Stop: 35345, Start Num: 11
Candidate Starts for Smarties_56:
(Start: 11 @34302 has 46 MA's), (38, 34488), (48, 34560), (58, 34641), (63, 34668), (73, 34734), (84, 34791), (85, 34800), (86, 34806), (87, 34809), (104, 34932), (112, 35010), (132, 35175), (139, 35229), (142, 35274), (145, 35292),

Gene: StuartMinion_32 Start: 22066, Stop: 23079, Start Num: 18
Candidate Starts for StuartMinion_32:
(12, 22033), (Start: 18 @22066 has 56 MA's), (20, 22081), (23, 22099), (39, 22240), (43, 22270), (49, 22312), (50, 22318), (59, 22399), (64, 22426), (75, 22507), (77, 22516), (81, 22537), (92, 22585), (111, 22756), (114, 22786), (127, 22900), (133, 22945), (146, 23056),

Gene: Sunny_ Start: 34030, Stop: 35070, Start Num: 10
Candidate Starts for Sunny_:
(Start: 10 @34030 has 10 MA's), (48, 34288), (58, 34369), (63, 34396), (66, 34402), (72, 34459), (80, 34507), (85, 34528), (86, 34534), (87, 34537), (104, 34660), (105, 34675), (112, 34738), (120, 34801), (132, 34900), (140, 34978), (141, 34987), (142, 34999), (144, 35014), (146, 35020),

Gene: TaylorSipht_38 Start: 25131, Stop: 26156, Start Num: 18
Candidate Starts for TaylorSipht_38:
(12, 25098), (Start: 18 @25131 has 56 MA's), (20, 25146), (25, 25173), (34, 25290), (36, 25296), (41, 25320), (53, 25416), (54, 25428), (56, 25446), (59, 25470), (60, 25482), (62, 25494), (81, 25608), (88, 25641), (97, 25695), (98, 25701), (103, 25749), (106, 25776), (127, 25968),

Gene: Teamocil_50 Start: 32585, Stop: 33628, Start Num: 10
Candidate Starts for Teamocil_50:
(Start: 10 @32585 has 10 MA's), (31, 32738), (48, 32846), (58, 32927), (73, 33020), (84, 33077), (85, 33086), (87, 33095), (104, 33218), (105, 33233), (112, 33296), (120, 33359), (123, 33383), (138, 33497), (139, 33512),

Gene: Terij_44 Start: 31471, Stop: 32544, Start Num: 11
Candidate Starts for Terij_44:
(Start: 11 @31471 has 46 MA's), (37, 31669), (45, 31720), (55, 31804), (56, 31807), (68, 31879), (72, 31918), (83, 31975), (85, 31987), (86, 31993), (87, 31996), (93, 32020), (95, 32044), (101, 32092), (113, 32218), (121, 32278), (126, 32329), (128, 32350), (138, 32413), (139, 32428), (140, 32452), (147, 32494),

Gene: Toad24_40 Start: 26410, Stop: 27438, Start Num: 18
Candidate Starts for Toad24_40:
(12, 26368), (Start: 18 @26410 has 56 MA's), (20, 26425), (36, 26575), (47, 26647), (59, 26749), (81, 26887), (86, 26911), (92, 26935), (96, 26968), (103, 27031), (106, 27058), (111, 27106), (127, 27250),

Gene: Tyrumbra_48 Start: 33686, Stop: 34732, Start Num: 10
Candidate Starts for Tyrumbra_48:
(5, 33527), (Start: 10 @33686 has 10 MA's), (84, 34178), (85, 34187), (86, 34193), (87, 34196), (104, 34319), (105, 34334), (112, 34397), (132, 34562), (139, 34616), (142, 34661), (151, 34709),

Gene: Violeta_40 Start: 23220, Stop: 24311, Start Num: 13
Candidate Starts for Violeta_40:
(6, 23100), (Start: 13 @23220 has 17 MA's), (42, 23442), (82, 23718), (83, 23724), (85, 23736), (87, 23745), (93, 23769), (100, 23829), (105, 23880), (111, 23940), (124, 24054), (128, 24099), (130, 24111), (134, 24135), (136, 24156),

Gene: Vulpecula_37 Start: 25435, Stop: 26463, Start Num: 18
Candidate Starts for Vulpecula_37:
(12, 25402), (Start: 18 @25435 has 56 MA's), (20, 25450), (36, 25600), (47, 25672), (49, 25687), (50, 25693), (59, 25774), (62, 25798), (86, 25936), (92, 25960), (96, 25993), (103, 26056), (110, 26128), (127, 26275),

Gene: Warren_38 Start: 23181, Stop: 24272, Start Num: 13
Candidate Starts for Warren_38:
(6, 23061), (Start: 13 @23181 has 17 MA's), (40, 23388), (42, 23403), (82, 23679), (83, 23685), (85, 23697), (87, 23706), (89, 23715), (100, 23790), (105, 23841), (111, 23901), (124, 24015), (128, 24060), (130, 24072), (134, 24096), (136, 24117),

Gene: Westrich_46 Start: 26088, Stop: 27116, Start Num: 18
Candidate Starts for Westrich_46:
(Start: 18 @26088 has 56 MA's), (20, 26103), (36, 26253), (47, 26325), (59, 26427), (81, 26565), (86, 26589), (92, 26613), (96, 26646), (103, 26709), (106, 26736), (111, 26784), (127, 26928),

Gene: WileyE_39 Start: 25312, Stop: 26337, Start Num: 18
Candidate Starts for WileyE_39:
(12, 25279), (Start: 18 @25312 has 56 MA's), (20, 25327), (36, 25477), (41, 25501), (53, 25597), (54, 25609), (59, 25651), (60, 25663), (97, 25876), (103, 25930), (127, 26149), (144, 26302),

Gene: Winchester007_40 Start: 23263, Stop: 24354, Start Num: 13
Candidate Starts for Winchester007_40:
(Start: 13 @23263 has 17 MA's), (42, 23485), (78, 23746), (82, 23761), (83, 23767), (85, 23779), (87, 23788), (89, 23797), (93, 23812), (100, 23872), (105, 23923), (111, 23983), (124, 24097), (128, 24142), (130, 24154), (134, 24178), (136, 24199),

Gene: Yeti_48 Start: 32507, Stop: 33580, Start Num: 11
Candidate Starts for Yeti_48:

(Start: 11 @32507 has 46 MA's), (14, 32513), (33, 32681), (46, 32744), (66, 32879), (79, 32978), (84, 32999), (85, 33008), (87, 33017), (91, 33035), (104, 33140), (112, 33227), (115, 33254), (120, 33290), (121, 33296), (131, 33392), (132, 33401), (135, 33419), (149, 33533),

Gene: Zapato_47 Start: 32655, Stop: 33710, Start Num: 10
Candidate Starts for Zapato_47:
(Start: 10 @32655 has 10 MA's), (22, 32724), (38, 32844), (48, 32916), (72, 33087), (73, 33090), (84, 33147), (85, 33156), (86, 33162), (87, 33165), (104, 33288), (112, 33366), (120, 33429), (123, 33453), (132, 33531), (138, 33570), (139, 33585), (140, 33609),

Gene: Zhuangyuan_42 Start: 25780, Stop: 26808, Start Num: 18
Candidate Starts for Zhuangyuan_42:
(Start: 18 @25780 has 56 MA's), (20, 25795), (34, 25945), (50, 26044), (59, 26125), (60, 26137), (64, 26152), (67, 26164), (88, 26299), (90, 26308), (92, 26314), (98, 26362), (107, 26455), (119, 26545), (127, 26629), (129, 26650), (133, 26674),

Gene: Zixiang_37 Start: 25775, Stop: 26803, Start Num: 18
Candidate Starts for Zixiang_37:
(12, 25733), (Start: 18 @25775 has 56 MA's), (20, 25790), (36, 25940), (47, 26012), (59, 26114), (81, 26252), (86, 26276), (92, 26300), (96, 26333), (103, 26396), (106, 26423), (111, 26471), (127, 26615),