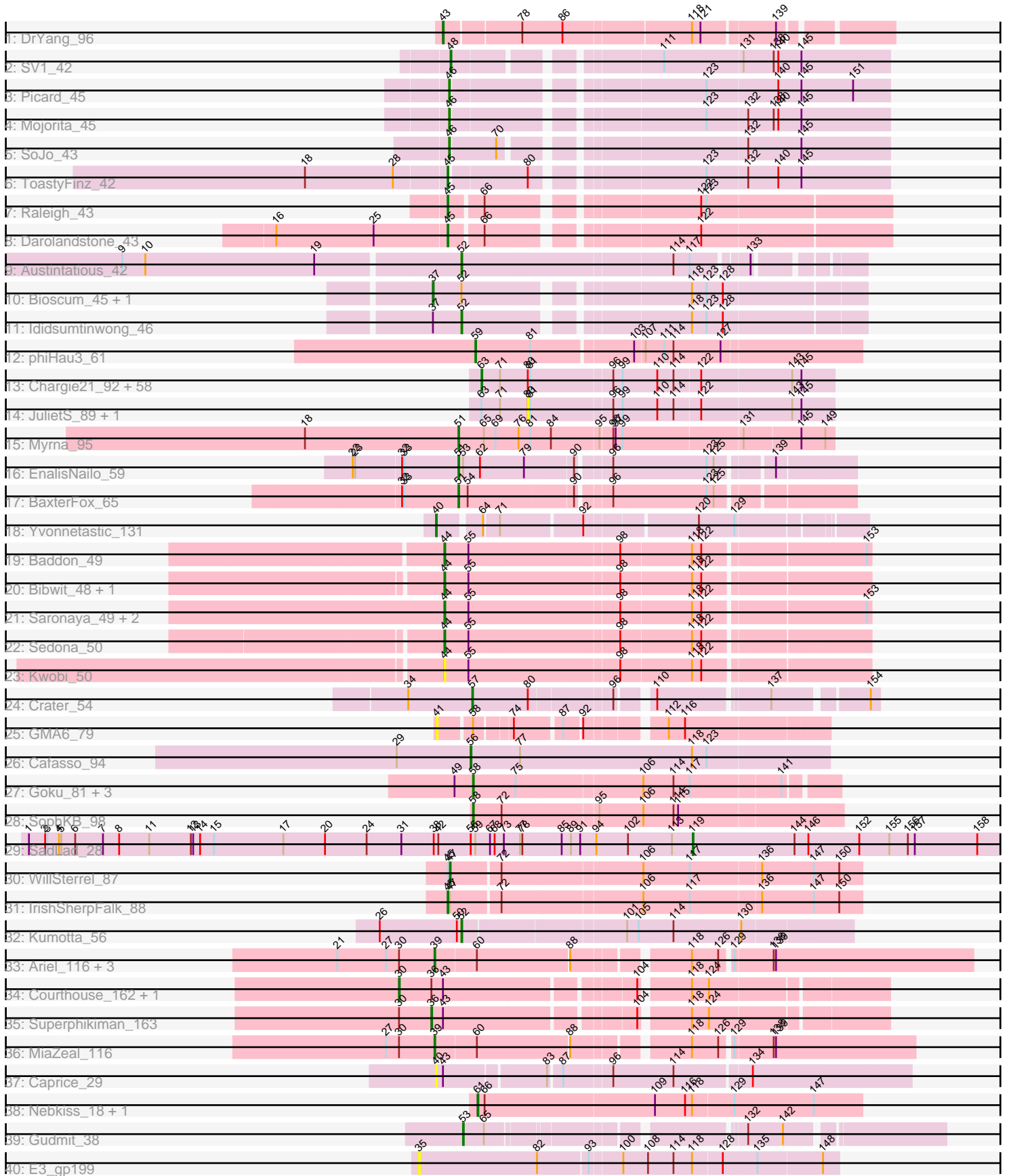


Pham 193864



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 193864 Report

This analysis was run 11/02/24 on database version 579.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 193864 has 111 members, 8 are drafts.

Phages represented in each track:

- Track 1 : DrYang_96
- Track 2 : SV1_42
- Track 3 : Picard_45
- Track 4 : Mojourita_45
- Track 5 : SoJo_43
- Track 6 : ToastyFinz_42
- Track 7 : Raleigh_43
- Track 8 : Darolandstone_43
- Track 9 : Austintatious_42
- Track 10 : Bioscum_45, PapayaSalad_44
- Track 11 : Ididsumtinwong_46
- Track 12 : phiHau3_61
- Track 13 : Chargie21_92, Atlantean_95, StubbySaigey_98, JPickles_94, Quasimodo_96, CindyLou_97, SilverDipper_97, Ngannou_92, Naija_95, Sebata_97, Iota_90, Shnickers_96, ValleyTerrace_96, LifeSavor_95, Essence_93, Audrick_98, Sauce_96, Babyland_96, Rahel_95, Amataga_96, Guwapp_95, InigoMontoya_97, ArcherS7_95, LRRHood_90, Ronan_89, Derek_96, Jemmno_96, Cali_91, Nappy_98, Jedediah_99, EmmaElysia_95, Basquiat_92, Yassified_92, Kboogie_99, JustHall_92, Pivoine_95, Momo_95, Trinitium_92, Jaygup_96, Phusco_96, Ghost_95, Shaqnato_88, Gamgam_96, Koguma_92, Sprinklers_91, Phlegm_98, SmallFry_96, McGee_97, Chomp_95, Patter_96, DirtMonster_89, CharlieB_91, Grungle_83, YoungMoneyMata_96, Ading_96, Adlitam_96, Bangla1971_97, Fludd_96, Latch_96
- Track 14 : JulietS_89, JigglyPuff_102
- Track 15 : Myrna_95
- Track 16 : EnalisNailo_59
- Track 17 : BaxterFox_65
- Track 18 : Yvonnetastic_131
- Track 19 : Baddon_49
- Track 20 : Bibwit_48, YorkOnyx_50
- Track 21 : Saronaya_49, JKSyngboy_47, Gustavo_49
- Track 22 : Sedona_50
- Track 23 : Kwobi_50
- Track 24 : Crater_54

- Track 25 : GMA6_79
- Track 26 : Cafasso_94
- Track 27 : Goku_81, Manda_84, Eureka_81, BaboJay_80
- Track 28 : SophKB_98
- Track 29 : SadLad_28
- Track 30 : WillSterrel_87
- Track 31 : IrishSherpFalk_88
- Track 32 : Kumotta_56
- Track 33 : Ariel_116, Courthouse_111, Squint_114, Superphikiman_113
- Track 34 : Courthouse_162, Ariel_165
- Track 35 : Superphikiman_163
- Track 36 : MiaZeal_116
- Track 37 : Caprice_29
- Track 38 : Nebkiss_18, Gaia_17
- Track 39 : Gudmit_38
- Track 40 : E3_gp199

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

The start number called the most often in the published annotations is 63, it was called in 59 of the 103 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ading_96, Adlitam_96, Amataga_96, ArcherS7_95, Atlantean_95, Audrick_98, Babyland_96, Bangla1971_97, Basquiat_92, Cali_91, Chargie21_92, CharlieB_91, Chomp_95, CindyLou_97, Derek_96, DirtMonster_89, EmmaElysia_95, Essence_93, Fludd_96, Gangam_96, Ghost_95, Grungle_83, Guwapp_95, InigoMontoya_97, Iota_90, JPickles_94, Jaygup_96, Jedediah_99, Jemmno_96, JustHall_92, Kboogie_99, Koguma_92, LRRHood_90, Latch_96, LifeSavor_95, McGee_97, Momo_95, Naija_95, Nappy_98, Ngannou_92, Patter_96, Phlegm_98, Phusco_96, Pivoine_95, Quasimodo_96, Rahel_95, Ronan_89, Sauce_96, Sebata_97, Shaqnato_88, Shnickers_96, SilverDipper_97, SmallFry_96, Sprinklers_91, StubbySaigey_98, Trinitium_92, ValleyTerrace_96, Yassified_92, YoungMoneyMata_96,

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

- JigglyPuff_102, JulietS_89,

Genes that do not have the "Most Annotated" start:

- Ariel_116, Ariel_165, Austintatious_42, BaboJay_80, Baddon_49, BaxterFox_65, Bibwit_48, Bioscum_45, Cafasso_94, Caprice_29, Courthouse_111, Courthouse_162, Crater_54, Darolandstone_43, DrYang_96, E3_gp199, EnalisNailo_59, Eureka_81, GMA6_79, Gaia_17, Goku_81, Gudmit_38, Gustavo_49, Ididsumtinwong_46, IrishSherpFalk_88, JKSyngboy_47, Kumotta_56, Kwobi_50, Manda_84, MiaZeal_116, Mojarita_45, Myrna_95, Nebkiss_18, PapayaSalad_44, Picard_45, Raleigh_43, SV1_42, SadLad_28, Saronaya_49, Sedona_50, SoJo_43, SophKB_98, Squint_114, Superphikiman_113, Superphikiman_163, ToastyFinz_42, WillSterrel_87, YorkOnyx_50, Yvonnetastic_131, phiHau3_61,

Summary by start number:

Start 30:

- Found in 8 of 111 (7.2%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Ariel_165 (J), Courthouse_162 (J),

Start 35:

- Found in 1 of 111 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3_gp199 (singleton),

Start 36:

- Found in 3 of 111 (2.7%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Superphikiman_163 (J),

Start 37:

- Found in 3 of 111 (2.7%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bioscum_45 (BC3), PapayaSalad_44 (BC3),

Start 39:

- Found in 5 of 111 (4.5%) of genes in pham
- Manual Annotations of this start: 5 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel_116 (J), Courthouse_111 (J), MiaZeal_116 (J), Squint_114 (J), Superphikiman_113 (J),

Start 40:

- Found in 2 of 111 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caprice_29 (S), Yvonnetastic_131 (DD),

Start 41:

- Found in 1 of 111 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6_79 (DQ),

Start 43:

- Found in 5 of 111 (4.5%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 20.0% of time when present
- Phage (with cluster) where this start called: DrYang_96 (AR),

Start 44:

- Found in 8 of 111 (7.2%) of genes in pham

- Manual Annotations of this start: 5 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Baddon_49 (DE1), Bibwit_48 (DE1), Gustavo_49 (DE1), JKSyngboy_47 (DE1), Kwobi_50 (DE1), Saronaya_49 (DE1), Sedona_50 (DE1), YorkOnyx_50 (DE1),

Start 45:

- Found in 5 of 111 (4.5%) of genes in pham
- Manual Annotations of this start: 4 of 103
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Darolandstone_43 (BC2), IrishSherpFalk_88 (F1), Raleigh_43 (BC2), ToastyFinz_42 (BC1),

Start 46:

- Found in 3 of 111 (2.7%) of genes in pham
- Manual Annotations of this start: 3 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Moajorita_45 (BC1), Picard_45 (BC1), SoJo_43 (BC1),

Start 47:

- Found in 2 of 111 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 50.0% of time when present
- Phage (with cluster) where this start called: WillSterrel_87 (F1),

Start 48:

- Found in 1 of 111 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SV1_42 (BC1),

Start 51:

- Found in 3 of 111 (2.7%) of genes in pham
- Manual Annotations of this start: 3 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaxterFox_65 (CZ3), EnalisNailo_59 (CY1), Myrna_95 (C2),

Start 52:

- Found in 5 of 111 (4.5%) of genes in pham
- Manual Annotations of this start: 3 of 103
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Austintatious_42 (BC3), Ididsumtinwong_46 (BC3), Kumotta_56 (FB),

Start 53:

- Found in 2 of 111 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gudmit_38 (singleton),

Start 56:

- Found in 2 of 111 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Cafasso_94 (DZ),

Start 57:

- Found in 1 of 111 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Crater_54 (DN3),

Start 58:

- Found in 6 of 111 (5.4%) of genes in pham
- Manual Annotations of this start: 5 of 103
- Called 83.3% of time when present
- Phage (with cluster) where this start called: BaboJay_80 (E), Eureka_81 (E), Goku_81 (E), Manda_84 (E), SophKB_98 (E),

Start 59:

- Found in 2 of 111 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 50.0% of time when present
- Phage (with cluster) where this start called: phiHau3_61 (BD4),

Start 61:

- Found in 2 of 111 (1.8%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia_17 (X), Nebkiss_18 (X),

Start 63:

- Found in 61 of 111 (55.0%) of genes in pham
- Manual Annotations of this start: 59 of 103
- Called 96.7% of time when present
- Phage (with cluster) where this start called: Ading_96 (C1), Adlitam_96 (C1), Amataga_96 (C1), ArcherS7_95 (C1), Atlantean_95 (C1), Audrick_98 (C1), Babyland_96 (C1), Bangla1971_97 (C1), Basquiat_92 (C1), Cali_91 (C1), Chargie21_92 (C1), CharlieB_91 (C1), Chomp_95 (C1), CindyLou_97 (C1), Derek_96 (C1), DirtMonster_89 (C1), EmmaElysia_95 (C1), Essence_93 (C1), Fludd_96 (C1), Gamgam_96 (C1), Ghost_95 (C1), Grungle_83 (C1), Guwapp_95 (C1), InigoMontoya_97 (C1), Iota_90 (C1), JPickles_94 (C1), Jaygup_96 (C1), Jedediah_99 (C1), Jemmno_96 (C1), JustHall_92 (C1), Kboogie_99 (C1), Koguma_92 (C1), LRRHood_90 (C1), Latch_96 (C1), LifeSavor_95 (C1), McGee_97 (C1), Momo_95 (C1), Naija_95 (C1), Nappy_98 (C1), Ngannou_92 (C1), Patter_96 (C1), Phlegm_98 (C1), Phusco_96 (C1), Pivoine_95 (C1), Quasimodo_96 (C1), Rahel_95 (C1), Ronan_89 (C1), Sauce_96 (C1), Sebata_97 (C1), Shaqnato_88 (C1), Shnickers_96 (C1), SilverDipper_97 (C1), SmallFry_96 (C1), Sprinklers_91 (C1), StubbySaigey_98 (C1), Trinitium_92 (C1), ValleyTerrace_96 (C1), Yassified_92 (C1), YoungMoneyMata_96 (C1),

Start 80:

- Found in 63 of 111 (56.8%) of genes in pham
- No Manual Annotations of this start.

- Called 3.2% of time when present
- Phage (with cluster) where this start called: JigglyPuff_102 (C1), JulietS_89 (C1),

Start 119:

- Found in 1 of 111 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SadLad_28 (EG),

Summary by clusters:

There are 22 clusters represented in this pham: singleton, CZ3, DD, FB, DZ, DQ, BD4, DN3, C2, C1, CY1, E, EG, J, S, AR, X, F1, DE1, BC1, BC2, BC3,

Info for manual annotations of cluster AR:

- Start number 43 was manually annotated 1 time for cluster AR.

Info for manual annotations of cluster BC1:

- Start number 45 was manually annotated 1 time for cluster BC1.
- Start number 46 was manually annotated 3 times for cluster BC1.
- Start number 48 was manually annotated 1 time for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 45 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 37 was manually annotated 2 times for cluster BC3.
- Start number 52 was manually annotated 2 times for cluster BC3.

Info for manual annotations of cluster BD4:

- Start number 59 was manually annotated 1 time for cluster BD4.

Info for manual annotations of cluster C1:

- Start number 63 was manually annotated 59 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 51 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CY1:

- Start number 51 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CZ3:

- Start number 51 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster DD:

- Start number 40 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DE1:

- Start number 44 was manually annotated 5 times for cluster DE1.

Info for manual annotations of cluster DN3:

- Start number 57 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster DZ:

- Start number 56 was manually annotated 1 time for cluster DZ.

Info for manual annotations of cluster E:

- Start number 58 was manually annotated 5 times for cluster E.

Info for manual annotations of cluster EG:

- Start number 119 was manually annotated 1 time for cluster EG.

Info for manual annotations of cluster F1:

- Start number 45 was manually annotated 1 time for cluster F1.
- Start number 47 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster FB:

- Start number 52 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster J:

- Start number 30 was manually annotated 2 times for cluster J.
- Start number 36 was manually annotated 1 time for cluster J.
- Start number 39 was manually annotated 5 times for cluster J.

Info for manual annotations of cluster X:

- Start number 61 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Ading_96 Start: 40893, Stop: 41336, Start Num: 63

Candidate Starts for Ading_96:

(Start: 63 @40893 has 59 MA's), (71, 40917), (80, 40953), (81, 40956), (96, 41058), (99, 41070), (110, 41115), (114, 41136), (122, 41169), (143, 41283), (145, 41295),

Gene: Adlitam_96 Start: 40910, Stop: 41353, Start Num: 63

Candidate Starts for Adlitam_96:

(Start: 63 @40910 has 59 MA's), (71, 40934), (80, 40970), (81, 40973), (96, 41075), (99, 41087), (110, 41132), (114, 41153), (122, 41186), (143, 41300), (145, 41312),

Gene: Amataga_96 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Amataga_96:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: ArcherS7_95 Start: 40473, Stop: 40916, Start Num: 63

Candidate Starts for ArcherS7_95:

(Start: 63 @40473 has 59 MA's), (71, 40497), (80, 40533), (81, 40536), (96, 40638), (99, 40650), (110, 40695), (114, 40716), (122, 40749), (143, 40863), (145, 40875),

Gene: Ariel_116 Start: 62922, Stop: 63554, Start Num: 39

Candidate Starts for Ariel_116:

(21, 62799), (27, 62862), (Start: 30 @62877 has 2 MA's), (Start: 39 @62922 has 5 MA's), (60, 62973), (88, 63084), (118, 63213), (126, 63243), (129, 63255), (138, 63303), (139, 63306),

Gene: Ariel_165 Start: 84168, Stop: 84737, Start Num: 30

Candidate Starts for Ariel_165:

(Start: 30 @84168 has 2 MA's), (Start: 36 @84210 has 1 MA's), (Start: 43 @84225 has 1 MA's), (104, 84447), (118, 84504), (124, 84525),

Gene: Atlantean_95 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Atlantean_95:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: Audrick_98 Start: 40134, Stop: 40577, Start Num: 63

Candidate Starts for Audrick_98:

(Start: 63 @40134 has 59 MA's), (71, 40158), (80, 40194), (81, 40197), (96, 40299), (99, 40311), (110, 40356), (114, 40377), (122, 40410), (143, 40524), (145, 40536),

Gene: Austintatious_42 Start: 27716, Stop: 28177, Start Num: 52

Candidate Starts for Austintatious_42:

(9, 27290), (10, 27320), (19, 27539), (Start: 52 @27716 has 3 MA's), (114, 27980), (117, 28001), (133, 28064),

Gene: BaboJay_80 Start: 51126, Stop: 51572, Start Num: 58

Candidate Starts for BaboJay_80:

(49, 51102), (Start: 58 @51126 has 5 MA's), (75, 51180), (106, 51339), (114, 51378), (117, 51399), (141, 51510),

Gene: Babyland_96 Start: 39594, Stop: 40037, Start Num: 63

Candidate Starts for Babyland_96:

(Start: 63 @39594 has 59 MA's), (71, 39618), (80, 39654), (81, 39657), (96, 39759), (99, 39771), (110, 39816), (114, 39837), (122, 39870), (143, 39984), (145, 39996),

Gene: Baddon_49 Start: 43084, Stop: 43602, Start Num: 44

Candidate Starts for Baddon_49:

(Start: 44 @43084 has 5 MA's), (55, 43114), (98, 43300), (118, 43390), (122, 43402), (153, 43597),

Gene: Bangla1971_97 Start: 40603, Stop: 41046, Start Num: 63

Candidate Starts for Bangla1971_97:

(Start: 63 @40603 has 59 MA's), (71, 40627), (80, 40663), (81, 40666), (96, 40768), (99, 40780), (110, 40825), (114, 40846), (122, 40879), (143, 40993), (145, 41005),

Gene: Basquiat_92 Start: 39148, Stop: 39591, Start Num: 63

Candidate Starts for Basquiat_92:

(Start: 63 @39148 has 59 MA's), (71, 39172), (80, 39208), (81, 39211), (96, 39313), (99, 39325), (110, 39370), (114, 39391), (122, 39424), (143, 39538), (145, 39550),

Gene: BaxterFox_65 Start: 44276, Stop: 44731, Start Num: 51

Candidate Starts for BaxterFox_65:

(32, 44204), (33, 44207), (Start: 51 @44276 has 3 MA's), (54, 44288), (90, 44417), (96, 44453), (123, 44570), (125, 44579),

Gene: Bibwit_48 Start: 41643, Stop: 42161, Start Num: 44

Candidate Starts for Bibwit_48:

(Start: 44 @41643 has 5 MA's), (55, 41673), (98, 41859), (118, 41949), (122, 41961),

Gene: Bioscum_45 Start: 29978, Stop: 30484, Start Num: 37

Candidate Starts for Bioscum_45:

(Start: 37 @29978 has 2 MA's), (Start: 52 @30014 has 3 MA's), (118, 30272), (123, 30290), (128, 30311),

Gene: Cafasso_94 Start: 55360, Stop: 55818, Start Num: 56

Candidate Starts for Cafasso_94:

(29, 55264), (Start: 56 @55360 has 1 MA's), (77, 55423), (118, 55645), (123, 55663),

Gene: Cali_91 Start: 40987, Stop: 41430, Start Num: 63

Candidate Starts for Cali_91:

(Start: 63 @40987 has 59 MA's), (71, 41011), (80, 41047), (81, 41050), (96, 41152), (99, 41164), (110, 41209), (114, 41230), (122, 41263), (143, 41377), (145, 41389),

Gene: Caprice_29 Start: 9273, Stop: 9845, Start Num: 40

Candidate Starts for Caprice_29:

(Start: 40 @9273 has 1 MA's), (Start: 43 @9282 has 1 MA's), (83, 9402), (87, 9417), (96, 9474), (114, 9552), (134, 9645),

Gene: Chargie21_92 Start: 39148, Stop: 39591, Start Num: 63

Candidate Starts for Chargie21_92:

(Start: 63 @39148 has 59 MA's), (71, 39172), (80, 39208), (81, 39211), (96, 39313), (99, 39325), (110, 39370), (114, 39391), (122, 39424), (143, 39538), (145, 39550),

Gene: CharlieB_91 Start: 38985, Stop: 39428, Start Num: 63

Candidate Starts for CharlieB_91:

(Start: 63 @38985 has 59 MA's), (71, 39009), (80, 39045), (81, 39048), (96, 39150), (99, 39162), (110, 39207), (114, 39228), (122, 39261), (143, 39375), (145, 39387),

Gene: Chomp_95 Start: 41443, Stop: 41886, Start Num: 63

Candidate Starts for Chomp_95:

(Start: 63 @41443 has 59 MA's), (71, 41467), (80, 41503), (81, 41506), (96, 41608), (99, 41620), (110, 41665), (114, 41686), (122, 41719), (143, 41833), (145, 41845),

Gene: CindyLou_97 Start: 41484, Stop: 41927, Start Num: 63

Candidate Starts for CindyLou_97:

(Start: 63 @41484 has 59 MA's), (71, 41508), (80, 41544), (81, 41547), (96, 41649), (99, 41661), (110, 41706), (114, 41727), (122, 41760), (143, 41874), (145, 41886),

Gene: Courthouse_111 Start: 62522, Stop: 63154, Start Num: 39

Candidate Starts for Courthouse_111:

(21, 62399), (27, 62462), (Start: 30 @62477 has 2 MA's), (Start: 39 @62522 has 5 MA's), (60, 62573), (88, 62684), (118, 62813), (126, 62843), (129, 62855), (138, 62903), (139, 62906),

Gene: Courthouse_162 Start: 84612, Stop: 85181, Start Num: 30

Candidate Starts for Courthouse_162:

(Start: 30 @84612 has 2 MA's), (Start: 36 @84654 has 1 MA's), (Start: 43 @84669 has 1 MA's), (104, 84891), (118, 84948), (124, 84969),

Gene: Crater_54 Start: 35514, Stop: 35963, Start Num: 57

Candidate Starts for Crater_54:

(34, 35433), (Start: 57 @35514 has 1 MA's), (80, 35586), (96, 35682), (110, 35718), (137, 35847), (154, 35952),

Gene: Darolandstone_43 Start: 33080, Stop: 33595, Start Num: 45

Candidate Starts for Darolandstone_43:

(16, 32861), (25, 32987), (Start: 45 @33080 has 4 MA's), (66, 33119), (122, 33359),

Gene: Derek_96 Start: 41245, Stop: 41688, Start Num: 63

Candidate Starts for Derek_96:

(Start: 63 @41245 has 59 MA's), (71, 41269), (80, 41305), (81, 41308), (96, 41410), (99, 41422), (110, 41467), (114, 41488), (122, 41521), (143, 41635), (145, 41647),

Gene: DirtMonster_89 Start: 39741, Stop: 40184, Start Num: 63

Candidate Starts for DirtMonster_89:

(Start: 63 @39741 has 59 MA's), (71, 39765), (80, 39801), (81, 39804), (96, 39906), (99, 39918), (110, 39963), (114, 39984), (122, 40017), (143, 40131), (145, 40143),

Gene: DrYang_96 Start: 63051, Stop: 63563, Start Num: 43

Candidate Starts for DrYang_96:

(Start: 43 @63051 has 1 MA's), (78, 63141), (86, 63192), (118, 63342), (121, 63351), (139, 63438),

Gene: E3_gp199 Start: 129947, Stop: 130468, Start Num: 35

Candidate Starts for E3_gp199:

(35, 129947), (82, 130100), (93, 130163), (100, 130202), (108, 130232), (114, 130265), (118, 130289), (128, 130325), (135, 130367), (148, 130448),

Gene: EmmaElysia_95 Start: 39722, Stop: 40165, Start Num: 63

Candidate Starts for EmmaElysia_95:

(Start: 63 @39722 has 59 MA's), (71, 39746), (80, 39782), (81, 39785), (96, 39887), (99, 39899), (110, 39944), (114, 39965), (122, 39998), (143, 40112), (145, 40124),

Gene: EnalisNailo_59 Start: 42622, Stop: 43077, Start Num: 51

Candidate Starts for EnalisNailo_59:

(22, 42490), (23, 42493), (32, 42550), (33, 42553), (Start: 51 @42622 has 3 MA's), (Start: 53 @42628 has 1 MA's), (62, 42649), (79, 42706), (90, 42763), (96, 42799), (123, 42916), (125, 42925), (139, 42985),

Gene: Essence_93 Start: 40709, Stop: 41152, Start Num: 63

Candidate Starts for Essence_93:

(Start: 63 @40709 has 59 MA's), (71, 40733), (80, 40769), (81, 40772), (96, 40874), (99, 40886), (110, 40931), (114, 40952), (122, 40985), (143, 41099), (145, 41111),

Gene: Eureka_81 Start: 51417, Stop: 51863, Start Num: 58

Candidate Starts for Eureka_81:

(49, 51393), (Start: 58 @51417 has 5 MA's), (75, 51471), (106, 51630), (114, 51669), (117, 51690), (141, 51801),

Gene: Fludd_96 Start: 39595, Stop: 40038, Start Num: 63

Candidate Starts for Fludd_96:

(Start: 63 @39595 has 59 MA's), (71, 39619), (80, 39655), (81, 39658), (96, 39760), (99, 39772), (110, 39817), (114, 39838), (122, 39871), (143, 39985), (145, 39997),

Gene: GMA6_79 Start: 60811, Stop: 61245, Start Num: 41

Candidate Starts for GMA6_79:

(41, 60811), (Start: 58 @60850 has 5 MA's), (74, 60892), (87, 60946), (92, 60967), (112, 61051), (116, 61072),

Gene: Gaia_17 Start: 16945, Stop: 17430, Start Num: 61

Candidate Starts for Gaia_17:

(Start: 61 @16945 has 2 MA's), (66, 16954), (109, 17170), (116, 17209), (118, 17218), (129, 17269), (147, 17368),

Gene: Gamgam_96 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Gamgam_96:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: Ghost_95 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Ghost_95:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: Goku_81 Start: 51146, Stop: 51592, Start Num: 58

Candidate Starts for Goku_81:

(49, 51122), (Start: 58 @51146 has 5 MA's), (75, 51200), (106, 51359), (114, 51398), (117, 51419), (141, 51530),

Gene: Grungle_83 Start: 37537, Stop: 37980, Start Num: 63

Candidate Starts for Grungle_83:

(Start: 63 @37537 has 59 MA's), (71, 37561), (80, 37597), (81, 37600), (96, 37702), (99, 37714), (110, 37759), (114, 37780), (122, 37813), (143, 37927), (145, 37939),

Gene: Gudmit_38 Start: 27363, Stop: 27896, Start Num: 53

Candidate Starts for Gudmit_38:

(Start: 53 @27363 has 1 MA's), (65, 27390), (132, 27666), (142, 27711),

Gene: Gustavo_49 Start: 42016, Stop: 42534, Start Num: 44

Candidate Starts for Gustavo_49:

(Start: 44 @42016 has 5 MA's), (55, 42046), (98, 42232), (118, 42322), (122, 42334), (153, 42529),

Gene: Guwapp_95 Start: 40250, Stop: 40693, Start Num: 63

Candidate Starts for Guwapp_95:

(Start: 63 @40250 has 59 MA's), (71, 40274), (80, 40310), (81, 40313), (96, 40415), (99, 40427), (110, 40472), (114, 40493), (122, 40526), (143, 40640), (145, 40652),

Gene: Ididsumtinwong_46 Start: 30014, Stop: 30484, Start Num: 52

Candidate Starts for Ididsumtinwong_46:

(Start: 37 @29978 has 2 MA's), (Start: 52 @30014 has 3 MA's), (118, 30272), (123, 30290), (128, 30311),

Gene: InigoMontoya_97 Start: 40116, Stop: 40559, Start Num: 63

Candidate Starts for InigoMontoya_97:

(Start: 63 @40116 has 59 MA's), (71, 40140), (80, 40176), (81, 40179), (96, 40281), (99, 40293), (110, 40338), (114, 40359), (122, 40392), (143, 40506), (145, 40518),

Gene: Iota_90 Start: 39896, Stop: 40339, Start Num: 63

Candidate Starts for Iota_90:

(Start: 63 @39896 has 59 MA's), (71, 39920), (80, 39956), (81, 39959), (96, 40061), (99, 40073), (110, 40118), (114, 40139), (122, 40172), (143, 40286), (145, 40298),

Gene: IrishSherpFalk_88 Start: 51234, Stop: 51749, Start Num: 45

Candidate Starts for IrishSherpFalk_88:

(Start: 45 @51234 has 4 MA's), (Start: 47 @51237 has 1 MA's), (72, 51297), (106, 51474), (117, 51534), (136, 51621), (147, 51687), (150, 51720),

Gene: JKSyngboy_47 Start: 42615, Stop: 43133, Start Num: 44

Candidate Starts for JKSyngboy_47:

(Start: 44 @42615 has 5 MA's), (55, 42645), (98, 42831), (118, 42921), (122, 42933), (153, 43128),

Gene: JPickles_94 Start: 39386, Stop: 39829, Start Num: 63

Candidate Starts for JPickles_94:

(Start: 63 @39386 has 59 MA's), (71, 39410), (80, 39446), (81, 39449), (96, 39551), (99, 39563), (110, 39608), (114, 39629), (122, 39662), (143, 39776), (145, 39788),

Gene: Jaygup_96 Start: 40911, Stop: 41354, Start Num: 63

Candidate Starts for Jaygup_96:

(Start: 63 @40911 has 59 MA's), (71, 40935), (80, 40971), (81, 40974), (96, 41076), (99, 41088), (110, 41133), (114, 41154), (122, 41187), (143, 41301), (145, 41313),

Gene: Jedediah_99 Start: 41411, Stop: 41854, Start Num: 63

Candidate Starts for Jedediah_99:

(Start: 63 @41411 has 59 MA's), (71, 41435), (80, 41471), (81, 41474), (96, 41576), (99, 41588), (110, 41633), (114, 41654), (122, 41687), (143, 41801), (145, 41813),

Gene: Jemmno_96 Start: 40861, Stop: 41304, Start Num: 63

Candidate Starts for Jemmno_96:

(Start: 63 @40861 has 59 MA's), (71, 40885), (80, 40921), (81, 40924), (96, 41026), (99, 41038), (110, 41083), (114, 41104), (122, 41137), (143, 41251), (145, 41263),

Gene: JigglyPuff_102 Start: 43130, Stop: 43513, Start Num: 80

Candidate Starts for JigglyPuff_102:

(Start: 63 @43070 has 59 MA's), (71, 43094), (80, 43130), (81, 43133), (96, 43235), (99, 43247), (110, 43292), (114, 43313), (122, 43346), (143, 43460), (145, 43472),

Gene: JulietS_89 Start: 38478, Stop: 38861, Start Num: 80

Candidate Starts for JulietS_89:

(Start: 63 @38418 has 59 MA's), (71, 38442), (80, 38478), (81, 38481), (96, 38583), (99, 38595), (110, 38640), (114, 38661), (122, 38694), (143, 38808), (145, 38820),

Gene: JustHall_92 Start: 40063, Stop: 40506, Start Num: 63

Candidate Starts for JustHall_92:

(Start: 63 @40063 has 59 MA's), (71, 40087), (80, 40123), (81, 40126), (96, 40228), (99, 40240), (110, 40285), (114, 40306), (122, 40339), (143, 40453), (145, 40465),

Gene: Kboogie_99 Start: 39707, Stop: 40150, Start Num: 63

Candidate Starts for Kboogie_99:

(Start: 63 @39707 has 59 MA's), (71, 39731), (80, 39767), (81, 39770), (96, 39872), (99, 39884), (110, 39929), (114, 39950), (122, 39983), (143, 40097), (145, 40109),

Gene: Koguma_92 Start: 38638, Stop: 39081, Start Num: 63

Candidate Starts for Koguma_92:

(Start: 63 @38638 has 59 MA's), (71, 38662), (80, 38698), (81, 38701), (96, 38803), (99, 38815), (110, 38860), (114, 38881), (122, 38914), (143, 39028), (145, 39040),

Gene: Kumotta_56 Start: 32485, Stop: 32964, Start Num: 52

Candidate Starts for Kumotta_56:

(26, 32380), (50, 32479), (Start: 52 @32485 has 3 MA's), (101, 32686), (105, 32701), (114, 32743), (130, 32827),

Gene: Kwobi_50 Start: 42725, Stop: 43243, Start Num: 44

Candidate Starts for Kwobi_50:

(Start: 44 @42725 has 5 MA's), (55, 42755), (98, 42941), (118, 43031), (122, 43043),

Gene: LRRHood_90 Start: 40457, Stop: 40900, Start Num: 63

Candidate Starts for LRRHood_90:

(Start: 63 @40457 has 59 MA's), (71, 40481), (80, 40517), (81, 40520), (96, 40622), (99, 40634), (110, 40679), (114, 40700), (122, 40733), (143, 40847), (145, 40859),

Gene: Latch_96 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Latch_96:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: LifeSavor_95 Start: 40843, Stop: 41286, Start Num: 63

Candidate Starts for LifeSavor_95:

(Start: 63 @40843 has 59 MA's), (71, 40867), (80, 40903), (81, 40906), (96, 41008), (99, 41020), (110, 41065), (114, 41086), (122, 41119), (143, 41233), (145, 41245),

Gene: Manda_84 Start: 52535, Stop: 52981, Start Num: 58

Candidate Starts for Manda_84:

(49, 52511), (Start: 58 @52535 has 5 MA's), (75, 52589), (106, 52748), (114, 52787), (117, 52808), (141, 52919),

Gene: McGee_97 Start: 39339, Stop: 39782, Start Num: 63

Candidate Starts for McGee_97:

(Start: 63 @39339 has 59 MA's), (71, 39363), (80, 39399), (81, 39402), (96, 39504), (99, 39516), (110, 39561), (114, 39582), (122, 39615), (143, 39729), (145, 39741),

Gene: MiaZeal_116 Start: 63594, Stop: 64151, Start Num: 39

Candidate Starts for MiaZeal_116:

(27, 63534), (Start: 30 @63549 has 2 MA's), (Start: 39 @63594 has 5 MA's), (60, 63645), (88, 63756), (118, 63885), (126, 63915), (129, 63927), (138, 63975), (139, 63978),

Gene: Mojarita_45 Start: 30760, Stop: 31281, Start Num: 46

Candidate Starts for Mojarita_45:

(Start: 46 @30760 has 3 MA's), (123, 31048), (132, 31099), (138, 31132), (140, 31138), (145, 31168),

Gene: Momo_95 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Momo_95:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: Myrna_95 Start: 42678, Stop: 43148, Start Num: 51

Candidate Starts for Myrna_95:

(18, 42480), (Start: 51 @42678 has 3 MA's), (65, 42711), (69, 42726), (76, 42756), (81, 42771), (84, 42798), (95, 42858), (96, 42873), (97, 42876), (99, 42885), (131, 43035), (145, 43107), (149, 43137),

Gene: Naija_95 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Naija_95:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: Nappy_98 Start: 41881, Stop: 42324, Start Num: 63

Candidate Starts for Nappy_98:

(Start: 63 @41881 has 59 MA's), (71, 41905), (80, 41941), (81, 41944), (96, 42046), (99, 42058), (110, 42103), (114, 42124), (122, 42157), (143, 42271), (145, 42283),

Gene: Nebkiss_18 Start: 16946, Stop: 17431, Start Num: 61

Candidate Starts for Nebkiss_18:

(Start: 61 @16946 has 2 MA's), (66, 16955), (109, 17171), (116, 17210), (118, 17219), (129, 17270), (147, 17369),

Gene: Ngannou_92 Start: 39137, Stop: 39580, Start Num: 63

Candidate Starts for Ngannou_92:

(Start: 63 @39137 has 59 MA's), (71, 39161), (80, 39197), (81, 39200), (96, 39302), (99, 39314), (110, 39359), (114, 39380), (122, 39413), (143, 39527), (145, 39539),

Gene: PapayaSalad_44 Start: 30268, Stop: 30774, Start Num: 37

Candidate Starts for PapayaSalad_44:

(Start: 37 @30268 has 2 MA's), (Start: 52 @30304 has 3 MA's), (118, 30562), (123, 30580), (128, 30601),

Gene: Patter_96 Start: 40172, Stop: 40615, Start Num: 63

Candidate Starts for Patter_96:

(Start: 63 @40172 has 59 MA's), (71, 40196), (80, 40232), (81, 40235), (96, 40337), (99, 40349), (110, 40394), (114, 40415), (122, 40448), (143, 40562), (145, 40574),

Gene: Phlegm_98 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Phlegm_98:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: Phusco_96 Start: 40920, Stop: 41363, Start Num: 63

Candidate Starts for Phusco_96:

(Start: 63 @40920 has 59 MA's), (71, 40944), (80, 40980), (81, 40983), (96, 41085), (99, 41097), (110, 41142), (114, 41163), (122, 41196), (143, 41310), (145, 41322),

Gene: Picard_45 Start: 30958, Stop: 31479, Start Num: 46

Candidate Starts for Picard_45:

(Start: 46 @30958 has 3 MA's), (123, 31246), (140, 31336), (145, 31366), (151, 31432),

Gene: Pivoine_95 Start: 40155, Stop: 40598, Start Num: 63

Candidate Starts for Pivoine_95:

(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: Quasimodo_96 Start: 40685, Stop: 41128, Start Num: 63

Candidate Starts for Quasimodo_96:

(Start: 63 @40685 has 59 MA's), (71, 40709), (80, 40745), (81, 40748), (96, 40850), (99, 40862), (110, 40907), (114, 40928), (122, 40961), (143, 41075), (145, 41087),

Gene: Rahel_95 Start: 40512, Stop: 40955, Start Num: 63

Candidate Starts for Rahel_95:

(Start: 63 @40512 has 59 MA's), (71, 40536), (80, 40572), (81, 40575), (96, 40677), (99, 40689), (110, 40734), (114, 40755), (122, 40788), (143, 40902), (145, 40914),

Gene: Raleigh_43 Start: 33449, Stop: 33964, Start Num: 45

Candidate Starts for Raleigh_43:

(Start: 45 @33449 has 4 MA's), (66, 33488), (122, 33728), (123, 33734),

Gene: Ronan_89 Start: 37956, Stop: 38399, Start Num: 63

Candidate Starts for Ronan_89:

(Start: 63 @37956 has 59 MA's), (71, 37980), (80, 38016), (81, 38019), (96, 38121), (99, 38133), (110, 38178), (114, 38199), (122, 38232), (143, 38346), (145, 38358),

Gene: SV1_42 Start: 29657, Stop: 30169, Start Num: 48

Candidate Starts for SV1_42:

(Start: 48 @29657 has 1 MA's), (111, 29882), (131, 29981), (138, 30020), (140, 30026), (145, 30056),

Gene: SadLad_28 Start: 14537, Stop: 14064, Start Num: 119

Candidate Starts for SadLad_28:

(1, 15395), (2, 15374), (3, 15371), (4, 15356), (5, 15353), (6, 15335), (7, 15299), (8, 15278), (11, 15239), (12, 15185), (13, 15182), (14, 15173), (15, 15155), (17, 15065), (20, 15011), (24, 14957), (31, 14912), (38, 14870), (42, 14864), (Start: 56 @14822 has 1 MA's), (Start: 59 @14816 has 1 MA's), (67, 14798), (68, 14792), (73, 14780), (77, 14759), (78, 14756), (85, 14705), (89, 14693), (91, 14681), (94, 14660), (102, 14621), (113, 14564), (Start: 119 @14537 has 1 MA's), (144, 14405), (146, 14387), (152, 14321), (155, 14282), (156, 14258), (157, 14249), (158, 14168),

Gene: Saronaya_49 Start: 42016, Stop: 42534, Start Num: 44

Candidate Starts for Saronaya_49:

(Start: 44 @42016 has 5 MA's), (55, 42046), (98, 42232), (118, 42322), (122, 42334), (153, 42529),

Gene: Sauce_96 Start: 40004, Stop: 40447, Start Num: 63

Candidate Starts for Sauce_96:

(Start: 63 @40004 has 59 MA's), (71, 40028), (80, 40064), (81, 40067), (96, 40169), (99, 40181), (110, 40226), (114, 40247), (122, 40280), (143, 40394), (145, 40406),

Gene: Sebata_97 Start: 41640, Stop: 42083, Start Num: 63

Candidate Starts for Sebata_97:

(Start: 63 @41640 has 59 MA's), (71, 41664), (80, 41700), (81, 41703), (96, 41805), (99, 41817), (110, 41862), (114, 41883), (122, 41916), (143, 42030), (145, 42042),

Gene: Sedona_50 Start: 43310, Stop: 43828, Start Num: 44

Candidate Starts for Sedona_50:

(Start: 44 @43310 has 5 MA's), (55, 43340), (98, 43526), (118, 43616), (122, 43628),

Gene: Shaqnato_88 Start: 38879, Stop: 39322, Start Num: 63
Candidate Starts for Shaqnato_88:
(Start: 63 @38879 has 59 MA's), (71, 38903), (80, 38939), (81, 38942), (96, 39044), (99, 39056), (110, 39101), (114, 39122), (122, 39155), (143, 39269), (145, 39281),

Gene: Shnickers_96 Start: 40911, Stop: 41354, Start Num: 63
Candidate Starts for Shnickers_96:
(Start: 63 @40911 has 59 MA's), (71, 40935), (80, 40971), (81, 40974), (96, 41076), (99, 41088), (110, 41133), (114, 41154), (122, 41187), (143, 41301), (145, 41313),

Gene: SilverDipper_97 Start: 40155, Stop: 40598, Start Num: 63
Candidate Starts for SilverDipper_97:
(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110, 40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: SmallFry_96 Start: 40106, Stop: 40549, Start Num: 63
Candidate Starts for SmallFry_96:
(Start: 63 @40106 has 59 MA's), (71, 40130), (80, 40166), (81, 40169), (96, 40271), (99, 40283), (110, 40328), (114, 40349), (122, 40382), (143, 40496), (145, 40508),

Gene: SoJo_43 Start: 31466, Stop: 31978, Start Num: 46
Candidate Starts for SoJo_43:
(Start: 46 @31466 has 3 MA's), (70, 31523), (132, 31799), (145, 31868),

Gene: SophKB_98 Start: 59438, Stop: 59899, Start Num: 58
Candidate Starts for SophKB_98:
(Start: 58 @59438 has 5 MA's), (72, 59474), (95, 59594), (106, 59651), (114, 59690), (115, 59696),

Gene: Sprinklers_91 Start: 39376, Stop: 39819, Start Num: 63
Candidate Starts for Sprinklers_91:
(Start: 63 @39376 has 59 MA's), (71, 39400), (80, 39436), (81, 39439), (96, 39541), (99, 39553), (110, 39598), (114, 39619), (122, 39652), (143, 39766), (145, 39778),

Gene: Squint_114 Start: 63713, Stop: 64345, Start Num: 39
Candidate Starts for Squint_114:
(21, 63590), (27, 63653), (Start: 30 @63668 has 2 MA's), (Start: 39 @63713 has 5 MA's), (60, 63764), (88, 63875), (118, 64004), (126, 64034), (129, 64046), (138, 64094), (139, 64097),

Gene: StubbySaigey_98 Start: 39443, Stop: 39886, Start Num: 63
Candidate Starts for StubbySaigey_98:
(Start: 63 @39443 has 59 MA's), (71, 39467), (80, 39503), (81, 39506), (96, 39608), (99, 39620), (110, 39665), (114, 39686), (122, 39719), (143, 39833), (145, 39845),

Gene: Superphikiman_163 Start: 84350, Stop: 84877, Start Num: 36
Candidate Starts for Superphikiman_163:
(Start: 30 @84308 has 2 MA's), (Start: 36 @84350 has 1 MA's), (Start: 43 @84365 has 1 MA's), (104, 84587), (118, 84644), (124, 84665),

Gene: Superphikiman_113 Start: 62804, Stop: 63436, Start Num: 39
Candidate Starts for Superphikiman_113:
(21, 62681), (27, 62744), (Start: 30 @62759 has 2 MA's), (Start: 39 @62804 has 5 MA's), (60, 62855), (88, 62966), (118, 63095), (126, 63125), (129, 63137), (138, 63185), (139, 63188),

Gene: ToastyFinz_42 Start: 32290, Stop: 32811, Start Num: 45
Candidate Starts for ToastyFinz_42:
(18, 32113), (28, 32227), (Start: 45 @32290 has 4 MA's), (80, 32383), (123, 32578), (132, 32629),
(140, 32668), (145, 32698),

Gene: Trinitium_92 Start: 39181, Stop: 39624, Start Num: 63
Candidate Starts for Trinitium_92:
(Start: 63 @39181 has 59 MA's), (71, 39205), (80, 39241), (81, 39244), (96, 39346), (99, 39358), (110,
39403), (114, 39424), (122, 39457), (143, 39571), (145, 39583),

Gene: ValleyTerrace_96 Start: 40155, Stop: 40598, Start Num: 63
Candidate Starts for ValleyTerrace_96:
(Start: 63 @40155 has 59 MA's), (71, 40179), (80, 40215), (81, 40218), (96, 40320), (99, 40332), (110,
40377), (114, 40398), (122, 40431), (143, 40545), (145, 40557),

Gene: WillSterrel_87 Start: 51270, Stop: 51782, Start Num: 47
Candidate Starts for WillSterrel_87:
(Start: 45 @51267 has 4 MA's), (Start: 47 @51270 has 1 MA's), (72, 51330), (106, 51507), (117,
51567), (136, 51654), (147, 51720), (150, 51753),

Gene: Yassified_92 Start: 39414, Stop: 39857, Start Num: 63
Candidate Starts for Yassified_92:
(Start: 63 @39414 has 59 MA's), (71, 39438), (80, 39474), (81, 39477), (96, 39579), (99, 39591), (110,
39636), (114, 39657), (122, 39690), (143, 39804), (145, 39816),

Gene: YorkOnyx_50 Start: 42214, Stop: 42732, Start Num: 44
Candidate Starts for YorkOnyx_50:
(Start: 44 @42214 has 5 MA's), (55, 42244), (98, 42430), (118, 42520), (122, 42532),

Gene: YoungMoneyMata_96 Start: 39906, Stop: 40349, Start Num: 63
Candidate Starts for YoungMoneyMata_96:
(Start: 63 @39906 has 59 MA's), (71, 39930), (80, 39966), (81, 39969), (96, 40071), (99, 40083), (110,
40128), (114, 40149), (122, 40182), (143, 40296), (145, 40308),

Gene: Yvonnetastic_131 Start: 74014, Stop: 74502, Start Num: 40
Candidate Starts for Yvonnetastic_131:
(Start: 40 @74014 has 1 MA's), (64, 74062), (71, 74080), (92, 74179), (120, 74311), (129, 74356),

Gene: phiHau3_61 Start: 41644, Stop: 41168, Start Num: 59
Candidate Starts for phiHau3_61:
(Start: 59 @41644 has 1 MA's), (81, 41575), (103, 41452), (107, 41440), (111, 41416), (114, 41404),
(127, 41344),