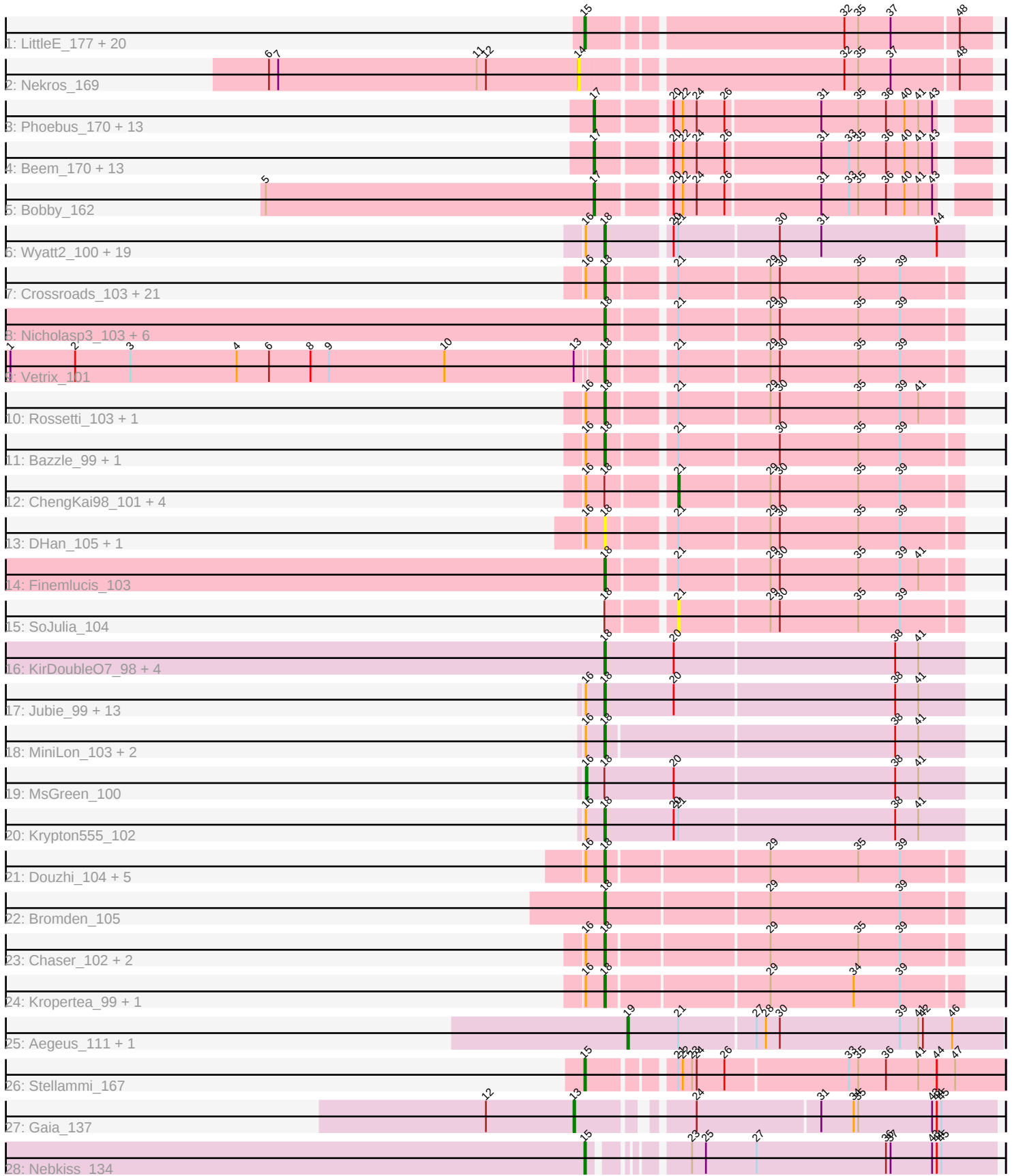


Pham 328760



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 328760 Report

This analysis was run 09/05/26 on database version 662.

Pham number 328760 has 155 members, 33 are drafts.

Phages represented in each track:

- Track 1 : LittleE_177, Lucky2013_166, KashFlow_167, MiaZeal_173, EricMillard_167, Rearden_169, BronnyJames_165, Courthouse_167, Klein_173, Omega_179, Superphikiman_168, Hannaconda_162, Nibley_163, Squint_165, Porcelain_170, Shaboozey_168, ThreeRngTarjay_166, Bagrid_178, Ariel_170, Wanda_167, Gonephishing_163
- Track 2 : Nekros_169
- Track 3 : Phoebus_170, HokkenD_164, Dove_156, Minerva_169, Kalah2_166, Bombitas_156, Halley_170, Schatzie_164, Yeet_161, JuicyJay_164, Thibault_153, Redno2_163, Dallas_169, NihilNomen_171
- Track 4 : Beem_170, BAKA_175, DmpstrDiver_171, Ejimix_160, Constella_165, Zelink_162, Xiaokay_165, Odette_173, Optimus_168, Marleymoo_156, Hidrated_159, Duke13_172, Hughesyang_168, Pound_163
- Track 5 : Bobby_162
- Track 6 : Wyatt2_100, JoeDirt_100, Appletree2_97, Silverleaf_97, Rose5_100, UPIE_98, LeBron_98, CicholasNage_95, Zaria_100, Halena_97, Acquire49_99, DirkDirk_95, Calm_101, MACKerman_98, Enceladus_95, AvadaKedavra_99, OhShagHennessy_94, Tyson_101, Wamburggrxpress_97, Poochiewood_96
- Track 7 : Crossroads_103, DrSeegs_101, OverPar_104, LilDestine_100, DanBing_102, Baoshan_103, Miley16_102, Hiraya_100, Wigglewiggles_101, Loadrie_100, GuuelaD_98, Breezona_102, Itos_102, Lynnae_103, Zakai_103, Gabriela_102, BobsGarage_101, Winky_102, Faith1_101, Wilder_102, BigCheese_101, Claus_101
- Track 8 : Nicholasp3_103, Underpass_95, MkaliMitinis3_103, Kahlid_102, Gardann_102, Rumpelstiltskin_99, Netyap_100
- Track 9 : Vetrix_101
- Track 10 : Rossetti_103, Tourach_103
- Track 11 : Bazzle_99, Archie_99
- Track 12 : ChengKai98_101, Sarshaun_102, Lewan_102, Molivier_92, Soap141_101
- Track 13 : DHan_105, ZhongYanYuan_99
- Track 14 : Finemlucis_103
- Track 15 : SoJulia_104
- Track 16 : KirDoubleO7_98, Ellson_99, DuncansLeg_101, BourbonZero_101, LiyuLake_99
- Track 17 : Jubie_99, Kingsolomon_97, Moostard_96, Snenia_98, Nicholas_97, Jobypre_99, Red305_100, Clautastrophe_98, Lumos_99, Bellis_100, Samty_99, Whirlwind_100, Finnry_100, TriFive_100

- Track 18 : MiniLon_103, Lolly9_98, MiniMac_103
- Track 19 : MsGreen_100
- Track 20 : Krypton555_102
- Track 21 : Douzhi_104, Sheng711_105, PYPDinur_104, Quby_104, BrainDrainer_105, Douge_104
- Track 22 : Bromden_105
- Track 23 : Chaser_102, FarmResident_105, ChutneyChips_105
- Track 24 : Kropertea_99, DyoEdafos_106
- Track 25 : Aegeus_111, Baudelaire_111
- Track 26 : Stellammi_167
- Track 27 : Gaia_137
- Track 28 : Nebkiss_134

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 74 of the 122 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_99, Appletree2_97, Archie_99, AvadaKedavra_99, Baoshan_103, Bazzle_99, Bellis_100, BigCheese_101, BobsGarage_101, BourbonZero_101, BrainDrainer_105, Breezona_102, Bromden_105, Calm_101, Chaser_102, ChutneyChips_105, CicholasNage_95, Claus_101, Clautastrophe_98, Crossroads_103, DHan_105, DanBing_102, DirkDirk_95, Douge_104, Douzhi_104, DrSeegs_101, DuncansLeg_101, DyoEdafos_106, Ellson_99, Enceladus_95, Faith1_101, FarmResident_105, Finemlucis_103, Finnry_100, Gabriela_102, Gardann_102, GuuelaD_98, Halena_97, Hiraya_100, Itos_102, Jobypre_99, JoeDirt_100, Jubie_99, Kahlid_102, Kingsolomon_97, KirDoubleO7_98, Kropertea_99, Krypton555_102, LeBron_98, LilDestine_100, LiyuLake_99, Loadrie_100, Lolly9_98, Lumos_99, Lynnae_103, MAckerman_98, Miley16_102, MiniLon_103, MiniMac_103, MkaliMitinis3_103, Moostard_96, Netyap_100, Nicholas_97, Nicholasp3_103, OhShagHennessy_94, OverPar_104, PYPDinur_104, Poochiewood_96, Quby_104, Red305_100, Rose5_100, Rossetti_103, Rumpelstiltskin_99, Samty_99, Sheng711_105, Silverleaf_97, Snenia_98, Tourach_103, TriFive_100, Tyson_101, UPIE_98, Underpass_95, Vetrix_101, Wamburgxpress_97, Whirlwind_100, Wigglewiggle_101, Wilder_102, Winky_102, Wyatt2_100, Zakai_103, Zaria_100, ZhongYanYuan_99,

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

- ChengKai98_101, Lewan_102, Molivier_92, MsGreen_100, Sarshaun_102, SoJulia_104, Soap141_101,

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

- Aegeus_111, Ariel_170, BAKA_175, Bagrid_178, Baudelaire_111, Beem_170, Bobby_162, Bombitas_156, BronnyJames_165, Constella_165, Courthouse_167, Dallas_169, DmpstrDiver_171, Dove_156, Duke13_172, Ejimix_160, EricMillard_167, Gaia_137, Gonephishing_163, Halley_170, Hannaconda_162, Hidrated_159, HokkenD_164, Hughesyang_168, JuicyJay_164, Kalah2_166, KashFlow_167, Klein_173, LittleE_177, Lucky2013_166, Marleymoo_156, MiaZeal_173, Minerva_169, Nebkiss_134, Nekros_169, Nibley_163, NihilNomen_171, Odette_173,

Omega_179, Optimus_168, Phoebus_170, Porcelain_170, Pound_163, Rearden_169, Redno2_163, Schatzie_164, Shaboozey_168, Squint_165, Stellammi_167, Superphikiman_168, Thibault_153, ThreeRngTarjay_166, Wanda_167, Xiaokay_165, Yeet_161, Zelink_162,

Summary by start number:

Start 13:

- Found in 2 of 155 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gaia_137 (X),

Start 14:

- Found in 1 of 155 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nekros_169 (J),

Start 15:

- Found in 23 of 155 (14.8%) of genes in pham
- Manual Annotations of this start: 17 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel_170 (J), Bagrid_178 (J), BronnyJames_165 (J), Courthouse_167 (J), EricMillard_167 (J), Gonephishing_163 (J), Hannaconda_162 (J), KashFlow_167 (J), Klein_173 (J), LittleE_177 (J), Lucky2013_166 (J), MiaZeal_173 (J), Nebkiss_134 (X), Nibley_163 (J), Omega_179 (J), Porcelain_170 (J), Rearden_169 (J), Shaboozey_168 (J), Squint_165 (J), Stellammi_167 (UNK), Superphikiman_168 (J), ThreeRngTarjay_166 (J), Wanda_167 (J),

Start 16:

- Found in 83 of 155 (53.5%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 1.2% of time when present
- Phage (with cluster) where this start called: MsGreen_100 (L3),

Start 17:

- Found in 29 of 155 (18.7%) of genes in pham
- Manual Annotations of this start: 26 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA_175 (J), Beem_170 (J), Bobby_162 (J), Bombitas_156 (J), Constella_165 (J), Dallas_169 (J), DmpstrDiver_171 (J), Dove_156 (J), Duke13_172 (J), Ejimix_160 (J), Halley_170 (J), Hidrated_159 (J), HokkenD_164 (J), Hughesyang_168 (J), JuicyJay_164 (J), Kalah2_166 (J), Marleymoo_156 (J), Minerva_169 (J), NihilNomen_171 (J), Odette_173 (J), Optimus_168 (J), Phoebus_170 (J), Pound_163 (J), Redno2_163 (J), Schatzie_164 (J), Thibault_153 (J), Xiaokay_165 (J), Yeet_161 (J), Zelink_162 (J),

Start 18:

- Found in 99 of 155 (63.9%) of genes in pham
- Manual Annotations of this start: 74 of 122
- Called 92.9% of time when present

- Phage (with cluster) where this start called: Acquire49_99 (L1), AppleTree2_97 (L1), Archie_99 (L2), AvadaKedavra_99 (L1), Baoshan_103 (L2), Bazzle_99 (L2), Bellis_100 (L3), BigCheese_101 (L2), BobsGarage_101 (L2), BourbonZero_101 (L3), BrainDrainer_105 (L4), Breezonia_102 (L2), Bromden_105 (L4), Calm_101 (L1), Chaser_102 (L4), ChutneyChips_105 (L4), CicholasNage_95 (L1), Claus_101 (L2), Clautastrophe_98 (L3), Crossroads_103 (L2), DHan_105 (L2), DanBing_102 (L2), DirkDirk_95 (L1), Douge_104 (L4), Douzhi_104 (L4), DrSeegs_101 (L2), DuncansLeg_101 (L3), DyoEdafos_106 (L4), Ellson_99 (L3), Enceladus_95 (L1), Faith1_101 (L2), FarmResident_105 (L4), Finemlucis_103 (L2), Finnry_100 (L3), Gabriela_102 (L2), Gardann_102 (L2), GuuelaD_98 (L2), Halena_97 (L1), Hiraya_100 (L2), Itos_102 (L2), Jobypre_99 (L3), JoeDirt_100 (L1), Jubie_99 (L3), Kahlid_102 (L2), Kingsolomon_97 (L3), KirDoubleO7_98 (L3), Kropertea_99 (L4), Krypton555_102 (L3), LeBron_98 (L1), LilDestine_100 (L2), LiyuLake_99 (L3), Loadrie_100 (L2), Lolly9_98 (L3), Lumos_99 (L3), Lynnae_103 (L2), MAckerman_98 (L1), MileY16_102 (L2), MiniLon_103 (L3), MiniMac_103 (L3), MkaliMitinis3_103 (L2), Moostard_96 (L3), Netyap_100 (L2), Nicholas_97 (L3), Nicholasp3_103 (L2), OhShagHennessy_94 (L1), OverPar_104 (L2), PYPDinur_104 (L4), Poochiewood_96 (L1), Quby_104 (L4), Red305_100 (L3), Rose5_100 (L1), Rossetti_103 (L2), Rumpelstiltskin_99 (L2), Samty_99 (L3), Sheng711_105 (L4), Silverleaf_97 (L1), Snenia_98 (L3), Tourach_103 (L2), TriFive_100 (L3), Tyson_101 (L1), UPIE_98 (L1), Underpass_95 (L2), Vetrix_101 (L2), Wamburggrxpress_97 (L1), Whirlwind_100 (L3), Wigglewiggles_101 (L2), Wilder_102 (L2), Winky_102 (L2), Wyatt2_100 (L1), Zakai_103 (L2), Zaria_100 (L1), ZhongYanYuan_99 (L2),

Start 19:

- Found in 2 of 155 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aegeus_111 (L5), Baudelaire_111 (L5),

Start 21:

- Found in 67 of 155 (43.2%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 9.0% of time when present
- Phage (with cluster) where this start called: ChengKai98_101 (L2), Lewan_102 (L2), Molivier_92 (L2), Sarshaun_102 (L2), SoJulia_104 (L2), Soap141_101 (L2),

Summary by clusters:

There are 8 clusters represented in this pham: J, L4, L5, L2, L3, L1, X, UNK,

Info for manual annotations of cluster J:

- Start number 15 was manually annotated 15 times for cluster J.
- Start number 17 was manually annotated 26 times for cluster J.

Info for manual annotations of cluster L1:

- Start number 18 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 18 was manually annotated 31 times for cluster L2.
- Start number 21 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

- Start number 16 was manually annotated 1 time for cluster L3.
- Start number 18 was manually annotated 18 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 18 was manually annotated 6 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 19 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster UNK:

- Start number 15 was manually annotated 1 time for cluster UNK.

Info for manual annotations of cluster X:

- Start number 13 was manually annotated 1 time for cluster X.
- Start number 15 was manually annotated 1 time for cluster X.

Gene Information:

Gene: Acquire49_99 Start: 60543, Stop: 60767, Start Num: 18

Candidate Starts for Acquire49_99:

(Start: 16 @60531 has 1 MA's), (Start: 18 @60543 has 74 MA's), (20, 60582), (Start: 21 @60585 has 1 MA's), (30, 60648), (31, 60675), (44, 60750),

Gene: Aegeus_111 Start: 63785, Stop: 64024, Start Num: 19

Candidate Starts for Aegeus_111:

(Start: 19 @63785 has 2 MA's), (Start: 21 @63818 has 1 MA's), (27, 63866), (28, 63872), (30, 63881), (39, 63959), (41, 63971), (42, 63974), (46, 63992),

Gene: Appletree2_97 Start: 60133, Stop: 60357, Start Num: 18

Candidate Starts for Appletree2_97:

(Start: 16 @60121 has 1 MA's), (Start: 18 @60133 has 74 MA's), (20, 60172), (Start: 21 @60175 has 1 MA's), (30, 60238), (31, 60265), (44, 60340),

Gene: Archie_99 Start: 61717, Stop: 61935, Start Num: 18

Candidate Starts for Archie_99:

(Start: 16 @61705 has 1 MA's), (Start: 18 @61717 has 74 MA's), (Start: 21 @61756 has 1 MA's), (30, 61819), (35, 61870), (39, 61897),

Gene: Ariel_170 Start: 87126, Stop: 87374, Start Num: 15

Candidate Starts for Ariel_170:

(Start: 15 @87126 has 17 MA's), (32, 87282), (35, 87291), (37, 87312), (48, 87354),

Gene: AvadaKedavra_99 Start: 60655, Stop: 60879, Start Num: 18

Candidate Starts for AvadaKedavra_99:

(Start: 16 @60643 has 1 MA's), (Start: 18 @60655 has 74 MA's), (20, 60694), (Start: 21 @60697 has 1 MA's), (30, 60760), (31, 60787), (44, 60862),

Gene: BAKA_175 Start: 91948, Stop: 92181, Start Num: 17

Candidate Starts for BAKA_175:

(Start: 17 @91948 has 26 MA's), (20, 91990), (22, 91996), (24, 92005), (26, 92023), (31, 92083), (33, 92101), (35, 92107), (36, 92125), (40, 92137), (41, 92146), (43, 92155),

Gene: Bagrid_178 Start: 92406, Stop: 92654, Start Num: 15

Candidate Starts for Bagrid_178:

(Start: 15 @92406 has 17 MA's), (32, 92562), (35, 92571), (37, 92592), (48, 92634),

Gene: Baoshan_103 Start: 62502, Stop: 62720, Start Num: 18

Candidate Starts for Baoshan_103:

(Start: 16 @62490 has 1 MA's), (Start: 18 @62502 has 74 MA's), (Start: 21 @62541 has 1 MA's), (29, 62598), (30, 62604), (35, 62655), (39, 62682),

Gene: Baudelaire_111 Start: 63785, Stop: 64024, Start Num: 19

Candidate Starts for Baudelaire_111:

(Start: 19 @63785 has 2 MA's), (Start: 21 @63818 has 1 MA's), (27, 63866), (28, 63872), (30, 63881), (39, 63959), (41, 63971), (42, 63974), (46, 63992),

Gene: Bazzle_99 Start: 62273, Stop: 62491, Start Num: 18

Candidate Starts for Bazzle_99:

(Start: 16 @62261 has 1 MA's), (Start: 18 @62273 has 74 MA's), (Start: 21 @62312 has 1 MA's), (30, 62375), (35, 62426), (39, 62453),

Gene: Beem_170 Start: 91103, Stop: 91336, Start Num: 17

Candidate Starts for Beem_170:

(Start: 17 @91103 has 26 MA's), (20, 91145), (22, 91151), (24, 91160), (26, 91178), (31, 91238), (33, 91256), (35, 91262), (36, 91280), (40, 91292), (41, 91301), (43, 91310),

Gene: Bellis_100 Start: 62047, Stop: 62277, Start Num: 18

Candidate Starts for Bellis_100:

(Start: 16 @62035 has 1 MA's), (Start: 18 @62047 has 74 MA's), (20, 62092), (38, 62233), (41, 62248),

Gene: BigCheese_101 Start: 62491, Stop: 62709, Start Num: 18

Candidate Starts for BigCheese_101:

(Start: 16 @62479 has 1 MA's), (Start: 18 @62491 has 74 MA's), (Start: 21 @62530 has 1 MA's), (29, 62587), (30, 62593), (35, 62644), (39, 62671),

Gene: Bobby_162 Start: 92095, Stop: 92328, Start Num: 17

Candidate Starts for Bobby_162:

(5, 91882), (Start: 17 @92095 has 26 MA's), (20, 92137), (22, 92143), (24, 92152), (26, 92170), (31, 92230), (33, 92248), (35, 92254), (36, 92272), (40, 92284), (41, 92293), (43, 92302),

Gene: BobsGarage_101 Start: 62491, Stop: 62709, Start Num: 18

Candidate Starts for BobsGarage_101:

(Start: 16 @62479 has 1 MA's), (Start: 18 @62491 has 74 MA's), (Start: 21 @62530 has 1 MA's), (29, 62587), (30, 62593), (35, 62644), (39, 62671),

Gene: Bombitas_156 Start: 87333, Stop: 87566, Start Num: 17

Candidate Starts for Bombitas_156:

(Start: 17 @87333 has 26 MA's), (20, 87375), (22, 87381), (24, 87390), (26, 87408), (31, 87468), (35, 87492), (36, 87510), (40, 87522), (41, 87531), (43, 87540),

Gene: BourbonZero_101 Start: 62227, Stop: 62457, Start Num: 18

Candidate Starts for BourbonZero_101:

(Start: 18 @62227 has 74 MA's), (20, 62272), (38, 62413), (41, 62428),

Gene: BrainDrainer_105 Start: 62537, Stop: 62758, Start Num: 18
Candidate Starts for BrainDrainer_105:
(Start: 16 @62525 has 1 MA's), (Start: 18 @62537 has 74 MA's), (29, 62636), (35, 62693), (39, 62720),

Gene: Breezona_102 Start: 62826, Stop: 63044, Start Num: 18
Candidate Starts for Breezona_102:
(Start: 16 @62814 has 1 MA's), (Start: 18 @62826 has 74 MA's), (Start: 21 @62865 has 1 MA's), (29, 62922), (30, 62928), (35, 62979), (39, 63006),

Gene: Bromden_105 Start: 63686, Stop: 63910, Start Num: 18
Candidate Starts for Bromden_105:
(Start: 18 @63686 has 74 MA's), (29, 63788), (39, 63872),

Gene: BronnyJames_165 Start: 87172, Stop: 87420, Start Num: 15
Candidate Starts for BronnyJames_165:
(Start: 15 @87172 has 17 MA's), (32, 87328), (35, 87337), (37, 87358), (48, 87400),

Gene: Calm_101 Start: 60922, Stop: 61146, Start Num: 18
Candidate Starts for Calm_101:
(Start: 16 @60910 has 1 MA's), (Start: 18 @60922 has 74 MA's), (20, 60961), (Start: 21 @60964 has 1 MA's), (30, 61027), (31, 61054), (44, 61129),

Gene: Chaser_102 Start: 61886, Stop: 62107, Start Num: 18
Candidate Starts for Chaser_102:
(Start: 16 @61874 has 1 MA's), (Start: 18 @61886 has 74 MA's), (29, 61985), (35, 62042), (39, 62069),

Gene: ChengKai98_101 Start: 61956, Stop: 62135, Start Num: 21
Candidate Starts for ChengKai98_101:
(Start: 16 @61905 has 1 MA's), (Start: 18 @61917 has 74 MA's), (Start: 21 @61956 has 1 MA's), (29, 62013), (30, 62019), (35, 62070), (39, 62097),

Gene: ChutneyChips_105 Start: 62612, Stop: 62833, Start Num: 18
Candidate Starts for ChutneyChips_105:
(Start: 16 @62600 has 1 MA's), (Start: 18 @62612 has 74 MA's), (29, 62711), (35, 62768), (39, 62795),

Gene: CicholasNage_95 Start: 60037, Stop: 60261, Start Num: 18
Candidate Starts for CicholasNage_95:
(Start: 16 @60025 has 1 MA's), (Start: 18 @60037 has 74 MA's), (20, 60076), (Start: 21 @60079 has 1 MA's), (30, 60142), (31, 60169), (44, 60244),

Gene: Claus_101 Start: 62312, Stop: 62530, Start Num: 18
Candidate Starts for Claus_101:
(Start: 16 @62300 has 1 MA's), (Start: 18 @62312 has 74 MA's), (Start: 21 @62351 has 1 MA's), (29, 62408), (30, 62414), (35, 62465), (39, 62492),

Gene: Clautastrophe_98 Start: 62042, Stop: 62272, Start Num: 18
Candidate Starts for Clautastrophe_98:
(Start: 16 @62030 has 1 MA's), (Start: 18 @62042 has 74 MA's), (20, 62087), (38, 62228), (41, 62243),

Gene: Constella_165 Start: 89837, Stop: 90070, Start Num: 17
Candidate Starts for Constella_165:
(Start: 17 @89837 has 26 MA's), (20, 89879), (22, 89885), (24, 89894), (26, 89912), (31, 89972), (33, 89990), (35, 89996), (36, 90014), (40, 90026), (41, 90035), (43, 90044),

Gene: Courthouse_167 Start: 87570, Stop: 87818, Start Num: 15
Candidate Starts for Courthouse_167:
(Start: 15 @87570 has 17 MA's), (32, 87726), (35, 87735), (37, 87756), (48, 87798),

Gene: Crossroads_103 Start: 62378, Stop: 62596, Start Num: 18
Candidate Starts for Crossroads_103:
(Start: 16 @62366 has 1 MA's), (Start: 18 @62378 has 74 MA's), (Start: 21 @62417 has 1 MA's), (29, 62474), (30, 62480), (35, 62531), (39, 62558),

Gene: DHan_105 Start: 62730, Stop: 62948, Start Num: 18
Candidate Starts for DHan_105:
(Start: 16 @62718 has 1 MA's), (Start: 18 @62730 has 74 MA's), (Start: 21 @62769 has 1 MA's), (29, 62826), (30, 62832), (35, 62883), (39, 62910),

Gene: Dallas_169 Start: 90326, Stop: 90559, Start Num: 17
Candidate Starts for Dallas_169:
(Start: 17 @90326 has 26 MA's), (20, 90368), (22, 90374), (24, 90383), (26, 90401), (31, 90461), (35, 90485), (36, 90503), (40, 90515), (41, 90524), (43, 90533),

Gene: DanBing_102 Start: 62194, Stop: 62412, Start Num: 18
Candidate Starts for DanBing_102:
(Start: 16 @62182 has 1 MA's), (Start: 18 @62194 has 74 MA's), (Start: 21 @62233 has 1 MA's), (29, 62290), (30, 62296), (35, 62347), (39, 62374),

Gene: DirkDirk_95 Start: 59748, Stop: 59972, Start Num: 18
Candidate Starts for DirkDirk_95:
(Start: 16 @59736 has 1 MA's), (Start: 18 @59748 has 74 MA's), (20, 59787), (Start: 21 @59790 has 1 MA's), (30, 59853), (31, 59880), (44, 59955),

Gene: DmpstrDiver_171 Start: 90021, Stop: 90254, Start Num: 17
Candidate Starts for DmpstrDiver_171:
(Start: 17 @90021 has 26 MA's), (20, 90063), (22, 90069), (24, 90078), (26, 90096), (31, 90156), (33, 90174), (35, 90180), (36, 90198), (40, 90210), (41, 90219), (43, 90228),

Gene: Douge_104 Start: 61957, Stop: 62178, Start Num: 18
Candidate Starts for Douge_104:
(Start: 16 @61945 has 1 MA's), (Start: 18 @61957 has 74 MA's), (29, 62056), (35, 62113), (39, 62140),

Gene: Douzhi_104 Start: 62226, Stop: 62447, Start Num: 18
Candidate Starts for Douzhi_104:
(Start: 16 @62214 has 1 MA's), (Start: 18 @62226 has 74 MA's), (29, 62325), (35, 62382), (39, 62409),

Gene: Dove_156 Start: 85689, Stop: 85922, Start Num: 17
Candidate Starts for Dove_156:
(Start: 17 @85689 has 26 MA's), (20, 85731), (22, 85737), (24, 85746), (26, 85764), (31, 85824), (35, 85848), (36, 85866), (40, 85878), (41, 85887), (43, 85896),

Gene: DrSeegs_101 Start: 62826, Stop: 63044, Start Num: 18
Candidate Starts for DrSeegs_101:
(Start: 16 @62814 has 1 MA's), (Start: 18 @62826 has 74 MA's), (Start: 21 @62865 has 1 MA's), (29, 62922), (30, 62928), (35, 62979), (39, 63006),

Gene: Duke13_172 Start: 90444, Stop: 90677, Start Num: 17

Candidate Starts for Duke13_172:

(Start: 17 @90444 has 26 MA's), (20, 90486), (22, 90492), (24, 90501), (26, 90519), (31, 90579), (33, 90597), (35, 90603), (36, 90621), (40, 90633), (41, 90642), (43, 90651),

Gene: DuncansLeg_101 Start: 62215, Stop: 62445, Start Num: 18

Candidate Starts for DuncansLeg_101:

(Start: 18 @62215 has 74 MA's), (20, 62260), (38, 62401), (41, 62416),

Gene: DyoEdafos_106 Start: 62535, Stop: 62756, Start Num: 18

Candidate Starts for DyoEdafos_106:

(Start: 16 @62523 has 1 MA's), (Start: 18 @62535 has 74 MA's), (29, 62634), (34, 62688), (39, 62718),

Gene: Ejimix_160 Start: 89314, Stop: 89547, Start Num: 17

Candidate Starts for Ejimix_160:

(Start: 17 @89314 has 26 MA's), (20, 89356), (22, 89362), (24, 89371), (26, 89389), (31, 89449), (33, 89467), (35, 89473), (36, 89491), (40, 89503), (41, 89512), (43, 89521),

Gene: Ellson_99 Start: 62530, Stop: 62760, Start Num: 18

Candidate Starts for Ellson_99:

(Start: 18 @62530 has 74 MA's), (20, 62575), (38, 62716), (41, 62731),

Gene: Enceladus_95 Start: 60046, Stop: 60270, Start Num: 18

Candidate Starts for Enceladus_95:

(Start: 16 @60034 has 1 MA's), (Start: 18 @60046 has 74 MA's), (20, 60085), (Start: 21 @60088 has 1 MA's), (30, 60151), (31, 60178), (44, 60253),

Gene: EricMillard_167 Start: 91016, Stop: 91264, Start Num: 15

Candidate Starts for EricMillard_167:

(Start: 15 @91016 has 17 MA's), (32, 91172), (35, 91181), (37, 91202), (48, 91244),

Gene: Faith1_101 Start: 62134, Stop: 62352, Start Num: 18

Candidate Starts for Faith1_101:

(Start: 16 @62122 has 1 MA's), (Start: 18 @62134 has 74 MA's), (Start: 21 @62173 has 1 MA's), (29, 62230), (30, 62236), (35, 62287), (39, 62314),

Gene: FarmResident_105 Start: 62140, Stop: 62361, Start Num: 18

Candidate Starts for FarmResident_105:

(Start: 16 @62128 has 1 MA's), (Start: 18 @62140 has 74 MA's), (29, 62239), (35, 62296), (39, 62323),

Gene: Finemlucis_103 Start: 63293, Stop: 63511, Start Num: 18

Candidate Starts for Finemlucis_103:

(Start: 18 @63293 has 74 MA's), (Start: 21 @63332 has 1 MA's), (29, 63389), (30, 63395), (35, 63446), (39, 63473), (41, 63485),

Gene: Finnry_100 Start: 62395, Stop: 62625, Start Num: 18

Candidate Starts for Finnry_100:

(Start: 16 @62383 has 1 MA's), (Start: 18 @62395 has 74 MA's), (20, 62440), (38, 62581), (41, 62596),

Gene: Gabriela_102 Start: 61480, Stop: 61698, Start Num: 18

Candidate Starts for Gabriela_102:

(Start: 16 @61468 has 1 MA's), (Start: 18 @61480 has 74 MA's), (Start: 21 @61519 has 1 MA's), (29, 61576), (30, 61582), (35, 61633), (39, 61660),

Gene: Gaia_137 Start: 75003, Stop: 75254, Start Num: 13

Candidate Starts for Gaia_137:

(12, 74946), (Start: 13 @75003 has 1 MA's), (24, 75063), (31, 75141), (34, 75162), (35, 75165), (43, 75213), (44, 75216), (45, 75219),

Gene: Gardann_102 Start: 62332, Stop: 62550, Start Num: 18

Candidate Starts for Gardann_102:

(Start: 18 @62332 has 74 MA's), (Start: 21 @62371 has 1 MA's), (29, 62428), (30, 62434), (35, 62485), (39, 62512),

Gene: Gonephishing_163 Start: 88387, Stop: 88635, Start Num: 15

Candidate Starts for Gonephishing_163:

(Start: 15 @88387 has 17 MA's), (32, 88543), (35, 88552), (37, 88573), (48, 88615),

Gene: GuuelaD_98 Start: 62093, Stop: 62311, Start Num: 18

Candidate Starts for GuuelaD_98:

(Start: 16 @62081 has 1 MA's), (Start: 18 @62093 has 74 MA's), (Start: 21 @62132 has 1 MA's), (29, 62189), (30, 62195), (35, 62246), (39, 62273),

Gene: Halena_97 Start: 59838, Stop: 60062, Start Num: 18

Candidate Starts for Halena_97:

(Start: 16 @59826 has 1 MA's), (Start: 18 @59838 has 74 MA's), (20, 59877), (Start: 21 @59880 has 1 MA's), (30, 59943), (31, 59970), (44, 60045),

Gene: Halley_170 Start: 89630, Stop: 89863, Start Num: 17

Candidate Starts for Halley_170:

(Start: 17 @89630 has 26 MA's), (20, 89672), (22, 89678), (24, 89687), (26, 89705), (31, 89765), (35, 89789), (36, 89807), (40, 89819), (41, 89828), (43, 89837),

Gene: Hannaconda_162 Start: 90308, Stop: 90556, Start Num: 15

Candidate Starts for Hannaconda_162:

(Start: 15 @90308 has 17 MA's), (32, 90464), (35, 90473), (37, 90494), (48, 90536),

Gene: Hidrated_159 Start: 91344, Stop: 91577, Start Num: 17

Candidate Starts for Hidrated_159:

(Start: 17 @91344 has 26 MA's), (20, 91386), (22, 91392), (24, 91401), (26, 91419), (31, 91479), (33, 91497), (35, 91503), (36, 91521), (40, 91533), (41, 91542), (43, 91551),

Gene: Hiraya_100 Start: 62059, Stop: 62277, Start Num: 18

Candidate Starts for Hiraya_100:

(Start: 16 @62047 has 1 MA's), (Start: 18 @62059 has 74 MA's), (Start: 21 @62098 has 1 MA's), (29, 62155), (30, 62161), (35, 62212), (39, 62239),

Gene: HokkenD_164 Start: 91411, Stop: 91644, Start Num: 17

Candidate Starts for HokkenD_164:

(Start: 17 @91411 has 26 MA's), (20, 91453), (22, 91459), (24, 91468), (26, 91486), (31, 91546), (35, 91570), (36, 91588), (40, 91600), (41, 91609), (43, 91618),

Gene: Hughesyang_168 Start: 90112, Stop: 90345, Start Num: 17

Candidate Starts for Hughesyang_168:

(Start: 17 @90112 has 26 MA's), (20, 90154), (22, 90160), (24, 90169), (26, 90187), (31, 90247), (33, 90265), (35, 90271), (36, 90289), (40, 90301), (41, 90310), (43, 90319),

Gene: Itos_102 Start: 61040, Stop: 61258, Start Num: 18

Candidate Starts for Itos_102:

(Start: 16 @61028 has 1 MA's), (Start: 18 @61040 has 74 MA's), (Start: 21 @61079 has 1 MA's), (29, 61136), (30, 61142), (35, 61193), (39, 61220),

Gene: Jobypre_99 Start: 62042, Stop: 62272, Start Num: 18

Candidate Starts for Jobypre_99:

(Start: 16 @62030 has 1 MA's), (Start: 18 @62042 has 74 MA's), (20, 62087), (38, 62228), (41, 62243),

Gene: JoeDirt_100 Start: 60975, Stop: 61199, Start Num: 18

Candidate Starts for JoeDirt_100:

(Start: 16 @60963 has 1 MA's), (Start: 18 @60975 has 74 MA's), (20, 61014), (Start: 21 @61017 has 1 MA's), (30, 61080), (31, 61107), (44, 61182),

Gene: Jubie_99 Start: 62177, Stop: 62407, Start Num: 18

Candidate Starts for Jubie_99:

(Start: 16 @62165 has 1 MA's), (Start: 18 @62177 has 74 MA's), (20, 62222), (38, 62363), (41, 62378),

Gene: JuicyJay_164 Start: 91058, Stop: 91291, Start Num: 17

Candidate Starts for JuicyJay_164:

(Start: 17 @91058 has 26 MA's), (20, 91100), (22, 91106), (24, 91115), (26, 91133), (31, 91193), (35, 91217), (36, 91235), (40, 91247), (41, 91256), (43, 91265),

Gene: Kahlid_102 Start: 62250, Stop: 62468, Start Num: 18

Candidate Starts for Kahlid_102:

(Start: 18 @62250 has 74 MA's), (Start: 21 @62289 has 1 MA's), (29, 62346), (30, 62352), (35, 62403), (39, 62430),

Gene: Kalah2_166 Start: 91396, Stop: 91629, Start Num: 17

Candidate Starts for Kalah2_166:

(Start: 17 @91396 has 26 MA's), (20, 91438), (22, 91444), (24, 91453), (26, 91471), (31, 91531), (35, 91555), (36, 91573), (40, 91585), (41, 91594), (43, 91603),

Gene: KashFlow_167 Start: 90121, Stop: 90369, Start Num: 15

Candidate Starts for KashFlow_167:

(Start: 15 @90121 has 17 MA's), (32, 90277), (35, 90286), (37, 90307), (48, 90349),

Gene: Kingsolomon_97 Start: 62151, Stop: 62381, Start Num: 18

Candidate Starts for Kingsolomon_97:

(Start: 16 @62139 has 1 MA's), (Start: 18 @62151 has 74 MA's), (20, 62196), (38, 62337), (41, 62352),

Gene: KirDoubleO7_98 Start: 62217, Stop: 62447, Start Num: 18

Candidate Starts for KirDoubleO7_98:

(Start: 18 @62217 has 74 MA's), (20, 62262), (38, 62403), (41, 62418),

Gene: Klein_173 Start: 89831, Stop: 90079, Start Num: 15

Candidate Starts for Klein_173:

(Start: 15 @89831 has 17 MA's), (32, 89987), (35, 89996), (37, 90017), (48, 90059),

Gene: Kropertea_99 Start: 61773, Stop: 61994, Start Num: 18

Candidate Starts for Kropertea_99:

(Start: 16 @61761 has 1 MA's), (Start: 18 @61773 has 74 MA's), (29, 61872), (34, 61926), (39, 61956),

Gene: Krypton555_102 Start: 62463, Stop: 62693, Start Num: 18
Candidate Starts for Krypton555_102:
(Start: 16 @62451 has 1 MA's), (Start: 18 @62463 has 74 MA's), (20, 62508), (Start: 21 @62511 has 1 MA's), (38, 62649), (41, 62664),

Gene: LeBron_98 Start: 60145, Stop: 60369, Start Num: 18
Candidate Starts for LeBron_98:
(Start: 16 @60133 has 1 MA's), (Start: 18 @60145 has 74 MA's), (20, 60184), (Start: 21 @60187 has 1 MA's), (30, 60250), (31, 60277), (44, 60352),

Gene: Lewan_102 Start: 62172, Stop: 62351, Start Num: 21
Candidate Starts for Lewan_102:
(Start: 16 @62121 has 1 MA's), (Start: 18 @62133 has 74 MA's), (Start: 21 @62172 has 1 MA's), (29, 62229), (30, 62235), (35, 62286), (39, 62313),

Gene: LilDestine_100 Start: 61804, Stop: 62022, Start Num: 18
Candidate Starts for LilDestine_100:
(Start: 16 @61792 has 1 MA's), (Start: 18 @61804 has 74 MA's), (Start: 21 @61843 has 1 MA's), (29, 61900), (30, 61906), (35, 61957), (39, 61984),

Gene: LittleE_177 Start: 91144, Stop: 91392, Start Num: 15
Candidate Starts for LittleE_177:
(Start: 15 @91144 has 17 MA's), (32, 91300), (35, 91309), (37, 91330), (48, 91372),

Gene: LiyuLake_99 Start: 62290, Stop: 62520, Start Num: 18
Candidate Starts for LiyuLake_99:
(Start: 18 @62290 has 74 MA's), (20, 62335), (38, 62476), (41, 62491),

Gene: Loadrie_100 Start: 62295, Stop: 62513, Start Num: 18
Candidate Starts for Loadrie_100:
(Start: 16 @62283 has 1 MA's), (Start: 18 @62295 has 74 MA's), (Start: 21 @62334 has 1 MA's), (29, 62391), (30, 62397), (35, 62448), (39, 62475),

Gene: Lolly9_98 Start: 62136, Stop: 62363, Start Num: 18
Candidate Starts for Lolly9_98:
(Start: 16 @62124 has 1 MA's), (Start: 18 @62136 has 74 MA's), (38, 62319), (41, 62334),

Gene: Lucky2013_166 Start: 86641, Stop: 86889, Start Num: 15
Candidate Starts for Lucky2013_166:
(Start: 15 @86641 has 17 MA's), (32, 86797), (35, 86806), (37, 86827), (48, 86869),

Gene: Lumos_99 Start: 62039, Stop: 62269, Start Num: 18
Candidate Starts for Lumos_99:
(Start: 16 @62027 has 1 MA's), (Start: 18 @62039 has 74 MA's), (20, 62084), (38, 62225), (41, 62240),

Gene: Lynnae_103 Start: 62116, Stop: 62334, Start Num: 18
Candidate Starts for Lynnae_103:
(Start: 16 @62104 has 1 MA's), (Start: 18 @62116 has 74 MA's), (Start: 21 @62155 has 1 MA's), (29, 62212), (30, 62218), (35, 62269), (39, 62296),

Gene: MAckerman_98 Start: 59831, Stop: 60055, Start Num: 18
Candidate Starts for MAckerman_98:

(Start: 16 @59819 has 1 MA's), (Start: 18 @59831 has 74 MA's), (20, 59870), (Start: 21 @59873 has 1 MA's), (30, 59936), (31, 59963), (44, 60038),

Gene: Marleymoo_156 Start: 88248, Stop: 88481, Start Num: 17

Candidate Starts for Marleymoo_156:

(Start: 17 @88248 has 26 MA's), (20, 88290), (22, 88296), (24, 88305), (26, 88323), (31, 88383), (33, 88401), (35, 88407), (36, 88425), (40, 88437), (41, 88446), (43, 88455),

Gene: MiaZeal_173 Start: 87788, Stop: 88036, Start Num: 15

Candidate Starts for MiaZeal_173:

(Start: 15 @87788 has 17 MA's), (32, 87944), (35, 87953), (37, 87974), (48, 88016),

Gene: Miley16_102 Start: 62826, Stop: 63044, Start Num: 18

Candidate Starts for Miley16_102:

(Start: 16 @62814 has 1 MA's), (Start: 18 @62826 has 74 MA's), (Start: 21 @62865 has 1 MA's), (29, 62922), (30, 62928), (35, 62979), (39, 63006),

Gene: Minerva_169 Start: 89476, Stop: 89709, Start Num: 17

Candidate Starts for Minerva_169:

(Start: 17 @89476 has 26 MA's), (20, 89518), (22, 89524), (24, 89533), (26, 89551), (31, 89611), (35, 89635), (36, 89653), (40, 89665), (41, 89674), (43, 89683),

Gene: MiniLon_103 Start: 62137, Stop: 62364, Start Num: 18

Candidate Starts for MiniLon_103:

(Start: 16 @62125 has 1 MA's), (Start: 18 @62137 has 74 MA's), (38, 62320), (41, 62335),

Gene: MiniMac_103 Start: 62132, Stop: 62359, Start Num: 18

Candidate Starts for MiniMac_103:

(Start: 16 @62120 has 1 MA's), (Start: 18 @62132 has 74 MA's), (38, 62315), (41, 62330),

Gene: MkaliMitinis3_103 Start: 62358, Stop: 62576, Start Num: 18

Candidate Starts for MkaliMitinis3_103:

(Start: 18 @62358 has 74 MA's), (Start: 21 @62397 has 1 MA's), (29, 62454), (30, 62460), (35, 62511), (39, 62538),

Gene: Molivier_92 Start: 57095, Stop: 57274, Start Num: 21

Candidate Starts for Molivier_92:

(Start: 16 @57044 has 1 MA's), (Start: 18 @57056 has 74 MA's), (Start: 21 @57095 has 1 MA's), (29, 57152), (30, 57158), (35, 57209), (39, 57236),

Gene: Moostard_96 Start: 62146, Stop: 62376, Start Num: 18

Candidate Starts for Moostard_96:

(Start: 16 @62134 has 1 MA's), (Start: 18 @62146 has 74 MA's), (20, 62191), (38, 62332), (41, 62347),

Gene: MsGreen_100 Start: 62029, Stop: 62271, Start Num: 16

Candidate Starts for MsGreen_100:

(Start: 16 @62029 has 1 MA's), (Start: 18 @62041 has 74 MA's), (20, 62086), (38, 62227), (41, 62242),

Gene: Nebkiss_134 Start: 71009, Stop: 71254, Start Num: 15

Candidate Starts for Nebkiss_134:

(Start: 15 @71009 has 17 MA's), (23, 71057), (25, 71066), (27, 71099), (36, 71183), (37, 71186), (43, 71213), (44, 71216), (45, 71219),

Gene: Nekros_169 Start: 90783, Stop: 91034, Start Num: 14

Candidate Starts for Nekros_169:

(6, 90582), (7, 90588), (11, 90717), (12, 90723), (14, 90783), (32, 90942), (35, 90951), (37, 90972), (48, 91014),

Gene: Netyap_100 Start: 62540, Stop: 62758, Start Num: 18

Candidate Starts for Netyap_100:

(Start: 18 @62540 has 74 MA's), (Start: 21 @62579 has 1 MA's), (29, 62636), (30, 62642), (35, 62693), (39, 62720),

Gene: Nibley_163 Start: 86749, Stop: 86997, Start Num: 15

Candidate Starts for Nibley_163:

(Start: 15 @86749 has 17 MA's), (32, 86905), (35, 86914), (37, 86935), (48, 86977),

Gene: Nicholas_97 Start: 62151, Stop: 62381, Start Num: 18

Candidate Starts for Nicholas_97:

(Start: 16 @62139 has 1 MA's), (Start: 18 @62151 has 74 MA's), (20, 62196), (38, 62337), (41, 62352),

Gene: Nicholasp3_103 Start: 62332, Stop: 62550, Start Num: 18

Candidate Starts for Nicholasp3_103:

(Start: 18 @62332 has 74 MA's), (Start: 21 @62371 has 1 MA's), (29, 62428), (30, 62434), (35, 62485), (39, 62512),

Gene: NihilNomen_171 Start: 89184, Stop: 89417, Start Num: 17

Candidate Starts for NihilNomen_171:

(Start: 17 @89184 has 26 MA's), (20, 89226), (22, 89232), (24, 89241), (26, 89259), (31, 89319), (35, 89343), (36, 89361), (40, 89373), (41, 89382), (43, 89391),

Gene: Odette_173 Start: 91865, Stop: 92098, Start Num: 17

Candidate Starts for Odette_173:

(Start: 17 @91865 has 26 MA's), (20, 91907), (22, 91913), (24, 91922), (26, 91940), (31, 92000), (33, 92018), (35, 92024), (36, 92042), (40, 92054), (41, 92063), (43, 92072),

Gene: OhShagHennessy_94 Start: 59550, Stop: 59774, Start Num: 18

Candidate Starts for OhShagHennessy_94:

(Start: 16 @59538 has 1 MA's), (Start: 18 @59550 has 74 MA's), (20, 59589), (Start: 21 @59592 has 1 MA's), (30, 59655), (31, 59682), (44, 59757),

Gene: Omega_179 Start: 92502, Stop: 92750, Start Num: 15

Candidate Starts for Omega_179:

(Start: 15 @92502 has 17 MA's), (32, 92658), (35, 92667), (37, 92688), (48, 92730),

Gene: Optimus_168 Start: 90391, Stop: 90624, Start Num: 17

Candidate Starts for Optimus_168:

(Start: 17 @90391 has 26 MA's), (20, 90433), (22, 90439), (24, 90448), (26, 90466), (31, 90526), (33, 90544), (35, 90550), (36, 90568), (40, 90580), (41, 90589), (43, 90598),

Gene: OverPar_104 Start: 62295, Stop: 62513, Start Num: 18

Candidate Starts for OverPar_104:

(Start: 16 @62283 has 1 MA's), (Start: 18 @62295 has 74 MA's), (Start: 21 @62334 has 1 MA's), (29, 62391), (30, 62397), (35, 62448), (39, 62475),

Gene: PYPDinur_104 Start: 62789, Stop: 63010, Start Num: 18

Candidate Starts for PYPDinur_104:

(Start: 16 @62777 has 1 MA's), (Start: 18 @62789 has 74 MA's), (29, 62888), (35, 62945), (39, 62972),

Gene: Phoebus_170 Start: 92871, Stop: 93104, Start Num: 17

Candidate Starts for Phoebus_170:

(Start: 17 @92871 has 26 MA's), (20, 92913), (22, 92919), (24, 92928), (26, 92946), (31, 93006), (35, 93030), (36, 93048), (40, 93060), (41, 93069), (43, 93078),

Gene: Poochiewood_96 Start: 60947, Stop: 61171, Start Num: 18

Candidate Starts for Poochiewood_96:

(Start: 16 @60935 has 1 MA's), (Start: 18 @60947 has 74 MA's), (20, 60986), (Start: 21 @60989 has 1 MA's), (30, 61052), (31, 61079), (44, 61154),

Gene: Porcelain_170 Start: 87587, Stop: 87835, Start Num: 15

Candidate Starts for Porcelain_170:

(Start: 15 @87587 has 17 MA's), (32, 87743), (35, 87752), (37, 87773), (48, 87815),

Gene: Pound_163 Start: 88920, Stop: 89153, Start Num: 17

Candidate Starts for Pound_163:

(Start: 17 @88920 has 26 MA's), (20, 88962), (22, 88968), (24, 88977), (26, 88995), (31, 89055), (33, 89073), (35, 89079), (36, 89097), (40, 89109), (41, 89118), (43, 89127),

Gene: Quby_104 Start: 62115, Stop: 62336, Start Num: 18

Candidate Starts for Quby_104:

(Start: 16 @62103 has 1 MA's), (Start: 18 @62115 has 74 MA's), (29, 62214), (35, 62271), (39, 62298),

Gene: Rearden_169 Start: 88090, Stop: 88338, Start Num: 15

Candidate Starts for Rearden_169:

(Start: 15 @88090 has 17 MA's), (32, 88246), (35, 88255), (37, 88276), (48, 88318),

Gene: Red305_100 Start: 62042, Stop: 62272, Start Num: 18

Candidate Starts for Red305_100:

(Start: 16 @62030 has 1 MA's), (Start: 18 @62042 has 74 MA's), (20, 62087), (38, 62228), (41, 62243),

Gene: Redno2_163 Start: 86984, Stop: 87217, Start Num: 17

Candidate Starts for Redno2_163:

(Start: 17 @86984 has 26 MA's), (20, 87026), (22, 87032), (24, 87041), (26, 87059), (31, 87119), (35, 87143), (36, 87161), (40, 87173), (41, 87182), (43, 87191),

Gene: Rose5_100 Start: 60817, Stop: 61041, Start Num: 18

Candidate Starts for Rose5_100:

(Start: 16 @60805 has 1 MA's), (Start: 18 @60817 has 74 MA's), (20, 60856), (Start: 21 @60859 has 1 MA's), (30, 60922), (31, 60949), (44, 61024),

Gene: Rossetti_103 Start: 62464, Stop: 62682, Start Num: 18

Candidate Starts for Rossetti_103:

(Start: 16 @62452 has 1 MA's), (Start: 18 @62464 has 74 MA's), (Start: 21 @62503 has 1 MA's), (29, 62560), (30, 62566), (35, 62617), (39, 62644), (41, 62656),

Gene: Rumpelstiltskin_99 Start: 62125, Stop: 62343, Start Num: 18

Candidate Starts for Rumpelstiltskin_99:

(Start: 18 @62125 has 74 MA's), (Start: 21 @62164 has 1 MA's), (29, 62221), (30, 62227), (35, 62278), (39, 62305),

Gene: Samty_99 Start: 62139, Stop: 62369, Start Num: 18

Candidate Starts for Samty_99:

(Start: 16 @62127 has 1 MA's), (Start: 18 @62139 has 74 MA's), (20, 62184), (38, 62325), (41, 62340),

Gene: Sarshaun_102 Start: 62926, Stop: 63105, Start Num: 21

Candidate Starts for Sarshaun_102:

(Start: 16 @62875 has 1 MA's), (Start: 18 @62887 has 74 MA's), (Start: 21 @62926 has 1 MA's), (29, 62983), (30, 62989), (35, 63040), (39, 63067),

Gene: Schatzie_164 Start: 89919, Stop: 90152, Start Num: 17

Candidate Starts for Schatzie_164:

(Start: 17 @89919 has 26 MA's), (20, 89961), (22, 89967), (24, 89976), (26, 89994), (31, 90054), (35, 90078), (36, 90096), (40, 90108), (41, 90117), (43, 90126),

Gene: Shaboozey_168 Start: 87193, Stop: 87441, Start Num: 15

Candidate Starts for Shaboozey_168:

(Start: 15 @87193 has 17 MA's), (32, 87349), (35, 87358), (37, 87379), (48, 87421),

Gene: Sheng711_105 Start: 62313, Stop: 62534, Start Num: 18

Candidate Starts for Sheng711_105:

(Start: 16 @62301 has 1 MA's), (Start: 18 @62313 has 74 MA's), (29, 62412), (35, 62469), (39, 62496),

Gene: Silverleaf_97 Start: 59957, Stop: 60181, Start Num: 18

Candidate Starts for Silverleaf_97:

(Start: 16 @59945 has 1 MA's), (Start: 18 @59957 has 74 MA's), (20, 59996), (Start: 21 @59999 has 1 MA's), (30, 60062), (31, 60089), (44, 60164),

Gene: Snenia_98 Start: 62043, Stop: 62273, Start Num: 18

Candidate Starts for Snenia_98:

(Start: 16 @62031 has 1 MA's), (Start: 18 @62043 has 74 MA's), (20, 62088), (38, 62229), (41, 62244),

Gene: SoJulia_104 Start: 64095, Stop: 64274, Start Num: 21

Candidate Starts for SoJulia_104:

(Start: 18 @64056 has 74 MA's), (Start: 21 @64095 has 1 MA's), (29, 64152), (30, 64158), (35, 64209), (39, 64236),

Gene: Soap141_101 Start: 62926, Stop: 63105, Start Num: 21

Candidate Starts for Soap141_101:

(Start: 16 @62875 has 1 MA's), (Start: 18 @62887 has 74 MA's), (Start: 21 @62926 has 1 MA's), (29, 62983), (30, 62989), (35, 63040), (39, 63067),

Gene: Squint_165 Start: 88097, Stop: 88345, Start Num: 15

Candidate Starts for Squint_165:

(Start: 15 @88097 has 17 MA's), (32, 88253), (35, 88262), (37, 88283), (48, 88325),

Gene: Stellammi_167 Start: 76374, Stop: 76631, Start Num: 15

Candidate Starts for Stellammi_167:

(Start: 15 @76374 has 17 MA's), (Start: 21 @76422 has 1 MA's), (22, 76425), (23, 76431), (24, 76434), (26, 76452), (33, 76530), (35, 76536), (36, 76554), (41, 76575), (44, 76587), (47, 76599),

Gene: Superphikiman_168 Start: 87266, Stop: 87514, Start Num: 15

Candidate Starts for Superphikiman_168:

(Start: 15 @87266 has 17 MA's), (32, 87422), (35, 87431), (37, 87452), (48, 87494),

Gene: Thibault_153 Start: 86799, Stop: 87032, Start Num: 17

Candidate Starts for Thibault_153:

(Start: 17 @86799 has 26 MA's), (20, 86841), (22, 86847), (24, 86856), (26, 86874), (31, 86934), (35, 86958), (36, 86976), (40, 86988), (41, 86997), (43, 87006),

Gene: ThreeRngTarjay_166 Start: 90889, Stop: 91137, Start Num: 15

Candidate Starts for ThreeRngTarjay_166:

(Start: 15 @90889 has 17 MA's), (32, 91045), (35, 91054), (37, 91075), (48, 91117),

Gene: Tourach_103 Start: 63186, Stop: 63404, Start Num: 18

Candidate Starts for Tourach_103:

(Start: 16 @63174 has 1 MA's), (Start: 18 @63186 has 74 MA's), (Start: 21 @63225 has 1 MA's), (29, 63282), (30, 63288), (35, 63339), (39, 63366), (41, 63378),

Gene: TriFive_100 Start: 62155, Stop: 62385, Start Num: 18

Candidate Starts for TriFive_100:

(Start: 16 @62143 has 1 MA's), (Start: 18 @62155 has 74 MA's), (20, 62200), (38, 62341), (41, 62356),

Gene: Tyson_101 Start: 61248, Stop: 61472, Start Num: 18

Candidate Starts for Tyson_101:

(Start: 16 @61236 has 1 MA's), (Start: 18 @61248 has 74 MA's), (20, 61287), (Start: 21 @61290 has 1 MA's), (30, 61353), (31, 61380), (44, 61455),

Gene: UPIE_98 Start: 60488, Stop: 60712, Start Num: 18

Candidate Starts for UPIE_98:

(Start: 16 @60476 has 1 MA's), (Start: 18 @60488 has 74 MA's), (20, 60527), (Start: 21 @60530 has 1 MA's), (30, 60593), (31, 60620), (44, 60695),

Gene: Underpass_95 Start: 57368, Stop: 57586, Start Num: 18

Candidate Starts for Underpass_95:

(Start: 18 @57368 has 74 MA's), (Start: 21 @57407 has 1 MA's), (29, 57464), (30, 57470), (35, 57521), (39, 57548),

Gene: Vetrix_101 Start: 62366, Stop: 62584, Start Num: 18

Candidate Starts for Vetrix_101:

(1, 61985), (2, 62027), (3, 62063), (4, 62132), (6, 62153), (8, 62180), (9, 62192), (10, 62267), (Start: 13 @62351 has 1 MA's), (Start: 18 @62366 has 74 MA's), (Start: 21 @62405 has 1 MA's), (29, 62462), (30, 62468), (35, 62519), (39, 62546),

Gene: Wamburgxpress_97 Start: 60434, Stop: 60658, Start Num: 18

Candidate Starts for Wamburgxpress_97:

(Start: 16 @60422 has 1 MA's), (Start: 18 @60434 has 74 MA's), (20, 60473), (Start: 21 @60476 has 1 MA's), (30, 60539), (31, 60566), (44, 60641),

Gene: Wanda_167 Start: 87480, Stop: 87728, Start Num: 15

Candidate Starts for Wanda_167:

(Start: 15 @87480 has 17 MA's), (32, 87636), (35, 87645), (37, 87666), (48, 87708),

Gene: Whirlwind_100 Start: 62291, Stop: 62521, Start Num: 18

Candidate Starts for Whirlwind_100:

(Start: 16 @62279 has 1 MA's), (Start: 18 @62291 has 74 MA's), (20, 62336), (38, 62477), (41, 62492),

Gene: Wigglewiggle_101 Start: 62057, Stop: 62275, Start Num: 18

Candidate Starts for Wigglewiggle_101:

(Start: 16 @62045 has 1 MA's), (Start: 18 @62057 has 74 MA's), (Start: 21 @62096 has 1 MA's), (29, 62153), (30, 62159), (35, 62210), (39, 62237),

Gene: Wilder_102 Start: 62104, Stop: 62322, Start Num: 18

Candidate Starts for Wilder_102:

(Start: 16 @62092 has 1 MA's), (Start: 18 @62104 has 74 MA's), (Start: 21 @62143 has 1 MA's), (29, 62200), (30, 62206), (35, 62257), (39, 62284),

Gene: Winky_102 Start: 62826, Stop: 63044, Start Num: 18

Candidate Starts for Winky_102:

(Start: 16 @62814 has 1 MA's), (Start: 18 @62826 has 74 MA's), (Start: 21 @62865 has 1 MA's), (29, 62922), (30, 62928), (35, 62979), (39, 63006),

Gene: Wyatt2_100 Start: 60911, Stop: 61135, Start Num: 18

Candidate Starts for Wyatt2_100:

(Start: 16 @60899 has 1 MA's), (Start: 18 @60911 has 74 MA's), (20, 60950), (Start: 21 @60953 has 1 MA's), (30, 61016), (31, 61043), (44, 61118),

Gene: Xiaokay_165 Start: 90819, Stop: 91052, Start Num: 17

Candidate Starts for Xiaokay_165:

(Start: 17 @90819 has 26 MA's), (20, 90861), (22, 90867), (24, 90876), (26, 90894), (31, 90954), (33, 90972), (35, 90978), (36, 90996), (40, 91008), (41, 91017), (43, 91026),

Gene: Yeet_161 Start: 88772, Stop: 89005, Start Num: 17

Candidate Starts for Yeet_161:

(Start: 17 @88772 has 26 MA's), (20, 88814), (22, 88820), (24, 88829), (26, 88847), (31, 88907), (35, 88931), (36, 88949), (40, 88961), (41, 88970), (43, 88979),

Gene: Zakai_103 Start: 62536, Stop: 62754, Start Num: 18

Candidate Starts for Zakai_103:

(Start: 16 @62524 has 1 MA's), (Start: 18 @62536 has 74 MA's), (Start: 21 @62575 has 1 MA's), (29, 62632), (30, 62638), (35, 62689), (39, 62716),

Gene: Zaria_100 Start: 60387, Stop: 60611, Start Num: 18

Candidate Starts for Zaria_100:

(Start: 16 @60375 has 1 MA's), (Start: 18 @60387 has 74 MA's), (20, 60426), (Start: 21 @60429 has 1 MA's), (30, 60492), (31, 60519), (44, 60594),

Gene: Zelink_162 Start: 89107, Stop: 89340, Start Num: 17

Candidate Starts for Zelink_162:

(Start: 17 @89107 has 26 MA's), (20, 89149), (22, 89155), (24, 89164), (26, 89182), (31, 89242), (33, 89260), (35, 89266), (36, 89284), (40, 89296), (41, 89305), (43, 89314),

Gene: ZhongYanYuan_99 Start: 62250, Stop: 62468, Start Num: 18

Candidate Starts for ZhongYanYuan_99:

(Start: 16 @62238 has 1 MA's), (Start: 18 @62250 has 74 MA's), (Start: 21 @62289 has 1 MA's), (29, 62346), (30, 62352), (35, 62403), (39, 62430),