

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 290891 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290891 has 167 members, 30 are drafts.

Phages represented in each track:

- Track 1 : Killigrew_87, PherrisBueller_88, EnzoK_94, Zeeculate_91
- Track 2 : BluSpix_85, IgnatiusPatJac_87, Alsfro_94
- Track 3 : Lesedi_88
- Track 4 : Goose_85
- Track 5 : Jabith_89
- Track 6 : Salz_85, Sham4_86, Et2Brutus_89, Wolpertinger_89, Mulciber_88, Hutc2_86, Fibonacci_89, Insomnia_89
- Track 7 : Bachome_87, Saskia_86
- Track 8 : Phlei_72
- Track 9 : SororFago_85
- Track 10 : Gail_88
- Track 11 : PainterBoy_85, Lucyedi_86, EagleEye_87
- Track 12 : 40AC_82
- Track 13 : Kerberos_86, Tomathan_86, Duplo_87, StarStuff_86, ANI8_85, Travvers_86, Pomar16_86, VC3_84, DBQu4n_86, AN9_85, C3_78
- Track 14 : EZMoney23_82
- Track 15 : Jsquared_90
- Track 16 : Journey13_69
- Track 17 : MissWhite_79
- Track 18 : Drake55_87, HarryHoudini_86, Piro94_85
- Track 19 : Sknot_86, NaSiaTalie_87, Baehexic_85, Flare16_86, WideWale_87, Equemioh13_86, MiculUcigas_86, Terrific_87, Updawg_87, Gratitude_84, Centaur_86
- Track 20 : BabyBack_81
- Track 21 : Kalpine_88
- Track 22 : GaugeLDP_80
- Track 23 : Malec_85
- Track 24 : Larenn_85
- Track 25 : Colin_85
- Track 26 : Hookmount_86, EtoileNova_83, Popcicle_86, Caviar_75, ResDef_84, Noella_87, Panamaxus_82, Pocahontas_85, Norbert_82, Texage_84
- Track 27 : Chiqui_69, BabyJohn_69
- Track 28 : DropBear_84, Roimos_85, HelDan_86, Heathen_86, Scout_86, Kachowdy_84, Marchesa_86
- Track 29 : QuinnKiro_85, Todacoro_86, Veracruz_83, Margo_86, Lambert1_86
- Track 30 : BabyRay_87
- Track 31 : Isca_83

- Track 32 : Rockstar_75, Phantastic_87
- Track 33 : Zarafa_84
- Track 34 : Backyardigan_80, Wile_81, Badger_81, Achebe_81, Cici_82, Wizard007_82, Druantia_84
- Track 35 : Katalie136_82, PetiteSangsue_82, Perplexer_82, Morpher26_82, Bumblebee11_81, AbbysRanger_82
- Track 36 : Kremtemulon_82
- Track 37 : Cintron_85
- Track 38 : Hexamo_88, CloudWang3_89, Roksolana_89, Rifter_89, Gruunaga_88, Artemis2UCLA_88, Gladiator_85
- Track 39 : Hammer_89, BlessJoy_89, ToneTone_86, Tucker_89, Lilbunny_88
- Track 40 : Sheen_83, FlyCatcher_86, Toro_84
- Track 41 : Courthouse_237, Ariel_241, Superphikiman_233
- Track 42 : Hughesyang_237, Redno2_226, Beem_238, Shaboozey_232, Squint_233, Klein_242, Bombitas_219, JuicyJay_230, Hannaconda_225, ThreeRngTarjay_234, Dove_217, Yeet_229, Bagrid_240, EricMillard_232, Nekros_235, Ejimix_226, Schatzie_227, Nibley_225, Zelink_228, Phoebus_233, BronnyJames_226, Odette_234
- Track 43 : Kalah2_224
- Track 44 : Hidrated_220, Marleymoo_215, Constella_224, Bobby_213, Thibault_209, Xiaokay_220
- Track 45 : NihilNomen_236
- Track 46 : Lucky2013_232, Porcelain_236, MiaZeal_245, Wanda_234
- Track 47 : LittleE_224, Rearden_235
- Track 48 : Gonephishing_231
- Track 49 : HokkenD_227
- Track 50 : KashFlow_227
- Track 51 : Pound_223
- Track 52 : DmpstrDiver_233
- Track 53 : Omega_235
- Track 54 : Duke13_235

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

The start number called the most often in the published annotations is 22, it was called in 44 of the 137 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 40AC_82, AN9_85, ANI8_85, Artemis2UCLA_88, BabyBack_81, Bachome_87, Baehexic_85, BlessJoy_89, C3_78, Centaur_86, CloudWang3_89, Colin_85, DBQu4n_86, Drake55_87, Duplo_87, EZMoney23_82, Equemioh13_86, Flare16_86, Gail_88, GaugeLDP_80, Gladiator_85, Gratitude_84, Gruunaga_88, Hammer_89, HarryHoudini_86, Hexamo_88, Journey13_69, Kalpine_88, Kerberos_86, Larenn_85, Lilbunny_88, Malec_85, MiculUcigas_86, MissWhite_79, NaSiaTalie_87, Piro94_85, Pomar16_86, Rifter_89, Roksolana_89, Saskia_86, Sknot_86, SororFago_85, StarStuff_86, Terrific_87, Tomathan_86, ToneTone_86, Travvers_86, Tucker_89, Updawg_87, VC3_84, WideWale_87,

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

- EagleEye_87, Jsquared_90, Lucyedi_86, PainterBoy_85,

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

- AbbysRanger_82, Achebe_81, Alsfro_94, Ariel_241, BabyJohn_69, BabyRay_87, Backyardigan_80, Badger_81, Bagrid_240, Beem_238, BluSpix_85, Bobby_213, Bombitas_219, BronnyJames_226, Bumblebee11_81, Caviar_75, Chiqui_69, Cici_82, Cintron_85, Constella_224, Courthouse_237, DmpstrDiver_233, Dove_217, DropBear_84, Druantia_84, Duke13_235, Ejimix_226, EnzoK_94, EricMillard_232, Et2Brutus_89, EtoileNova_83, Fibonacci_89, FlyCatcher_86, Gonephishing_231, Goose_85, Hannaconda_225, Heathen_86, HelDan_86, Hidrated_220, HokkenD_227, Hookmount_86, Hughesyang_237, Hutc2_86, IgnatiusPatJac_87, Insomnia_89, Isca_83, Jabith_89, JuicyJay_230, Kachowdy_84, Kalah2_224, KashFlow_227, Katalie136_82, Killigrew_87, Klein_242, Kremtemulon_82, Lambert1_86, Lesedi_88, LittleE_224, Lucky2013_232, Marchesa_86, Margo_86, Marleymoo_215, MiaZeal_245, Morpher26_82, Mulciber_88, Nekros_235, Nibley_225, NihilNomen_236, Noella_87, Norbert_82, Odette_234, Omega_235, Panamaxus_82, Perplexer_82, PetiteSangsue_82, Phantastic_87, PherrisBueller_88, Phlei_72, Phoebus_233, Pocahontas_85, Poppicle_86, Porcelain_236, Pound_223, QuinnKiro_85, Rearden_235, Redno2_226, ResDef_84, Rockstar_75, Roimos_85, Salz_85, Schatzie_227, Scout_86, Shaboozey_232, Sham4_86, Sheen_83, Squint_233, Superphikiman_233, Texage_84, Thibault_209, ThreeRngTarjay_234, Todacoro_86, Toro_84, Veracruz_83, Wanda_234, Wile_81, Wizard007_82, Wolpertinger_89, Xiaokay_220, Yeet_229, Zarafa_84, Zeeculate_91, Zelink_228,

Summary by start number:

Start 15:

- Found in 3 of 167 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EagleEye_87 (A16), Lucyedi_86 (A16), PainterBoy_85 (A16),

Start 16:

- Found in 26 of 167 (15.6%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 3.8% of time when present
- Phage (with cluster) where this start called: Jsquared_90 (A2),

Start 18:

- Found in 1 of 167 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyRay_87 (A3),

Start 19:

- Found in 1 of 167 (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: Phlei_72 (A13),

Start 20:

- Found in 1 of 167 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 137

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Omega_235 (J),

Start 21:

- Found in 31 of 167 (18.6%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 3.2% of time when present
- Phage (with cluster) where this start called: Pound_223 (J),

Start 22:

- Found in 55 of 167 (32.9%) of genes in pham
- Manual Annotations of this start: 44 of 137
- Called 92.7% of time when present
- Phage (with cluster) where this start called: 40AC_82 (A17), AN9_85 (A2), ANI8_85 (A2), Artemis2UCLA_88 (A6), BabyBack_81 (A2), Bachome_87 (A11), Baehexic_85 (A2), BlessJoy_89 (A6), C3_78 (A2), Centaur_86 (A2), CloudWang3_89 (A6), Colin_85 (A2), DBQu4n_86 (A2), Drake55_87 (A2), Duplo_87 (A2), EZMoney23_82 (A2), Equemioh13_86 (A2), Flare16_86 (A2), Gail_88 (A14), GaugeLDP_80 (A2), Gladiator_85 (A6), Gratitude_84 (A2), Gruunaga_88 (A6), Hammer_89 (A6), HarryHoudini_86 (A2), Hexamo_88 (A6), Journey13_69 (A2), Kalpine_88 (A2), Kerberos_86 (A2), Larenn_85 (A2), Lilbunny_88 (A6), Malec_85 (A2), MiculUcigas_86 (A2), MissWhite_79 (A2), NaSiaTalie_87 (A2), Piro94_85 (A2), Pomar16_86 (A2), Rifter_89 (A6), Roksolana_89 (A6), Saskia_86 (A11), Sknot_86 (A2), SororFago_85 (A14), StarStuff_86 (A2), Terrific_87 (A2), Tomathan_86 (A2), ToneTone_86 (A6), Travvers_86 (A2), Tucker_89 (A6), Updawg_87 (A2), VC3_84 (A2), WideWale_87 (A2),

Start 23:

- Found in 5 of 167 (3.0%) of genes in pham
- Manual Annotations of this start: 3 of 137
- Called 60.0% of time when present
- Phage (with cluster) where this start called: HokkenD_227 (J), Kalah2_224 (J), NihilNomen_236 (J),

Start 24:

- Found in 13 of 167 (7.8%) of genes in pham
- Manual Annotations of this start: 7 of 137
- Called 53.8% of time when present
- Phage (with cluster) where this start called: Achebe_81 (A4), Backyardigan_80 (A4), Badger_81 (A4), Cici_82 (A4), Druantia_84 (A4), Wile_81 (A4), Wizard007_82 (A4),

Start 26:

- Found in 11 of 167 (6.6%) of genes in pham
- Manual Annotations of this start: 9 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alsfro_94 (A1), BluSpix_85 (A1), EnzoK_94 (A1), FlyCatcher_86 (A7), IgnatiusPatJac_87 (A1), Killigrew_87 (A1), Lesedi_88 (A1), PherrisBueller_88 (A1), Sheen_83 (A7), Toro_84 (A7), Zeeculate_91 (A1),

Start 27:

- Found in 45 of 167 (26.9%) of genes in pham
- Manual Annotations of this start: 30 of 137

- Called 91.1% of time when present
- Phage (with cluster) where this start called: Ariel_241 (J), Bagrid_240 (J), Beem_238 (J), Bobby_213 (J), Bombitas_219 (J), BronnyJames_226 (J), Constella_224 (J), Courthouse_237 (J), DmpstrDiver_233 (J), Dove_217 (J), Duke13_235 (J), Ejimix_226 (J), EricMillard_232 (J), Gonephishing_231 (J), Hannaconda_225 (J), Hidrated_220 (J), Hughesyang_237 (J), JuicyJay_230 (J), KashFlow_227 (J), Klein_242 (J), LittleE_224 (J), Lucky2013_232 (J), Marleymoo_215 (J), MiaZeal_245 (J), Nekros_235 (J), Nibley_225 (J), Odette_234 (J), Phoebus_233 (J), Porcelain_236 (J), Rearden_235 (J), Redno2_226 (J), Schatzie_227 (J), Shaboozey_232 (J), Squint_233 (J), Superphikiman_233 (J), Thibault_209 (J), ThreeRngTarjay_234 (J), Wanda_234 (J), Xiaokay_220 (J), Yeet_229 (J), Zelink_228 (J),

Start 28:

- Found in 12 of 167 (7.2%) of genes in pham
- Manual Annotations of this start: 8 of 137
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Et2Brutus_89 (A11), Fibonacci_89 (A11), Hutc2_86 (A11), Insomnia_89 (A11), Jabith_89 (A11), Mulciber_88 (A11), Salz_85 (A11), Sham4_86 (A11), Wolpertinger_89 (A11),

Start 29:

- Found in 29 of 167 (17.4%) of genes in pham
- Manual Annotations of this start: 21 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyJohn_69 (A3), Caviar_75 (A3), Chiqui_69 (A3), DropBear_84 (A3), EtoileNova_83 (A3), Goose_85 (A10), Heathen_86 (A3), HelDan_86 (A3), Hookmount_86 (A3), Isca_83 (A3), Kachowdy_84 (A3), Lambert1_86 (A3), Marchesa_86 (A3), Margo_86 (A3), Noella_87 (A3), Norbert_82 (A3), Panamaxus_82 (A3), Phantastic_87 (A3), Pocahontas_85 (A3), Popcicle_86 (A3), QuinnKiro_85 (A3), ResDef_84 (A3), Rockstar_75 (A3), Roimos_85 (A3), Scout_86 (A3), Texage_84 (A3), Todacoro_86 (A3), Veracruz_83 (A3), Zarafa_84 (A3),

Start 35:

- Found in 15 of 167 (9.0%) of genes in pham
- Manual Annotations of this start: 8 of 137
- Called 53.3% of time when present
- Phage (with cluster) where this start called: AbbysRanger_82 (A4), Bumblebee11_81 (A4), Cintron_85 (A4), Katalie136_82 (A4), Kremtemulon_82 (A4), Morpher26_82 (A4), Perplexer_82 (A4), PetiteSangsue_82 (A4),

Summary by clusters:

There are 13 clusters represented in this pham: A14, A17, A16, A11, A10, A13, J, A1, A3, A2, A4, A7, A6,

Info for manual annotations of cluster A1:

- Start number 26 was manually annotated 8 times for cluster A1.

Info for manual annotations of cluster A10:

- Start number 29 was manually annotated 1 time for cluster A10.

Info for manual annotations of cluster A11:

- Start number 22 was manually annotated 1 time for cluster A11.
- Start number 28 was manually annotated 8 times for cluster A11.

Info for manual annotations of cluster A14:

- Start number 22 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A16:

- Start number 15 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A2:

- Start number 16 was manually annotated 1 time for cluster A2.
- Start number 22 was manually annotated 29 times for cluster A2.

Info for manual annotations of cluster A3:

- Start number 18 was manually annotated 1 time for cluster A3.
- Start number 29 was manually annotated 20 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 24 was manually annotated 7 times for cluster A4.
- Start number 35 was manually annotated 8 times for cluster A4.

Info for manual annotations of cluster A6:

- Start number 22 was manually annotated 12 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 26 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster J:

- Start number 20 was manually annotated 1 time for cluster J.
- Start number 21 was manually annotated 1 time for cluster J.
- Start number 23 was manually annotated 3 times for cluster J.
- Start number 27 was manually annotated 30 times for cluster J.

Gene Information:

Gene: 40AC_82 Start: 48479, Stop: 48276, Start Num: 22

Candidate Starts for 40AC_82:

(Start: 22 @48479 has 44 MA's), (37, 48428), (46, 48344),

Gene: AN9_85 Start: 47253, Stop: 47056, Start Num: 22

Candidate Starts for AN9_85:

(Start: 22 @47253 has 44 MA's), (37, 47199), (46, 47121),

Gene: ANI8_85 Start: 47253, Stop: 47056, Start Num: 22

Candidate Starts for ANI8_85:

(Start: 22 @47253 has 44 MA's), (37, 47199), (46, 47121),

Gene: AbbysRanger_82 Start: 48599, Stop: 48441, Start Num: 35

Candidate Starts for AbbysRanger_82:

(Start: 24 @48638 has 7 MA's), (Start: 35 @48599 has 8 MA's), (38, 48590), (46, 48503), (47, 48470),

Gene: Achebe_81 Start: 48782, Stop: 48585, Start Num: 24

Candidate Starts for Achebe_81:

(Start: 24 @48782 has 7 MA's), (Start: 35 @48743 has 8 MA's), (38, 48734), (46, 48647), (47, 48614),

Gene: Alsfro_94 Start: 49646, Stop: 49846, Start Num: 26

Candidate Starts for Alsfro_94:

(Start: 26 @49646 has 9 MA's), (45, 49778),

Gene: Ariel_241 Start: 107734, Stop: 107546, Start Num: 27

Candidate Starts for Ariel_241:

(Start: 21 @107755 has 1 MA's), (Start: 27 @107734 has 30 MA's), (40, 107692), (44, 107653), (47, 107581), (50, 107557),

Gene: Artemis2UCLA_88 Start: 46537, Stop: 46328, Start Num: 22

Candidate Starts for Artemis2UCLA_88:

(Start: 22 @46537 has 44 MA's), (39, 46477),

Gene: BabyBack_81 Start: 48271, Stop: 48068, Start Num: 22

Candidate Starts for BabyBack_81:

(12, 48391), (13, 48343), (Start: 22 @48271 has 44 MA's), (36, 48220), (46, 48136),

Gene: BabyJohn_69 Start: 44585, Stop: 44400, Start Num: 29

Candidate Starts for BabyJohn_69:

(17, 44612), (Start: 29 @44585 has 21 MA's), (43, 44522),

Gene: BabyRay_87 Start: 47952, Stop: 47743, Start Num: 18

Candidate Starts for BabyRay_87:

(Start: 18 @47952 has 1 MA's), (31, 47919), (38, 47889), (46, 47814), (47, 47781),

Gene: Bachome_87 Start: 47191, Stop: 46985, Start Num: 22

Candidate Starts for Bachome_87:

(Start: 16 @47206 has 1 MA's), (Start: 22 @47191 has 44 MA's), (37, 47137), (42, 47113), (46, 47053), (50, 46996),

Gene: Backyardigan_80 Start: 48654, Stop: 48457, Start Num: 24

Candidate Starts for Backyardigan_80:

(Start: 24 @48654 has 7 MA's), (Start: 35 @48615 has 8 MA's), (38, 48606), (46, 48519), (47, 48486),

Gene: Badger_81 Start: 48620, Stop: 48423, Start Num: 24

Candidate Starts for Badger_81:

(Start: 24 @48620 has 7 MA's), (Start: 35 @48581 has 8 MA's), (38, 48572), (46, 48485), (47, 48452),

Gene: Baehexic_85 Start: 48457, Stop: 48251, Start Num: 22

Candidate Starts for Baehexic_85:

(8, 48655), (Start: 16 @48472 has 1 MA's), (Start: 22 @48457 has 44 MA's), (37, 48403), (46, 48319),

Gene: Bagrid_240 Start: 111821, Stop: 111645, Start Num: 27

Candidate Starts for Bagrid_240:

(Start: 21 @111842 has 1 MA's), (Start: 27 @111821 has 30 MA's), (40, 111779), (44, 111752),

Gene: Beem_238 Start: 110940, Stop: 110764, Start Num: 27

Candidate Starts for Beem_238:
(Start: 21 @110961 has 1 MA's), (Start: 27 @110940 has 30 MA's), (40, 110898), (44, 110871),

Gene: BlessJoy_89 Start: 47058, Stop: 46849, Start Num: 22
Candidate Starts for BlessJoy_89:
(Start: 22 @47058 has 44 MA's), (39, 46998), (45, 46923),

Gene: BluSpix_85 Start: 44982, Stop: 45182, Start Num: 26
Candidate Starts for BluSpix_85:
(Start: 26 @44982 has 9 MA's), (45, 45114),

Gene: Bobby_213 Start: 108407, Stop: 108219, Start Num: 27
Candidate Starts for Bobby_213:
(Start: 27 @108407 has 30 MA's), (34, 108383), (40, 108365), (44, 108326), (47, 108254), (50, 108230),

Gene: Bombitas_219 Start: 107223, Stop: 107050, Start Num: 27
Candidate Starts for Bombitas_219:
(Start: 21 @107244 has 1 MA's), (Start: 27 @107223 has 30 MA's), (40, 107181), (44, 107154),

Gene: BronnyJames_226 Start: 105609, Stop: 105433, Start Num: 27
Candidate Starts for BronnyJames_226:
(Start: 21 @105630 has 1 MA's), (Start: 27 @105609 has 30 MA's), (40, 105567), (44, 105540),

Gene: Bumblebee11_81 Start: 48581, Stop: 48423, Start Num: 35
Candidate Starts for Bumblebee11_81:
(Start: 24 @48620 has 7 MA's), (Start: 35 @48581 has 8 MA's), (38, 48572), (46, 48485), (47, 48452),

Gene: C3_78 Start: 47253, Stop: 47056, Start Num: 22
Candidate Starts for C3_78:
(Start: 22 @47253 has 44 MA's), (37, 47199), (46, 47121),

Gene: Caviar_75 Start: 44830, Stop: 44630, Start Num: 29
Candidate Starts for Caviar_75:
(9, 45019), (Start: 29 @44830 has 21 MA's), (42, 44770), (46, 44704), (47, 44671),

Gene: Centaur_86 Start: 48324, Stop: 48118, Start Num: 22
Candidate Starts for Centaur_86:
(8, 48522), (Start: 16 @48339 has 1 MA's), (Start: 22 @48324 has 44 MA's), (37, 48270), (46, 48186),

Gene: Chiqui_69 Start: 44594, Stop: 44409, Start Num: 29
Candidate Starts for Chiqui_69:
(17, 44621), (Start: 29 @44594 has 21 MA's), (43, 44531),

Gene: Cici_82 Start: 48633, Stop: 48436, Start Num: 24
Candidate Starts for Cici_82:
(Start: 24 @48633 has 7 MA's), (Start: 35 @48594 has 8 MA's), (38, 48585), (46, 48498), (47, 48465),

Gene: Cintron_85 Start: 48872, Stop: 48702, Start Num: 35
Candidate Starts for Cintron_85:
(Start: 35 @48872 has 8 MA's), (38, 48863), (46, 48776), (47, 48743),

Gene: CloudWang3_89 Start: 47066, Stop: 46857, Start Num: 22

Candidate Starts for CloudWang3_89:
(Start: 22 @47066 has 44 MA's), (39, 47006),

Gene: Colin_85 Start: 49399, Stop: 49190, Start Num: 22
Candidate Starts for Colin_85:
(8, 49606), (10, 49546), (11, 49531), (Start: 16 @49414 has 1 MA's), (Start: 22 @49399 has 44 MA's),
(31, 49375), (32, 49372), (46, 49258),

Gene: Constella_224 Start: 108319, Stop: 108131, Start Num: 27
Candidate Starts for Constella_224:
(Start: 27 @108319 has 30 MA's), (34, 108295), (40, 108277), (44, 108238), (47, 108166), (50,
108142),

Gene: Courthouse_237 Start: 108498, Stop: 108310, Start Num: 27
Candidate Starts for Courthouse_237:
(Start: 21 @108519 has 1 MA's), (Start: 27 @108498 has 30 MA's), (40, 108456), (44, 108417), (47,
108345), (50, 108321),

Gene: DBQu4n_86 Start: 48304, Stop: 48101, Start Num: 22
Candidate Starts for DBQu4n_86:
(Start: 22 @48304 has 44 MA's), (37, 48250), (46, 48166),

Gene: DmpstrDiver_233 Start: 109198, Stop: 109022, Start Num: 27
Candidate Starts for DmpstrDiver_233:
(Start: 27 @109198 has 30 MA's), (34, 109174), (40, 109156), (44, 109129), (47, 109057), (48,
109042),

Gene: Dove_217 Start: 105704, Stop: 105528, Start Num: 27
Candidate Starts for Dove_217:
(Start: 21 @105725 has 1 MA's), (Start: 27 @105704 has 30 MA's), (40, 105662), (44, 105635),

Gene: Drake55_87 Start: 48575, Stop: 48369, Start Num: 22
Candidate Starts for Drake55_87:
(8, 48773), (Start: 16 @48590 has 1 MA's), (Start: 22 @48575 has 44 MA's), (46, 48437),

Gene: DropBear_84 Start: 48015, Stop: 47824, Start Num: 29
Candidate Starts for DropBear_84:
(1, 48504), (2, 48471), (4, 48288), (Start: 29 @48015 has 21 MA's), (42, 47955), (46, 47889),

Gene: Druantia_84 Start: 48829, Stop: 48632, Start Num: 24
Candidate Starts for Druantia_84:
(Start: 24 @48829 has 7 MA's), (Start: 35 @48790 has 8 MA's), (38, 48781), (46, 48694), (47, 48661),

Gene: Duke13_235 Start: 110008, Stop: 109820, Start Num: 27
Candidate Starts for Duke13_235:
(Start: 23 @110023 has 3 MA's), (Start: 27 @110008 has 30 MA's), (34, 109984), (40, 109966), (44,
109927), (45, 109891), (47, 109855), (50, 109831),

Gene: Duplo_87 Start: 48361, Stop: 48158, Start Num: 22
Candidate Starts for Duplo_87:
(Start: 22 @48361 has 44 MA's), (37, 48307), (46, 48223),

Gene: EZMoney23_82 Start: 48034, Stop: 47822, Start Num: 22

Candidate Starts for EZMoney23_82:

(6, 48262), (10, 48181), (Start: 16 @48049 has 1 MA's), (Start: 22 @48034 has 44 MA's), (30, 48013), (36, 47983), (46, 47890),

Gene: EagleEye_87 Start: 48171, Stop: 47941, Start Num: 15

Candidate Starts for EagleEye_87:

(Start: 15 @48171 has 3 MA's), (Start: 22 @48147 has 44 MA's), (25, 48135), (Start: 28 @48123 has 8 MA's), (37, 48084),

Gene: Ejimix_226 Start: 109183, Stop: 109007, Start Num: 27

Candidate Starts for Ejimix_226:

(Start: 21 @109204 has 1 MA's), (Start: 27 @109183 has 30 MA's), (40, 109141), (44, 109114),

Gene: EnzoK_94 Start: 50479, Stop: 50279, Start Num: 26

Candidate Starts for EnzoK_94:

(Start: 26 @50479 has 9 MA's), (45, 50347),

Gene: Equemioh13_86 Start: 48553, Stop: 48347, Start Num: 22

Candidate Starts for Equemioh13_86:

(8, 48751), (Start: 16 @48568 has 1 MA's), (Start: 22 @48553 has 44 MA's), (37, 48499), (46, 48415),

Gene: EricMillard_232 Start: 111027, Stop: 110851, Start Num: 27

Candidate Starts for EricMillard_232:

(Start: 21 @111048 has 1 MA's), (Start: 27 @111027 has 30 MA's), (40, 110985), (44, 110958),

Gene: Et2Brutus_89 Start: 48147, Stop: 47950, Start Num: 28

Candidate Starts for Et2Brutus_89:

(Start: 28 @48147 has 8 MA's), (46, 48018), (50, 47961),

Gene: EtoileNova_83 Start: 47837, Stop: 47637, Start Num: 29

Candidate Starts for EtoileNova_83:

(9, 48026), (Start: 29 @47837 has 21 MA's), (42, 47777), (46, 47711), (47, 47678),

Gene: Fibonacci_89 Start: 48153, Stop: 47956, Start Num: 28

Candidate Starts for Fibonacci_89:

(Start: 28 @48153 has 8 MA's), (46, 48024), (50, 47967),

Gene: Flare16_86 Start: 48368, Stop: 48162, Start Num: 22

Candidate Starts for Flare16_86:

(8, 48566), (Start: 16 @48383 has 1 MA's), (Start: 22 @48368 has 44 MA's), (37, 48314), (46, 48230),

Gene: FlyCatcher_86 Start: 51563, Stop: 51378, Start Num: 26

Candidate Starts for FlyCatcher_86:

(Start: 26 @51563 has 9 MA's), (37, 51521), (45, 51446),

Gene: Gail_88 Start: 48344, Stop: 48141, Start Num: 22

Candidate Starts for Gail_88:

(Start: 16 @48359 has 1 MA's), (Start: 22 @48344 has 44 MA's), (37, 48293), (46, 48209),

Gene: GaugeLDP_80 Start: 47824, Stop: 47624, Start Num: 22

Candidate Starts for GaugeLDP_80:

(Start: 22 @47824 has 44 MA's), (36, 47773), (46, 47692),

Gene: Gladiator_85 Start: 46722, Stop: 46513, Start Num: 22

Candidate Starts for Gladiator_85:

(Start: 22 @46722 has 44 MA's), (39, 46662),

Gene: Gonephishing_231 Start: 108727, Stop: 108539, Start Num: 27

Candidate Starts for Gonephishing_231:

(Start: 23 @108742 has 3 MA's), (Start: 27 @108727 has 30 MA's), (34, 108703), (40, 108685), (44, 108646), (47, 108574), (50, 108550),

Gene: Goose_85 Start: 48375, Stop: 48187, Start Num: 29

Candidate Starts for Goose_85:

(17, 48408), (Start: 29 @48375 has 21 MA's), (45, 48255), (46, 48252),

Gene: Gratitude_84 Start: 48553, Stop: 48347, Start Num: 22

Candidate Starts for Gratitude_84:

(8, 48751), (Start: 16 @48568 has 1 MA's), (Start: 22 @48553 has 44 MA's), (37, 48499), (46, 48415),

Gene: Gruunaga_88 Start: 46677, Stop: 46468, Start Num: 22

Candidate Starts for Gruunaga_88:

(Start: 22 @46677 has 44 MA's), (39, 46617),

Gene: Hammer_89 Start: 46384, Stop: 46175, Start Num: 22

Candidate Starts for Hammer_89:

(Start: 22 @46384 has 44 MA's), (39, 46324), (45, 46249),

Gene: Hannaconda_225 Start: 109232, Stop: 109056, Start Num: 27

Candidate Starts for Hannaconda_225:

(Start: 21 @109253 has 1 MA's), (Start: 27 @109232 has 30 MA's), (40, 109190), (44, 109163),

Gene: HarryHoudini_86 Start: 48578, Stop: 48372, Start Num: 22

Candidate Starts for HarryHoudini_86:

(8, 48776), (Start: 16 @48593 has 1 MA's), (Start: 22 @48578 has 44 MA's), (46, 48440),

Gene: Heathen_86 Start: 47894, Stop: 47703, Start Num: 29

Candidate Starts for Heathen_86:

(1, 48383), (2, 48350), (4, 48167), (Start: 29 @47894 has 21 MA's), (42, 47834), (46, 47768),

Gene: HelDan_86 Start: 48117, Stop: 47926, Start Num: 29

Candidate Starts for HelDan_86:

(1, 48606), (2, 48573), (4, 48390), (Start: 29 @48117 has 21 MA's), (42, 48057), (46, 47991),

Gene: Hexamo_88 Start: 46552, Stop: 46343, Start Num: 22

Candidate Starts for Hexamo_88:

(Start: 22 @46552 has 44 MA's), (39, 46492),

Gene: Hidrated_220 Start: 109826, Stop: 109638, Start Num: 27

Candidate Starts for Hidrated_220:

(Start: 27 @109826 has 30 MA's), (34, 109802), (40, 109784), (44, 109745), (47, 109673), (50, 109649),

Gene: HokkenD_227 Start: 110994, Stop: 110791, Start Num: 23

Candidate Starts for HokkenD_227:

(Start: 23 @110994 has 3 MA's), (Start: 27 @110979 has 30 MA's), (34, 110955), (40, 110937), (44, 110898), (45, 110862), (47, 110826), (50, 110802),

Gene: Hookmount_86 Start: 47833, Stop: 47633, Start Num: 29

Candidate Starts for Hookmount_86:

(9, 48022), (Start: 29 @47833 has 21 MA's), (42, 47773), (46, 47707), (47, 47674),

Gene: Hughesyang_237 Start: 110914, Stop: 110738, Start Num: 27

Candidate Starts for Hughesyang_237:

(Start: 21 @110935 has 1 MA's), (Start: 27 @110914 has 30 MA's), (40, 110872), (44, 110845),

Gene: Hutc2_86 Start: 47037, Stop: 46840, Start Num: 28

Candidate Starts for Hutc2_86:

(Start: 28 @47037 has 8 MA's), (46, 46908), (50, 46851),

Gene: IgnatiusPatJac_87 Start: 48927, Stop: 49127, Start Num: 26

Candidate Starts for IgnatiusPatJac_87:

(Start: 26 @48927 has 9 MA's), (45, 49059),

Gene: Insomnia_89 Start: 48331, Stop: 48134, Start Num: 28

Candidate Starts for Insomnia_89:

(Start: 28 @48331 has 8 MA's), (46, 48202), (50, 48145),

Gene: Isca_83 Start: 47223, Stop: 47023, Start Num: 29

Candidate Starts for Isca_83:

(5, 47487), (Start: 29 @47223 has 21 MA's), (31, 47217), (42, 47163), (46, 47097), (47, 47064),

Gene: Jabith_89 Start: 48345, Stop: 48148, Start Num: 28

Candidate Starts for Jabith_89:

(3, 48675), (Start: 28 @48345 has 8 MA's), (46, 48216), (50, 48159),

Gene: Journey13_69 Start: 43468, Stop: 43256, Start Num: 22

Candidate Starts for Journey13_69:

(Start: 16 @43483 has 1 MA's), (Start: 22 @43468 has 44 MA's), (37, 43414), (42, 43390), (46, 43330), (47, 43297), (49, 43276),

Gene: Jsquared_90 Start: 48187, Stop: 47969, Start Num: 16

Candidate Starts for Jsquared_90:

(Start: 16 @48187 has 1 MA's), (Start: 22 @48172 has 44 MA's), (37, 48118), (46, 48034), (47, 48001),

Gene: JuicyJay_230 Start: 110889, Stop: 110713, Start Num: 27

Candidate Starts for JuicyJay_230:

(Start: 21 @110910 has 1 MA's), (Start: 27 @110889 has 30 MA's), (40, 110847), (44, 110820),

Gene: Kachowdy_84 Start: 48146, Stop: 47955, Start Num: 29

Candidate Starts for Kachowdy_84:

(1, 48635), (2, 48602), (4, 48419), (Start: 29 @48146 has 21 MA's), (42, 48086), (46, 48020),

Gene: Kalah2_224 Start: 108578, Stop: 108375, Start Num: 23

Candidate Starts for Kalah2_224:

(Start: 23 @108578 has 3 MA's), (Start: 27 @108563 has 30 MA's), (34, 108539), (40, 108521), (44, 108482), (45, 108446), (46, 108443), (47, 108410), (48, 108395),

Gene: Kalpine_88 Start: 49294, Stop: 49088, Start Num: 22

Candidate Starts for Kalpine_88:

(7, 49507), (Start: 16 @49309 has 1 MA's), (Start: 22 @49294 has 44 MA's), (46, 49156),

Gene: KashFlow_227 Start: 109125, Stop: 108949, Start Num: 27

Candidate Starts for KashFlow_227:

(Start: 21 @109146 has 1 MA's), (Start: 27 @109125 has 30 MA's), (40, 109083), (44, 109056), (46, 109017),

Gene: Katalie136_82 Start: 48581, Stop: 48423, Start Num: 35

Candidate Starts for Katalie136_82:

(Start: 24 @48620 has 7 MA's), (Start: 35 @48581 has 8 MA's), (38, 48572), (46, 48485), (47, 48452),

Gene: Kerberos_86 Start: 48324, Stop: 48121, Start Num: 22

Candidate Starts for Kerberos_86:

(Start: 22 @48324 has 44 MA's), (37, 48270), (46, 48186),

Gene: Killigrew_87 Start: 50774, Stop: 50574, Start Num: 26

Candidate Starts for Killigrew_87:

(Start: 26 @50774 has 9 MA's), (45, 50642),

Gene: Klein_242 Start: 109911, Stop: 109735, Start Num: 27

Candidate Starts for Klein_242:

(Start: 21 @109932 has 1 MA's), (Start: 27 @109911 has 30 MA's), (40, 109869), (44, 109842),

Gene: Kremtemulon_82 Start: 48636, Stop: 48466, Start Num: 35

Candidate Starts for Kremtemulon_82:

(Start: 35 @48636 has 8 MA's), (46, 48540), (47, 48507),

Gene: Lambert1_86 Start: 47834, Stop: 47634, Start Num: 29

Candidate Starts for Lambert1_86:

(4, 48107), (9, 48023), (Start: 29 @47834 has 21 MA's), (42, 47774), (46, 47708), (47, 47675),

Gene: Larenn_85 Start: 48736, Stop: 48527, Start Num: 22

Candidate Starts for Larenn_85:

(Start: 16 @48751 has 1 MA's), (Start: 22 @48736 has 44 MA's), (37, 48682), (42, 48658), (46, 48598), (47, 48565),

Gene: Lesedi_88 Start: 50089, Stop: 49889, Start Num: 26

Candidate Starts for Lesedi_88:

(Start: 26 @50089 has 9 MA's), (45, 49957),

Gene: Lilbunny_88 Start: 46631, Stop: 46422, Start Num: 22

Candidate Starts for Lilbunny_88:

(Start: 22 @46631 has 44 MA's), (39, 46571), (45, 46496),

Gene: LittleE_224 Start: 106916, Stop: 106728, Start Num: 27

Candidate Starts for LittleE_224:

(Start: 27 @106916 has 30 MA's), (34, 106892), (40, 106874), (44, 106835), (47, 106763), (50, 106739),

Gene: Lucky2013_232 Start: 106413, Stop: 106237, Start Num: 27

Candidate Starts for Lucky2013_232:

(Start: 21 @106434 has 1 MA's), (Start: 27 @106413 has 30 MA's), (40, 106371), (44, 106344),

Gene: Lucyedi_86 Start: 48370, Stop: 48140, Start Num: 15

Candidate Starts for Lucyedi_86:

(Start: 15 @48370 has 3 MA's), (Start: 22 @48346 has 44 MA's), (25, 48334), (Start: 28 @48322 has 8 MA's), (37, 48283),

Gene: Malec_85 Start: 49144, Stop: 48938, Start Num: 22

Candidate Starts for Malec_85:

(8, 49342), (Start: 16 @49159 has 1 MA's), (Start: 22 @49144 has 44 MA's), (37, 49090), (42, 49066), (46, 49006),

Gene: Marchesa_86 Start: 48008, Stop: 47817, Start Num: 29

Candidate Starts for Marchesa_86:

(1, 48497), (2, 48464), (4, 48281), (Start: 29 @48008 has 21 MA's), (42, 47948), (46, 47882),

Gene: Margo_86 Start: 47859, Stop: 47659, Start Num: 29

Candidate Starts for Margo_86:

(4, 48132), (9, 48048), (Start: 29 @47859 has 21 MA's), (42, 47799), (46, 47733), (47, 47700),

Gene: Marleymoo_215 Start: 106507, Stop: 106319, Start Num: 27

Candidate Starts for Marleymoo_215:

(Start: 27 @106507 has 30 MA's), (34, 106483), (40, 106465), (44, 106426), (47, 106354), (50, 106330),

Gene: MiaZeal_245 Start: 108550, Stop: 108374, Start Num: 27

Candidate Starts for MiaZeal_245:

(Start: 21 @108571 has 1 MA's), (Start: 27 @108550 has 30 MA's), (40, 108508), (44, 108481),

Gene: MiculUcigas_86 Start: 48271, Stop: 48065, Start Num: 22

Candidate Starts for MiculUcigas_86:

(8, 48469), (Start: 16 @48286 has 1 MA's), (Start: 22 @48271 has 44 MA's), (37, 48217), (46, 48133),

Gene: MissWhite_79 Start: 45139, Stop: 44933, Start Num: 22

Candidate Starts for MissWhite_79:

(Start: 16 @45154 has 1 MA's), (Start: 22 @45139 has 44 MA's), (37, 45085), (42, 45061), (46, 45001),

Gene: Morpher26_82 Start: 48602, Stop: 48444, Start Num: 35

Candidate Starts for Morpher26_82:

(Start: 24 @48641 has 7 MA's), (Start: 35 @48602 has 8 MA's), (38, 48593), (46, 48506), (47, 48473),

Gene: Mulciber_88 Start: 48150, Stop: 47953, Start Num: 28

Candidate Starts for Mulciber_88:

(Start: 28 @48150 has 8 MA's), (46, 48021), (50, 47964),

Gene: NaSiaTalie_87 Start: 48558, Stop: 48352, Start Num: 22

Candidate Starts for NaSiaTalie_87:

(8, 48756), (Start: 16 @48573 has 1 MA's), (Start: 22 @48558 has 44 MA's), (37, 48504), (46, 48420),

Gene: Nekros_235 Start: 109893, Stop: 109717, Start Num: 27

Candidate Starts for Nekros_235:

(Start: 21 @109914 has 1 MA's), (Start: 27 @109893 has 30 MA's), (40, 109851), (44, 109824),

Gene: Nibley_225 Start: 105186, Stop: 105010, Start Num: 27
Candidate Starts for Nibley_225:
(Start: 21 @105207 has 1 MA's), (Start: 27 @105186 has 30 MA's), (40, 105144), (44, 105117),

Gene: NihilNomen_236 Start: 108748, Stop: 108545, Start Num: 23
Candidate Starts for NihilNomen_236:
(Start: 23 @108748 has 3 MA's), (Start: 27 @108733 has 30 MA's), (34, 108709), (40, 108691), (44, 108652), (47, 108580), (50, 108556),

Gene: Noella_87 Start: 47835, Stop: 47635, Start Num: 29
Candidate Starts for Noella_87:
(9, 48024), (Start: 29 @47835 has 21 MA's), (42, 47775), (46, 47709), (47, 47676),

Gene: Norbert_82 Start: 47832, Stop: 47632, Start Num: 29
Candidate Starts for Norbert_82:
(9, 48021), (Start: 29 @47832 has 21 MA's), (42, 47772), (46, 47706), (47, 47673),

Gene: Odette_234 Start: 110012, Stop: 109836, Start Num: 27
Candidate Starts for Odette_234:
(Start: 21 @110033 has 1 MA's), (Start: 27 @110012 has 30 MA's), (40, 109970), (44, 109943),

Gene: Omega_235 Start: 109887, Stop: 109675, Start Num: 20
Candidate Starts for Omega_235:
(14, 109956), (Start: 20 @109887 has 1 MA's), (34, 109839), (40, 109821), (44, 109782), (47, 109710), (50, 109686),

Gene: PainterBoy_85 Start: 48081, Stop: 47851, Start Num: 15
Candidate Starts for PainterBoy_85:
(Start: 15 @48081 has 3 MA's), (Start: 22 @48057 has 44 MA's), (25, 48045), (Start: 28 @48033 has 8 MA's), (37, 47994),

Gene: Panamaxus_82 Start: 47834, Stop: 47634, Start Num: 29
Candidate Starts for Panamaxus_82:
(9, 48023), (Start: 29 @47834 has 21 MA's), (42, 47774), (46, 47708), (47, 47675),

Gene: Perplexer_82 Start: 48582, Stop: 48424, Start Num: 35
Candidate Starts for Perplexer_82:
(Start: 24 @48621 has 7 MA's), (Start: 35 @48582 has 8 MA's), (38, 48573), (46, 48486), (47, 48453),

Gene: PetiteSangsue_82 Start: 48585, Stop: 48427, Start Num: 35
Candidate Starts for PetiteSangsue_82:
(Start: 24 @48624 has 7 MA's), (Start: 35 @48585 has 8 MA's), (38, 48576), (46, 48489), (47, 48456),

Gene: Phantastic_87 Start: 47341, Stop: 47150, Start Num: 29
Candidate Starts for Phantastic_87:
(5, 47605), (Start: 29 @47341 has 21 MA's), (31, 47335), (42, 47281), (46, 47215),

Gene: PherrisBueller_88 Start: 48812, Stop: 48612, Start Num: 26
Candidate Starts for PherrisBueller_88:
(Start: 26 @48812 has 9 MA's), (45, 48680),

Gene: Phlei_72 Start: 46175, Stop: 45936, Start Num: 19
Candidate Starts for Phlei_72:

(19, 46175), (45, 46019),

Gene: Phoebus_233 Start: 112122, Stop: 111946, Start Num: 27

Candidate Starts for Phoebus_233:

(Start: 21 @112143 has 1 MA's), (Start: 27 @112122 has 30 MA's), (40, 112080), (44, 112053),

Gene: Piro94_85 Start: 48506, Stop: 48300, Start Num: 22

Candidate Starts for Piro94_85:

(8, 48704), (Start: 16 @48521 has 1 MA's), (Start: 22 @48506 has 44 MA's), (46, 48368),

Gene: Pocahontas_85 Start: 47830, Stop: 47630, Start Num: 29

Candidate Starts for Pocahontas_85:

(9, 48019), (Start: 29 @47830 has 21 MA's), (42, 47770), (46, 47704), (47, 47671),

Gene: Pomar16_86 Start: 48397, Stop: 48194, Start Num: 22

Candidate Starts for Pomar16_86:

(Start: 22 @48397 has 44 MA's), (37, 48343), (46, 48259),

Gene: Popcicle_86 Start: 47830, Stop: 47630, Start Num: 29

Candidate Starts for Popcicle_86:

(9, 48019), (Start: 29 @47830 has 21 MA's), (42, 47770), (46, 47704), (47, 47671),

Gene: Porcelain_236 Start: 107360, Stop: 107184, Start Num: 27

Candidate Starts for Porcelain_236:

(Start: 21 @107381 has 1 MA's), (Start: 27 @107360 has 30 MA's), (40, 107318), (44, 107291),

Gene: Pound_223 Start: 107829, Stop: 107617, Start Num: 21

Candidate Starts for Pound_223:

(Start: 21 @107829 has 1 MA's), (Start: 27 @107808 has 30 MA's), (34, 107784), (36, 107775), (41, 107760), (44, 107724), (45, 107688), (46, 107685), (47, 107652), (48, 107637),

Gene: QuinnKiro_85 Start: 47833, Stop: 47633, Start Num: 29

Candidate Starts for QuinnKiro_85:

(4, 48106), (9, 48022), (Start: 29 @47833 has 21 MA's), (42, 47773), (46, 47707), (47, 47674),

Gene: Rearden_235 Start: 108013, Stop: 107825, Start Num: 27

Candidate Starts for Rearden_235:

(Start: 27 @108013 has 30 MA's), (34, 107989), (40, 107971), (44, 107932), (47, 107860), (50, 107836),

Gene: Redno2_226 Start: 106231, Stop: 106055, Start Num: 27

Candidate Starts for Redno2_226:

(Start: 21 @106252 has 1 MA's), (Start: 27 @106231 has 30 MA's), (40, 106189), (44, 106162),

Gene: ResDef_84 Start: 47836, Stop: 47636, Start Num: 29

Candidate Starts for ResDef_84:

(9, 48025), (Start: 29 @47836 has 21 MA's), (42, 47776), (46, 47710), (47, 47677),

Gene: Rifter_89 Start: 46179, Stop: 45970, Start Num: 22

Candidate Starts for Rifter_89:

(Start: 22 @46179 has 44 MA's), (39, 46119),

Gene: Rockstar_75 Start: 45031, Stop: 44831, Start Num: 29

Candidate Starts for Rockstar_75:

(5, 45295), (Start: 29 @45031 has 21 MA's), (31, 45025), (42, 44971), (46, 44905),

Gene: Roimos_85 Start: 48032, Stop: 47841, Start Num: 29

Candidate Starts for Roimos_85:

(1, 48521), (2, 48488), (4, 48305), (Start: 29 @48032 has 21 MA's), (42, 47972), (46, 47906),

Gene: Roksolana_89 Start: 46895, Stop: 46686, Start Num: 22

Candidate Starts for Roksolana_89:

(Start: 22 @46895 has 44 MA's), (39, 46835),

Gene: Salz_85 Start: 46959, Stop: 46762, Start Num: 28

Candidate Starts for Salz_85:

(Start: 28 @46959 has 8 MA's), (46, 46830), (50, 46773),

Gene: Saskia_86 Start: 47205, Stop: 46999, Start Num: 22

Candidate Starts for Saskia_86:

(Start: 16 @47220 has 1 MA's), (Start: 22 @47205 has 44 MA's), (37, 47151), (42, 47127), (46, 47067), (50, 47010),

Gene: Schatzie_227 Start: 109153, Stop: 108977, Start Num: 27

Candidate Starts for Schatzie_227:

(Start: 21 @109174 has 1 MA's), (Start: 27 @109153 has 30 MA's), (40, 109111), (44, 109084),

Gene: Scout_86 Start: 47357, Stop: 47166, Start Num: 29

Candidate Starts for Scout_86:

(1, 47846), (2, 47813), (4, 47630), (Start: 29 @47357 has 21 MA's), (42, 47297), (46, 47231),

Gene: Shaboozey_232 Start: 106458, Stop: 106282, Start Num: 27

Candidate Starts for Shaboozey_232:

(Start: 21 @106479 has 1 MA's), (Start: 27 @106458 has 30 MA's), (40, 106416), (44, 106389),

Gene: Sham4_86 Start: 47045, Stop: 46848, Start Num: 28

Candidate Starts for Sham4_86:

(Start: 28 @47045 has 8 MA's), (46, 46916), (50, 46859),

Gene: Sheen_83 Start: 50900, Stop: 50715, Start Num: 26

Candidate Starts for Sheen_83:

(Start: 26 @50900 has 9 MA's), (37, 50858), (45, 50783),

Gene: Sknot_86 Start: 48365, Stop: 48159, Start Num: 22

Candidate Starts for Sknot_86:

(8, 48563), (Start: 16 @48380 has 1 MA's), (Start: 22 @48365 has 44 MA's), (37, 48311), (46, 48227),

Gene: SororFago_85 Start: 48106, Stop: 47903, Start Num: 22

Candidate Starts for SororFago_85:

(Start: 16 @48121 has 1 MA's), (Start: 22 @48106 has 44 MA's), (37, 48055),

Gene: Squint_233 Start: 108166, Stop: 107990, Start Num: 27

Candidate Starts for Squint_233:

(Start: 21 @108187 has 1 MA's), (Start: 27 @108166 has 30 MA's), (40, 108124), (44, 108097),

Gene: StarStuff_86 Start: 48359, Stop: 48156, Start Num: 22

Candidate Starts for StarStuff_86:

(Start: 22 @48359 has 44 MA's), (37, 48305), (46, 48221),

Gene: Superphikiman_233 Start: 107294, Stop: 107106, Start Num: 27

Candidate Starts for Superphikiman_233:

(Start: 21 @107315 has 1 MA's), (Start: 27 @107294 has 30 MA's), (40, 107252), (44, 107213), (47, 107141), (50, 107117),

Gene: Terrific_87 Start: 48339, Stop: 48133, Start Num: 22

Candidate Starts for Terrific_87:

(8, 48537), (Start: 16 @48354 has 1 MA's), (Start: 22 @48339 has 44 MA's), (37, 48285), (46, 48201),

Gene: Texage_84 Start: 47834, Stop: 47634, Start Num: 29

Candidate Starts for Texage_84:

(9, 48023), (Start: 29 @47834 has 21 MA's), (42, 47774), (46, 47708), (47, 47675),

Gene: Thibault_209 Start: 104098, Stop: 103910, Start Num: 27

Candidate Starts for Thibault_209:

(Start: 27 @104098 has 30 MA's), (34, 104074), (40, 104056), (44, 104017), (47, 103945), (50, 103921),

Gene: ThreeRngTarjay_234 Start: 111335, Stop: 111162, Start Num: 27

Candidate Starts for ThreeRngTarjay_234:

(Start: 21 @111356 has 1 MA's), (Start: 27 @111335 has 30 MA's), (40, 111293), (44, 111266),

Gene: Todacoro_86 Start: 47833, Stop: 47633, Start Num: 29

Candidate Starts for Todacoro_86:

(4, 48106), (9, 48022), (Start: 29 @47833 has 21 MA's), (42, 47773), (46, 47707), (47, 47674),

Gene: Tomathan_86 Start: 48437, Stop: 48234, Start Num: 22

Candidate Starts for Tomathan_86:

(Start: 22 @48437 has 44 MA's), (37, 48383), (46, 48299),

Gene: ToneTone_86 Start: 46559, Stop: 46350, Start Num: 22

Candidate Starts for ToneTone_86:

(Start: 22 @46559 has 44 MA's), (39, 46499), (45, 46424),

Gene: Toro_84 Start: 51563, Stop: 51378, Start Num: 26

Candidate Starts for Toro_84:

(Start: 26 @51563 has 9 MA's), (37, 51521), (45, 51446),

Gene: Travvers_86 Start: 48354, Stop: 48151, Start Num: 22

Candidate Starts for Travvers_86:

(Start: 22 @48354 has 44 MA's), (37, 48300), (46, 48216),

Gene: Tucker_89 Start: 46762, Stop: 46553, Start Num: 22

Candidate Starts for Tucker_89:

(Start: 22 @46762 has 44 MA's), (39, 46702), (45, 46627),

Gene: Updawg_87 Start: 48553, Stop: 48347, Start Num: 22

Candidate Starts for Updawg_87:

(8, 48751), (Start: 16 @48568 has 1 MA's), (Start: 22 @48553 has 44 MA's), (37, 48499), (46, 48415),

Gene: VC3_84 Start: 47253, Stop: 47056, Start Num: 22
Candidate Starts for VC3_84:
(Start: 22 @47253 has 44 MA's), (37, 47199), (46, 47121),

Gene: Veracruz_83 Start: 47834, Stop: 47634, Start Num: 29
Candidate Starts for Veracruz_83:
(4, 48107), (9, 48023), (Start: 29 @47834 has 21 MA's), (42, 47774), (46, 47708), (47, 47675),

Gene: Wanda_234 Start: 107541, Stop: 107365, Start Num: 27
Candidate Starts for Wanda_234:
(Start: 21 @107562 has 1 MA's), (Start: 27 @107541 has 30 MA's), (40, 107499), (44, 107472),

Gene: WideWale_87 Start: 48553, Stop: 48347, Start Num: 22
Candidate Starts for WideWale_87:
(8, 48751), (Start: 16 @48568 has 1 MA's), (Start: 22 @48553 has 44 MA's), (37, 48499), (46, 48415),

Gene: Wile_81 Start: 48650, Stop: 48453, Start Num: 24
Candidate Starts for Wile_81:
(Start: 24 @48650 has 7 MA's), (Start: 35 @48611 has 8 MA's), (38, 48602), (46, 48515), (47, 48482),

Gene: Wizard007_82 Start: 48376, Stop: 48179, Start Num: 24
Candidate Starts for Wizard007_82:
(Start: 24 @48376 has 7 MA's), (Start: 35 @48337 has 8 MA's), (38, 48328), (46, 48241), (47, 48208),

Gene: Wolpertinger_89 Start: 48164, Stop: 47967, Start Num: 28
Candidate Starts for Wolpertinger_89:
(Start: 28 @48164 has 8 MA's), (46, 48035), (50, 47978),

Gene: Xiaokay_220 Start: 108420, Stop: 108232, Start Num: 27
Candidate Starts for Xiaokay_220:
(Start: 27 @108420 has 30 MA's), (34, 108396), (40, 108378), (44, 108339), (47, 108267), (50, 108243),

Gene: Yeet_229 Start: 109251, Stop: 109075, Start Num: 27
Candidate Starts for Yeet_229:
(Start: 21 @109272 has 1 MA's), (Start: 27 @109251 has 30 MA's), (40, 109209), (44, 109182),

Gene: Zarafa_84 Start: 48022, Stop: 47831, Start Num: 29
Candidate Starts for Zarafa_84:
(1, 48511), (2, 48478), (4, 48295), (Start: 29 @48022 has 21 MA's), (33, 48001), (42, 47962), (46, 47896),

Gene: Zeeculate_91 Start: 53471, Stop: 53271, Start Num: 26
Candidate Starts for Zeeculate_91:
(Start: 26 @53471 has 9 MA's), (45, 53339),

Gene: Zelink_228 Start: 108839, Stop: 108663, Start Num: 27
Candidate Starts for Zelink_228:
(Start: 21 @108860 has 1 MA's), (Start: 27 @108839 has 30 MA's), (40, 108797), (44, 108770),