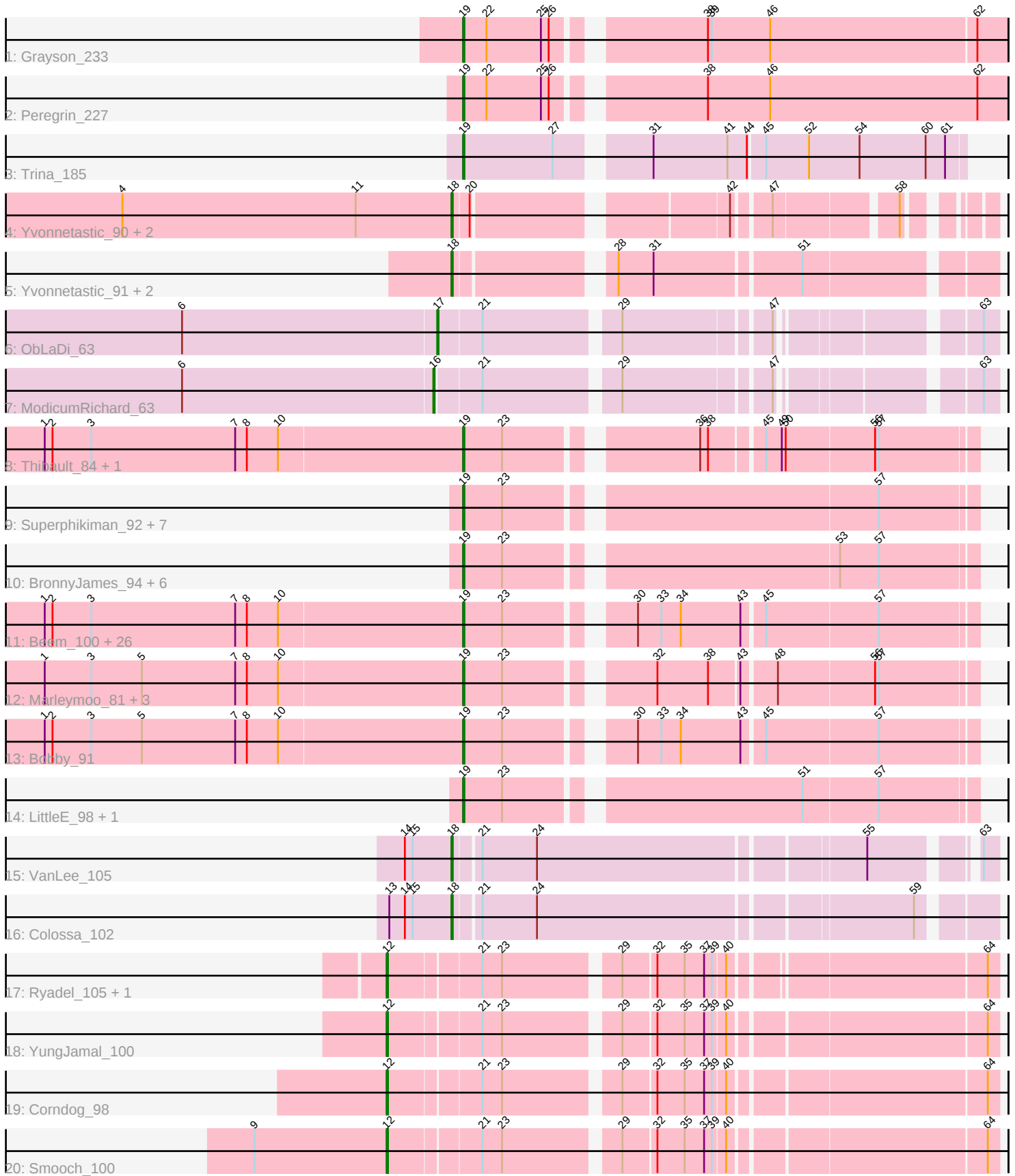


Pham 330818



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 330818 Report

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

Pham number 330818 has 69 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Grayson_233
- Track 2 : Peregrin_227
- Track 3 : Trina_185
- Track 4 : Yvonnestic_90, JonJames_92, Cardigan_91
- Track 5 : Yvonnestic_91, JonJames_93, Cardigan_92
- Track 6 : ObLaDi_63
- Track 7 : ModicumRichard_63
- Track 8 : Thibault_84, Constella_85
- Track 9 : Superphikiman_92, Courthouse_90, Hidrated_86, MiaZeal_95, Xiaokay_89, Porcelain_93, Squint_93, Ariel_94
- Track 10 : BronnyJames_94, Nekros_97, Rearden_89, Nibley_88, Gonephishing_87, Shaboozey_93, Lucky2013_92
- Track 11 : Beem_100, Yeet_92, Ejimix_93, Kalah2_93, HokkenD_88, Bagrid_99, ThreeRngTarjay_96, Schatzie_94, Optimus_93, BAKA_101, Pound_91, Klein_100, Halley_101, JuicyJay_96, EricMillard_93, Bombitas_88, Redno2_91, Hughesyang_99, Dove_85, Wanda_103, Phoebus_101, Odette_99, Dallas_101, Zelink_96, NihilNomen_101, Minerva_99, Duke13_96
- Track 12 : Marleymoo_81, Hannaconda_86, DmpstrDiver_101, KashFlow_90
- Track 13 : Bobby_91
- Track 14 : LittleE_98, Omega_104
- Track 15 : VanLee_105
- Track 16 : Colossa_102
- Track 17 : Ryadel_105, MadKillah_104
- Track 18 : YungJamal_100
- Track 19 : Corndog_98
- Track 20 : Smooch_100

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

The start number called the most often in the published annotations is 19, it was called in 44 of the 59 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel_94, BAKA_101, Bagrid_99, Beem_100, Bobby_91, Bombitas_88, BronnyJames_94, Constella_85, Courthouse_90, Dallas_101, DmpstrDiver_101, Dove_85, Duke13_96, Ejimix_93, EricMillard_93, Gonephishing_87, Grayson_233, Halley_101, Hannaconda_86, Hidrated_86, HokkenD_88, Hughesyang_99, JuicyJay_96, Kalah2_93, KashFlow_90, Klein_100, LittleE_98, Lucky2013_92, Marleymoo_81, MiaZeal_95, Minerva_99, Nekros_97, Nibley_88, NihilNomen_101, Odette_99, Omega_104, Optimus_93, Peregrin_227, Phoebus_101, Porcelain_93, Pound_91, Rearden_89, Redno2_91, Schatzie_94, Shaboozey_93, Squint_93, Superphikiman_92, Thibault_84, ThreeRngTarjay_96, Trina_185, Wanda_103, Xiaokay_89, Yeet_92, Zelink_96,

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

-

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

- Cardigan_91, Cardigan_92, Colossa_102, Corndog_98, JonJames_92, JonJames_93, MadKillah_104, ModicumRichard_63, ObLaDi_63, Ryadel_105, Smooch_100, VanLee_105, YungJamal_100, Yvonnetastic_90, Yvonnetastic_91,

Summary by start number:

Start 12:

- Found in 5 of 69 (7.2%) of genes in pham
- Manual Annotations of this start: 5 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Corndog_98 (O), MadKillah_104 (O), Ryadel_105 (O), Smooch_100 (O), YungJamal_100 (O),

Start 16:

- Found in 1 of 69 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ModicumRichard_63 (DZ),

Start 17:

- Found in 1 of 69 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ObLaDi_63 (DZ),

Start 18:

- Found in 8 of 69 (11.6%) of genes in pham
- Manual Annotations of this start: 8 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cardigan_91 (DD), Cardigan_92 (DD), Colossa_102 (KA), JonJames_92 (DD), JonJames_93 (DD), VanLee_105 (KA), Yvonnetastic_90 (DD), Yvonnetastic_91 (DD),

Start 19:

- Found in 54 of 69 (78.3%) of genes in pham
- Manual Annotations of this start: 44 of 59
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Ariel_94 (J), BAKA_101 (J), Bagrid_99 (J), Beem_100 (J), Bobby_91 (J), Bombitas_88 (J), BronnyJames_94 (J), Constella_85 (J), Courthouse_90 (J), Dallas_101 (J), DmpstrDiver_101 (J), Dove_85 (J), Duke13_96 (J), Ejimix_93 (J), EricMillard_93 (J), Gonephishing_87 (J), Grayson_233 (CB), Halley_101 (J), Hannaconda_86 (J), Hidrated_86 (J), HokkenD_88 (J), Hughesyang_99 (J), JuicyJay_96 (J), Kalah2_93 (J), KashFlow_90 (J), Klein_100 (J), LittleE_98 (J), Lucky2013_92 (J), Marleymoo_81 (J), MiaZeal_95 (J), Minerva_99 (J), Nekros_97 (J), Nibley_88 (J), NihilNomen_101 (J), Odette_99 (J), Omega_104 (J), Optimus_93 (J), Peregrin_227 (CB), Phoebus_101 (J), Porcelain_93 (J), Pound_91 (J), Rearden_89 (J), Redno2_91 (J), Schatzie_94 (J), Shaboozey_93 (J), Squint_93 (J), Superphikiman_92 (J), Thibault_84 (J), ThreeRngTarjay_96 (J), Trina_185 (CE), Wanda_103 (J), Xiaokay_89 (J), Yeet_92 (J), Zelink_96 (J),

Summary by clusters:

There are 7 clusters represented in this pham: KA, CB, DD, J, CE, DZ, O,

Info for manual annotations of cluster CB:

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

Info for manual annotations of cluster CE:

- Start number 19 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster DD:

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

Info for manual annotations of cluster DZ:

- Start number 16 was manually annotated 1 time for cluster DZ.
- Start number 17 was manually annotated 1 time for cluster DZ.

Info for manual annotations of cluster J:

- Start number 19 was manually annotated 41 times for cluster J.

Info for manual annotations of cluster KA:

- Start number 18 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster O:

- Start number 12 was manually annotated 5 times for cluster O.

Gene Information:

Gene: Ariel_94 Start: 54759, Stop: 55124, Start Num: 19

Candidate Starts for Ariel_94:

(Start: 19 @54759 has 44 MA's), (23, 54789), (57, 55053),

Gene: BAKA_101 Start: 60653, Stop: 61012, Start Num: 19

Candidate Starts for BAKA_101:

(1, 60332), (2, 60338), (3, 60368), (7, 60479), (8, 60488), (10, 60512), (Start: 19 @60653 has 44 MA's), (23, 60683), (30, 60764), (33, 60782), (34, 60797), (43, 60842), (45, 60857), (57, 60941),

Gene: Bagrid_99 Start: 59520, Stop: 59879, Start Num: 19

Candidate Starts for Bagrid_99:

(1, 59199), (2, 59205), (3, 59235), (7, 59346), (8, 59355), (10, 59379), (Start: 19 @59520 has 44 MA's), (23, 59550), (30, 59631), (33, 59649), (34, 59664), (43, 59709), (45, 59724), (57, 59808),

Gene: Beem_100 Start: 60381, Stop: 60740, Start Num: 19

Candidate Starts for Beem_100:

(1, 60060), (2, 60066), (3, 60096), (7, 60207), (8, 60216), (10, 60240), (Start: 19 @60381 has 44 MA's), (23, 60411), (30, 60492), (33, 60510), (34, 60525), (43, 60570), (45, 60585), (57, 60669),

Gene: Bobby_91 Start: 58746, Stop: 59105, Start Num: 19

Candidate Starts for Bobby_91:

(1, 58425), (2, 58431), (3, 58461), (5, 58500), (7, 58572), (8, 58581), (10, 58605), (Start: 19 @58746 has 44 MA's), (23, 58776), (30, 58857), (33, 58875), (34, 58890), (43, 58935), (45, 58950), (57, 59034),

Gene: Bombitas_88 Start: 57544, Stop: 57903, Start Num: 19

Candidate Starts for Bombitas_88:

(1, 57223), (2, 57229), (3, 57259), (7, 57370), (8, 57379), (10, 57403), (Start: 19 @57544 has 44 MA's), (23, 57574), (30, 57655), (33, 57673), (34, 57688), (43, 57733), (45, 57748), (57, 57832),

Gene: BronnyJames_94 Start: 55241, Stop: 55606, Start Num: 19

Candidate Starts for BronnyJames_94:

(Start: 19 @55241 has 44 MA's), (23, 55271), (53, 55505), (57, 55535),

Gene: Cardigan_91 Start: 56443, Stop: 56784, Start Num: 18

Candidate Starts for Cardigan_91:

(4, 56191), (11, 56371), (Start: 18 @56443 has 8 MA's), (20, 56455), (42, 56629), (47, 56653), (58, 56737),

Gene: Cardigan_92 Start: 56781, Stop: 57152, Start Num: 18

Candidate Starts for Cardigan_92:

(Start: 18 @56781 has 8 MA's), (28, 56886), (31, 56913), (51, 57018),

Gene: Colossa_102 Start: 55194, Stop: 55577, Start Num: 18

Candidate Starts for Colossa_102:

(13, 55146), (14, 55158), (15, 55164), (Start: 18 @55194 has 8 MA's), (21, 55212), (24, 55254), (59, 55527),

Gene: Constella_85 Start: 54550, Stop: 54906, Start Num: 19

Candidate Starts for Constella_85:

(1, 54229), (2, 54235), (3, 54265), (7, 54376), (8, 54385), (10, 54409), (Start: 19 @54550 has 44 MA's), (23, 54580), (36, 54709), (38, 54715), (45, 54751), (49, 54763), (50, 54766), (56, 54832), (57, 54835),

Gene: Corndog_98 Start: 61248, Stop: 60820, Start Num: 12

Candidate Starts for Corndog_98:

(Start: 12 @61248 has 5 MA's), (21, 61182), (23, 61167), (29, 61086), (32, 61062), (35, 61041), (37, 61026), (39, 61020), (40, 61011), (64, 60828),

Gene: Courthouse_90 Start: 54359, Stop: 54724, Start Num: 19

Candidate Starts for Courthouse_90:

(Start: 19 @54359 has 44 MA's), (23, 54389), (57, 54653),

Gene: Dallas_101 Start: 60389, Stop: 60748, Start Num: 19

Candidate Starts for Dallas_101:

(1, 60068), (2, 60074), (3, 60104), (7, 60215), (8, 60224), (10, 60248), (Start: 19 @60389 has 44 MA's), (23, 60419), (30, 60500), (33, 60518), (34, 60533), (43, 60578), (45, 60593), (57, 60677),

Gene: DmpstrDiver_101 Start: 59812, Stop: 60168, Start Num: 19

Candidate Starts for DmpstrDiver_101:

(1, 59491), (3, 59527), (5, 59566), (7, 59638), (8, 59647), (10, 59671), (Start: 19 @59812 has 44 MA's), (23, 59842), (32, 59938), (38, 59977), (43, 59998), (48, 60022), (56, 60094), (57, 60097),

Gene: Dove_85 Start: 55810, Stop: 56169, Start Num: 19

Candidate Starts for Dove_85:

(1, 55489), (2, 55495), (3, 55525), (7, 55636), (8, 55645), (10, 55669), (Start: 19 @55810 has 44 MA's), (23, 55840), (30, 55921), (33, 55939), (34, 55954), (43, 55999), (45, 56014), (57, 56098),

Gene: Duke13_96 Start: 58321, Stop: 58680, Start Num: 19

Candidate Starts for Duke13_96:

(1, 58000), (2, 58006), (3, 58036), (7, 58147), (8, 58156), (10, 58180), (Start: 19 @58321 has 44 MA's), (23, 58351), (30, 58432), (33, 58450), (34, 58465), (43, 58510), (45, 58525), (57, 58609),

Gene: Ejimix_93 Start: 60108, Stop: 60467, Start Num: 19

Candidate Starts for Ejimix_93:

(1, 59787), (2, 59793), (3, 59823), (7, 59934), (8, 59943), (10, 59967), (Start: 19 @60108 has 44 MA's), (23, 60138), (30, 60219), (33, 60237), (34, 60252), (43, 60297), (45, 60312), (57, 60396),

Gene: EricMillard_93 Start: 59449, Stop: 59808, Start Num: 19

Candidate Starts for EricMillard_93:

(1, 59128), (2, 59134), (3, 59164), (7, 59275), (8, 59284), (10, 59308), (Start: 19 @59449 has 44 MA's), (23, 59479), (30, 59560), (33, 59578), (34, 59593), (43, 59638), (45, 59653), (57, 59737),

Gene: Gonephishing_87 Start: 53920, Stop: 54285, Start Num: 19

Candidate Starts for Gonephishing_87:

(Start: 19 @53920 has 44 MA's), (23, 53950), (53, 54184), (57, 54214),

Gene: Grayson_233 Start: 113502, Stop: 113894, Start Num: 19

Candidate Starts for Grayson_233:

(Start: 19 @113502 has 44 MA's), (22, 113520), (25, 113562), (26, 113568), (38, 113667), (39, 113670), (46, 113715), (62, 113871),

Gene: Halley_101 Start: 60382, Stop: 60741, Start Num: 19

Candidate Starts for Halley_101:

(1, 60061), (2, 60067), (3, 60097), (7, 60208), (8, 60217), (10, 60241), (Start: 19 @60382 has 44 MA's), (23, 60412), (30, 60493), (33, 60511), (34, 60526), (43, 60571), (45, 60586), (57, 60670),

Gene: Hannaconda_86 Start: 53322, Stop: 53678, Start Num: 19

Candidate Starts for Hannaconda_86:

(1, 53001), (3, 53037), (5, 53076), (7, 53148), (8, 53157), (10, 53181), (Start: 19 @53322 has 44 MA's), (23, 53352), (32, 53448), (38, 53487), (43, 53508), (48, 53532), (56, 53604), (57, 53607),

Gene: Hidrated_86 Start: 58278, Stop: 58643, Start Num: 19

Candidate Starts for Hidrated_86:

(Start: 19 @58278 has 44 MA's), (23, 58308), (57, 58572),

Gene: HokkenD_88 Start: 58651, Stop: 59010, Start Num: 19

Candidate Starts for HokkenD_88:

(1, 58330), (2, 58336), (3, 58366), (7, 58477), (8, 58486), (10, 58510), (Start: 19 @58651 has 44 MA's), (23, 58681), (30, 58762), (33, 58780), (34, 58795), (43, 58840), (45, 58855), (57, 58939),

Gene: Hughesyang_99 Start: 60340, Stop: 60699, Start Num: 19

Candidate Starts for Hughesyang_99:

(1, 60019), (2, 60025), (3, 60055), (7, 60166), (8, 60175), (10, 60199), (Start: 19 @60340 has 44 MA's), (23, 60370), (30, 60451), (33, 60469), (34, 60484), (43, 60529), (45, 60544), (57, 60628),

Gene: JonJames_92 Start: 56636, Stop: 56977, Start Num: 18

Candidate Starts for JonJames_92:

(4, 56384), (11, 56564), (Start: 18 @56636 has 8 MA's), (20, 56648), (42, 56822), (47, 56846), (58, 56930),

Gene: JonJames_93 Start: 56974, Stop: 57345, Start Num: 18

Candidate Starts for JonJames_93:

(Start: 18 @56974 has 8 MA's), (28, 57079), (31, 57106), (51, 57211),

Gene: JuicyJay_96 Start: 61516, Stop: 61875, Start Num: 19

Candidate Starts for JuicyJay_96:

(1, 61195), (2, 61201), (3, 61231), (7, 61342), (8, 61351), (10, 61375), (Start: 19 @61516 has 44 MA's), (23, 61546), (30, 61627), (33, 61645), (34, 61660), (43, 61705), (45, 61720), (57, 61804),

Gene: Kalah2_93 Start: 59675, Stop: 60034, Start Num: 19

Candidate Starts for Kalah2_93:

(1, 59354), (2, 59360), (3, 59390), (7, 59501), (8, 59510), (10, 59534), (Start: 19 @59675 has 44 MA's), (23, 59705), (30, 59786), (33, 59804), (34, 59819), (43, 59864), (45, 59879), (57, 59963),

Gene: KashFlow_90 Start: 54883, Stop: 55239, Start Num: 19

Candidate Starts for KashFlow_90:

(1, 54562), (3, 54598), (5, 54637), (7, 54709), (8, 54718), (10, 54742), (Start: 19 @54883 has 44 MA's), (23, 54913), (32, 55009), (38, 55048), (43, 55069), (48, 55093), (56, 55165), (57, 55168),

Gene: Klein_100 Start: 59382, Stop: 59741, Start Num: 19

Candidate Starts for Klein_100:

(1, 59061), (2, 59067), (3, 59097), (7, 59208), (8, 59217), (10, 59241), (Start: 19 @59382 has 44 MA's), (23, 59412), (30, 59493), (33, 59511), (34, 59526), (43, 59571), (45, 59586), (57, 59670),

Gene: LittleE_98 Start: 58455, Stop: 58820, Start Num: 19

Candidate Starts for LittleE_98:

(Start: 19 @58455 has 44 MA's), (23, 58485), (51, 58692), (57, 58749),

Gene: Lucky2013_92 Start: 54775, Stop: 55140, Start Num: 19

Candidate Starts for Lucky2013_92:

(Start: 19 @54775 has 44 MA's), (23, 54805), (53, 55039), (57, 55069),

Gene: MadKillah_104 Start: 62467, Stop: 62042, Start Num: 12

Candidate Starts for MadKillah_104:

(Start: 12 @62467 has 5 MA's), (21, 62401), (23, 62386), (29, 62305), (32, 62281), (35, 62260), (37, 62245), (39, 62239), (40, 62230), (64, 62050),

Gene: Marleymoo_81 Start: 56537, Stop: 56893, Start Num: 19

Candidate Starts for Marleymoo_81:

(1, 56216), (3, 56252), (5, 56291), (7, 56363), (8, 56372), (10, 56396), (Start: 19 @56537 has 44 MA's), (23, 56567), (32, 56663), (38, 56702), (43, 56723), (48, 56747), (56, 56819), (57, 56822),

Gene: MiaZeal_95 Start: 55431, Stop: 55796, Start Num: 19

Candidate Starts for MiaZeal_95:

(Start: 19 @55431 has 44 MA's), (23, 55461), (57, 55725),

Gene: Minerva_99 Start: 60327, Stop: 60686, Start Num: 19

Candidate Starts for Minerva_99:

(1, 60006), (2, 60012), (3, 60042), (7, 60153), (8, 60162), (10, 60186), (Start: 19 @60327 has 44 MA's), (23, 60357), (30, 60438), (33, 60456), (34, 60471), (43, 60516), (45, 60531), (57, 60615),

Gene: ModicumRichard_63 Start: 43300, Stop: 43671, Start Num: 16

Candidate Starts for ModicumRichard_63:

(6, 43108), (Start: 16 @43300 has 1 MA's), (21, 43333), (29, 43429), (47, 43531), (63, 43660),

Gene: Nekros_97 Start: 58390, Stop: 58755, Start Num: 19

Candidate Starts for Nekros_97:

(Start: 19 @58390 has 44 MA's), (23, 58420), (53, 58654), (57, 58684),

Gene: Nibley_88 Start: 54818, Stop: 55183, Start Num: 19

Candidate Starts for Nibley_88:

(Start: 19 @54818 has 44 MA's), (23, 54848), (53, 55082), (57, 55112),

Gene: NihilNomen_101 Start: 60468, Stop: 60827, Start Num: 19

Candidate Starts for NihilNomen_101:

(1, 60147), (2, 60153), (3, 60183), (7, 60294), (8, 60303), (10, 60327), (Start: 19 @60468 has 44 MA's), (23, 60498), (30, 60579), (33, 60597), (34, 60612), (43, 60657), (45, 60672), (57, 60756),

Gene: ObLaDi_63 Start: 43248, Stop: 43619, Start Num: 17

Candidate Starts for ObLaDi_63:

(6, 43053), (Start: 17 @43248 has 1 MA's), (21, 43281), (29, 43377), (47, 43479), (63, 43608),

Gene: Odette_99 Start: 59511, Stop: 59870, Start Num: 19

Candidate Starts for Odette_99:

(1, 59190), (2, 59196), (3, 59226), (7, 59337), (8, 59346), (10, 59370), (Start: 19 @59511 has 44 MA's), (23, 59541), (30, 59622), (33, 59640), (34, 59655), (43, 59700), (45, 59715), (57, 59799),

Gene: Omega_104 Start: 60228, Stop: 60593, Start Num: 19

Candidate Starts for Omega_104:

(Start: 19 @60228 has 44 MA's), (23, 60258), (51, 60465), (57, 60522),

Gene: Optimus_93 Start: 59002, Stop: 59361, Start Num: 19

Candidate Starts for Optimus_93:

(1, 58681), (2, 58687), (3, 58717), (7, 58828), (8, 58837), (10, 58861), (Start: 19 @59002 has 44 MA's), (23, 59032), (30, 59113), (33, 59131), (34, 59146), (43, 59191), (45, 59206), (57, 59290),

Gene: Peregrin_227 Start: 113498, Stop: 113893, Start Num: 19

Candidate Starts for Peregrin_227:

(Start: 19 @113498 has 44 MA's), (22, 113516), (25, 113558), (26, 113564), (38, 113663), (46, 113711), (62, 113870),

Gene: Phoebus_101 Start: 61651, Stop: 62010, Start Num: 19

Candidate Starts for Phoebus_101:

(1, 61330), (2, 61336), (3, 61366), (7, 61477), (8, 61486), (10, 61510), (Start: 19 @61651 has 44 MA's), (23, 61681), (30, 61762), (33, 61780), (34, 61795), (43, 61840), (45, 61855), (57, 61939),

Gene: Porcelain_93 Start: 55431, Stop: 55796, Start Num: 19

Candidate Starts for Porcelain_93:

(Start: 19 @55431 has 44 MA's), (23, 55461), (57, 55725),

Gene: Pound_91 Start: 59679, Stop: 60038, Start Num: 19

Candidate Starts for Pound_91:

(1, 59358), (2, 59364), (3, 59394), (7, 59505), (8, 59514), (10, 59538), (Start: 19 @59679 has 44 MA's), (23, 59709), (30, 59790), (33, 59808), (34, 59823), (43, 59868), (45, 59883), (57, 59967),

Gene: Rearden_89 Start: 55614, Stop: 55979, Start Num: 19

Candidate Starts for Rearden_89:

(Start: 19 @55614 has 44 MA's), (23, 55644), (53, 55878), (57, 55908),

Gene: Redno2_91 Start: 56202, Stop: 56561, Start Num: 19

Candidate Starts for Redno2_91:

(1, 55881), (2, 55887), (3, 55917), (7, 56028), (8, 56037), (10, 56061), (Start: 19 @56202 has 44 MA's), (23, 56232), (30, 56313), (33, 56331), (34, 56346), (43, 56391), (45, 56406), (57, 56490),

Gene: Ryadel_105 Start: 63803, Stop: 63378, Start Num: 12

Candidate Starts for Ryadel_105:

(Start: 12 @63803 has 5 MA's), (21, 63737), (23, 63722), (29, 63641), (32, 63617), (35, 63596), (37, 63581), (39, 63575), (40, 63566), (64, 63386),

Gene: Schatzie_94 Start: 59258, Stop: 59617, Start Num: 19

Candidate Starts for Schatzie_94:

(1, 58937), (2, 58943), (3, 58973), (7, 59084), (8, 59093), (10, 59117), (Start: 19 @59258 has 44 MA's), (23, 59288), (30, 59369), (33, 59387), (34, 59402), (43, 59447), (45, 59462), (57, 59546),

Gene: Shaboozey_93 Start: 55262, Stop: 55627, Start Num: 19

Candidate Starts for Shaboozey_93:

(Start: 19 @55262 has 44 MA's), (23, 55292), (53, 55526), (57, 55556),

Gene: Smooch_100 Start: 62946, Stop: 62518, Start Num: 12

Candidate Starts for Smooch_100:

(9, 63048), (Start: 12 @62946 has 5 MA's), (21, 62880), (23, 62865), (29, 62784), (32, 62760), (35, 62739), (37, 62724), (39, 62718), (40, 62709), (64, 62526),

Gene: Squint_93 Start: 55550, Stop: 55915, Start Num: 19

Candidate Starts for Squint_93:

(Start: 19 @55550 has 44 MA's), (23, 55580), (57, 55844),

Gene: Superphikiman_92 Start: 54641, Stop: 55006, Start Num: 19

Candidate Starts for Superphikiman_92:

(Start: 19 @54641 has 44 MA's), (23, 54671), (57, 54935),

Gene: Thibault_84 Start: 55167, Stop: 55523, Start Num: 19

Candidate Starts for Thibault_84:

(1, 54846), (2, 54852), (3, 54882), (7, 54993), (8, 55002), (10, 55026), (Start: 19 @55167 has 44 MA's), (23, 55197), (36, 55326), (38, 55332), (45, 55368), (49, 55380), (50, 55383), (56, 55449), (57, 55452),

Gene: ThreeRngTarjay_96 Start: 60543, Stop: 60902, Start Num: 19

Candidate Starts for ThreeRngTarjay_96:

(1, 60222), (2, 60228), (3, 60258), (7, 60369), (8, 60378), (10, 60402), (Start: 19 @60543 has 44 MA's), (23, 60573), (30, 60654), (33, 60672), (34, 60687), (43, 60732), (45, 60747), (57, 60831),

Gene: Trina_185 Start: 102486, Stop: 102851, Start Num: 19

Candidate Starts for Trina_185:

(Start: 19 @102486 has 44 MA's), (27, 102555), (31, 102615), (41, 102672), (44, 102687), (45, 102699), (52, 102732), (54, 102771), (60, 102822), (61, 102837),

Gene: VanLee_105 Start: 56038, Stop: 56412, Start Num: 18

Candidate Starts for VanLee_105:

(14, 56002), (15, 56008), (Start: 18 @56038 has 8 MA's), (21, 56056), (24, 56098), (55, 56335), (63, 56401),

Gene: Wanda_103 Start: 59659, Stop: 60018, Start Num: 19

Candidate Starts for Wanda_103:

(1, 59338), (2, 59344), (3, 59374), (7, 59485), (8, 59494), (10, 59518), (Start: 19 @59659 has 44 MA's), (23, 59689), (30, 59770), (33, 59788), (34, 59803), (43, 59848), (45, 59863), (57, 59947),

Gene: Xiaokay_89 Start: 56418, Stop: 56783, Start Num: 19

Candidate Starts for Xiaokay_89:

(Start: 19 @56418 has 44 MA's), (23, 56448), (57, 56712),

Gene: Yeet_92 Start: 58760, Stop: 59119, Start Num: 19

Candidate Starts for Yeet_92:

(1, 58439), (2, 58445), (3, 58475), (7, 58586), (8, 58595), (10, 58619), (Start: 19 @58760 has 44 MA's), (23, 58790), (30, 58871), (33, 58889), (34, 58904), (43, 58949), (45, 58964), (57, 59048),

Gene: YungJamal_100 Start: 62022, Stop: 61594, Start Num: 12

Candidate Starts for YungJamal_100:

(Start: 12 @62022 has 5 MA's), (21, 61956), (23, 61941), (29, 61860), (32, 61836), (35, 61815), (37, 61800), (39, 61794), (40, 61785), (64, 61602),

Gene: Yvonnetastic_90 Start: 54178, Stop: 54519, Start Num: 18

Candidate Starts for Yvonnetastic_90:

(4, 53926), (11, 54106), (Start: 18 @54178 has 8 MA's), (20, 54190), (42, 54364), (47, 54388), (58, 54472),

Gene: Yvonnetastic_91 Start: 54516, Stop: 54887, Start Num: 18

Candidate Starts for Yvonnetastic_91:

(Start: 18 @54516 has 8 MA's), (28, 54621), (31, 54648), (51, 54753),

Gene: Zelink_96 Start: 60854, Stop: 61213, Start Num: 19

Candidate Starts for Zelink_96:

(1, 60533), (2, 60539), (3, 60569), (7, 60680), (8, 60689), (10, 60713), (Start: 19 @60854 has 44 MA's), (23, 60884), (30, 60965), (33, 60983), (34, 60998), (43, 61043), (45, 61058), (57, 61142),