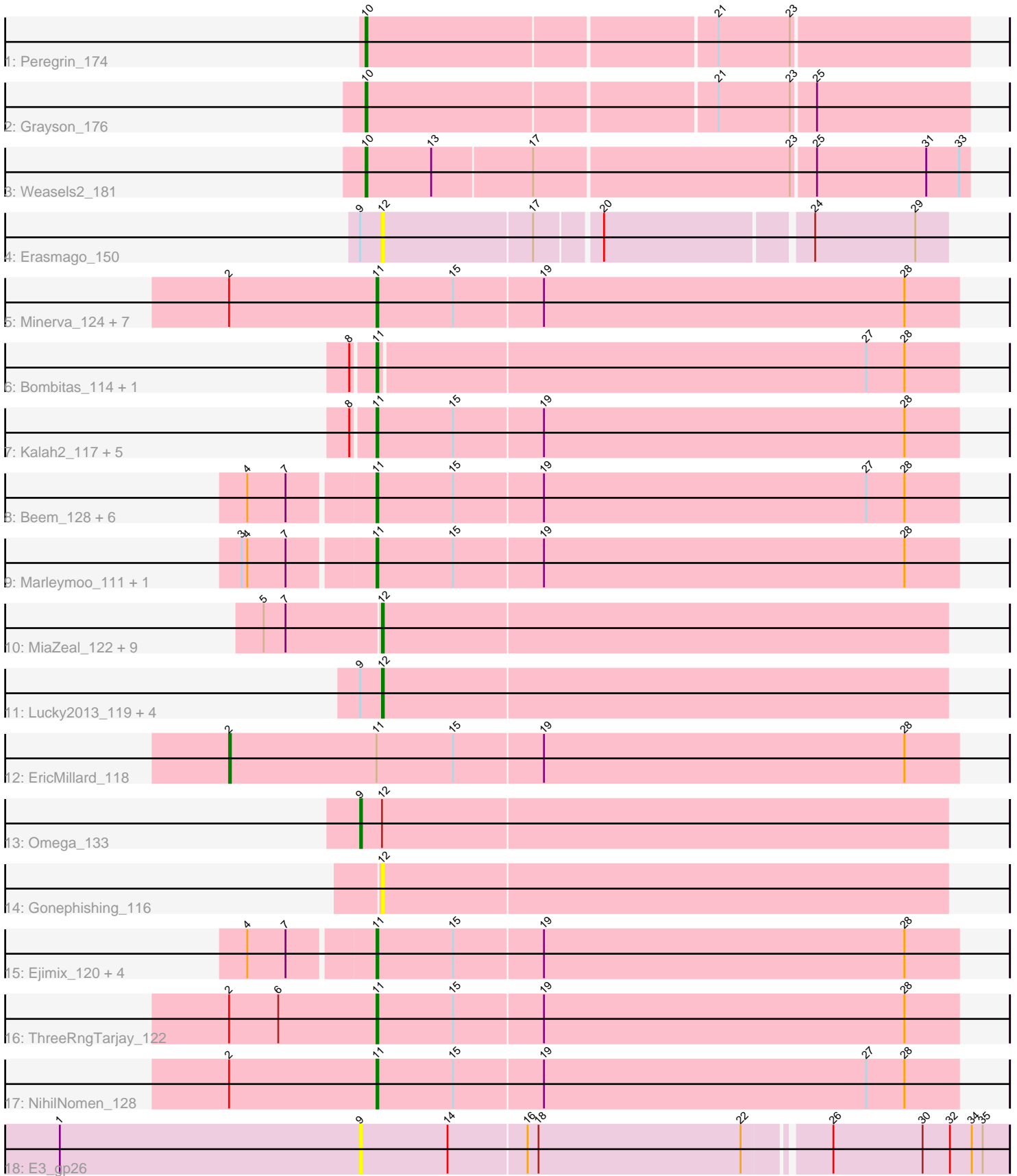


Pham 296625



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 296625 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296625 has 55 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Peregrin_174
- Track 2 : Grayson_176
- Track 3 : Weasels2_181
- Track 4 : Erasmago_150
- Track 5 : Minerva_124, Optimus_117, Hughesyang_126, BAKA_126, Zelink_121, Duke13_121, Wanda_125, Constella_116
- Track 6 : Bombitas_114, Yeet_118
- Track 7 : Kalah2_117, DmpstrDiver_126, Pound_115, Klein_122, Bagrid_126, Schatzie_122
- Track 8 : Beem_128, Thibault_108, Xiaokay_120, JuicyJay_123, Redno2_118, Phoebus_127, HokkenD_116
- Track 9 : Marleymoo_111, Bobby_118
- Track 10 : MiaZeal_122, Shaboozey_123, Courthouse_117, Nibley_119, Superphikiman_119, BronnyJames_119, Ariel_122, LittleE_126, Rearden_120, Squint_120
- Track 11 : Lucky2013_119, Hannaconda_113, Nekros_125, Porcelain_122, KashFlow_119
- Track 12 : EricMillard_118
- Track 13 : Omega_133
- Track 14 : Gonephishing_116
- Track 15 : Ejimix_120, Dove_112, Hidrated_111, Dallas_127, Halley_128
- Track 16 : ThreeRngTarjay_122
- Track 17 : NihilNomen_128
- Track 18 : E3_gp26

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

The start number called the most often in the published annotations is 11, it was called in 28 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BAKA_126, Bagrid_126, Beem_128, Bobby_118, Bombitas_114, Constella_116, Dallas_127, DmpstrDiver_126, Dove_112, Duke13_121, Ejimix_120, Halley_128, Hidrated_111, HokkenD_116, Hughesyang_126, JuicyJay_123, Kalah2_117,

Klein_122, Marleymoo_111, Minerva_124, NihilNomen_128, Optimus_117, Phoebus_127, Pound_115, Redno2_118, Schatzie_122, Thibault_108, ThreeRngTarjay_122, Wanda_125, Xiaokay_120, Yeet_118, Zelink_121,

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

- EricMillard_118,

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

- Ariel_122, BronnyJames_119, Courthouse_117, E3_gp26, Erasmago_150, Gonephishing_116, Grayson_176, Hannaconda_113, KashFlow_119, LittleE_126, Lucky2013_119, MiaZeal_122, Nekros_125, Nibley_119, Omega_133, Peregrin_174, Porcelain_122, Rearden_120, Shaboozey_123, Squint_120, Superphikiman_119, Weasels2_181,

Summary by start number:

Start 2:

- Found in 11 of 55 (20.0%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 9.1% of time when present
- Phage (with cluster) where this start called: EricMillard_118 (J),

Start 9:

- Found in 8 of 55 (14.5%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 25.0% of time when present
- Phage (with cluster) where this start called: E3_gp26 (singleton), Omega_133 (J),

Start 10:

- Found in 3 of 55 (5.5%) of genes in pham
- Manual Annotations of this start: 3 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson_176 (CB), Peregrin_174 (CB), Weasels2_181 (CB),

Start 11:

- Found in 33 of 55 (60.0%) of genes in pham
- Manual Annotations of this start: 28 of 43
- Called 97.0% of time when present
- Phage (with cluster) where this start called: BAKA_126 (J), Bagrid_126 (J), Beem_128 (J), Bobby_118 (J), Bombitas_114 (J), Constella_116 (J), Dallas_127 (J), DmpstrDiver_126 (J), Dove_112 (J), Duke13_121 (J), Ejimix_120 (J), Halley_128 (J), Hidrated_111 (J), HokkenD_116 (J), Hughesyang_126 (J), JuicyJay_123 (J), Kalah2_117 (J), Klein_122 (J), Marleymoo_111 (J), Minerva_124 (J), NihilNomen_128 (J), Optimus_117 (J), Phoebus_127 (J), Pound_115 (J), Redno2_118 (J), Schatzie_122 (J), Thibault_108 (J), ThreeRngTarjay_122 (J), Wanda_125 (J), Xiaokay_120 (J), Yeet_118 (J), Zelink_121 (J),

Start 12:

- Found in 18 of 55 (32.7%) of genes in pham
- Manual Annotations of this start: 10 of 43
- Called 94.4% of time when present

- Phage (with cluster) where this start called: Ariel_122 (J), BronnyJames_119 (J), Courthouse_117 (J), Erasmago_150 (GD2), Gonephishing_116 (J), Hannaconda_113 (J), KashFlow_119 (J), LittleE_126 (J), Lucky2013_119 (J), MiaZeal_122 (J), Nekros_125 (J), Nibley_119 (J), Porcelain_122 (J), Rearden_120 (J), Shaboozey_123 (J), Squint_120 (J), Superphikiman_119 (J),

Summary by clusters:

There are 4 clusters represented in this pham: CB, singleton, J, GD2,

Info for manual annotations of cluster CB:

- Start number 10 was manually annotated 3 times for cluster CB.

Info for manual annotations of cluster J:

- Start number 2 was manually annotated 1 time for cluster J.
- Start number 9 was manually annotated 1 time for cluster J.
- Start number 11 was manually annotated 28 times for cluster J.
- Start number 12 was manually annotated 10 times for cluster J.

Gene Information:

Gene: Ariel_122 Start: 65393, Stop: 65701, Start Num: 12

Candidate Starts for Ariel_122:

(5, 65330), (7, 65342), (Start: 12 @65393 has 10 MA's),

Gene: BAKA_126 Start: 68936, Stop: 69253, Start Num: 11

Candidate Starts for BAKA_126:

(Start: 2 @68855 has 1 MA's), (Start: 11 @68936 has 28 MA's), (15, 68978), (19, 69026), (28, 69224),

Gene: Bagrid_126 Start: 69047, Stop: 69364, Start Num: 11

Candidate Starts for Bagrid_126:

(8, 69035), (Start: 11 @69047 has 28 MA's), (15, 69089), (19, 69137), (28, 69335),

Gene: Beem_128 Start: 70519, Stop: 70836, Start Num: 11

Candidate Starts for Beem_128:

(4, 70453), (7, 70474), (Start: 11 @70519 has 28 MA's), (15, 70561), (19, 70609), (27, 70786), (28, 70807),

Gene: Bobby_118 Start: 70119, Stop: 70436, Start Num: 11

Candidate Starts for Bobby_118:

(3, 70050), (4, 70053), (7, 70074), (Start: 11 @70119 has 28 MA's), (15, 70161), (19, 70209), (28, 70407),

Gene: Bombitas_114 Start: 67933, Stop: 68247, Start Num: 11

Candidate Starts for Bombitas_114:

(8, 67921), (Start: 11 @67933 has 28 MA's), (27, 68197), (28, 68218),

Gene: BronnyJames_119 Start: 66373, Stop: 66681, Start Num: 12

Candidate Starts for BronnyJames_119:

(5, 66310), (7, 66322), (Start: 12 @66373 has 10 MA's),

Gene: Constella_116 Start: 66023, Stop: 66340, Start Num: 11
Candidate Starts for Constella_116:
(Start: 2 @65942 has 1 MA's), (Start: 11 @66023 has 28 MA's), (15, 66065), (19, 66113), (28, 66311),

Gene: Courthouse_117 Start: 64993, Stop: 65301, Start Num: 12
Candidate Starts for Courthouse_117:
(5, 64930), (7, 64942), (Start: 12 @64993 has 10 MA's),

Gene: Dallas_127 Start: 70034, Stop: 70351, Start Num: 11
Candidate Starts for Dallas_127:
(4, 69968), (7, 69989), (Start: 11 @70034 has 28 MA's), (15, 70076), (19, 70124), (28, 70322),

Gene: DmpstrDiver_126 Start: 69336, Stop: 69653, Start Num: 11
Candidate Starts for DmpstrDiver_126:
(8, 69324), (Start: 11 @69336 has 28 MA's), (15, 69378), (19, 69426), (28, 69624),

Gene: Dove_112 Start: 64947, Stop: 65264, Start Num: 11
Candidate Starts for Dove_112:
(4, 64881), (7, 64902), (Start: 11 @64947 has 28 MA's), (15, 64989), (19, 65037), (28, 65235),

Gene: Duke13_121 Start: 66604, Stop: 66921, Start Num: 11
Candidate Starts for Duke13_121:
(Start: 2 @66523 has 1 MA's), (Start: 11 @66604 has 28 MA's), (15, 66646), (19, 66694), (28, 66892),

Gene: E3_gp26 Start: 11072, Stop: 11416, Start Num: 9
Candidate Starts for E3_gp26:
(1, 10907), (Start: 9 @11072 has 1 MA's), (14, 11120), (16, 11162), (18, 11168), (22, 11279), (26, 11321), (30, 11369), (32, 11384), (34, 11396), (35, 11402),

Gene: Ejimix_120 Start: 70102, Stop: 70419, Start Num: 11
Candidate Starts for Ejimix_120:
(4, 70036), (7, 70057), (Start: 11 @70102 has 28 MA's), (15, 70144), (19, 70192), (28, 70390),

Gene: Erasmago_150 Start: 88705, Stop: 88998, Start Num: 12
Candidate Starts for Erasmago_150:
(Start: 9 @88693 has 1 MA's), (Start: 12 @88705 has 10 MA's), (17, 88786), (20, 88819), (24, 88927), (29, 88981),

Gene: EricMillard_118 Start: 68492, Stop: 68890, Start Num: 2
Candidate Starts for EricMillard_118:
(Start: 2 @68492 has 1 MA's), (Start: 11 @68573 has 28 MA's), (15, 68615), (19, 68663), (28, 68861),

Gene: Gonephishing_116 Start: 64412, Stop: 64720, Start Num: 12
Candidate Starts for Gonephishing_116:
(Start: 12 @64412 has 10 MA's),

Gene: Grayson_176 Start: 93715, Stop: 94035, Start Num: 10
Candidate Starts for Grayson_176:
(Start: 10 @93715 has 3 MA's), (21, 93901), (23, 93940), (25, 93952),

Gene: Halley_128 Start: 70418, Stop: 70735, Start Num: 11
Candidate Starts for Halley_128:

(4, 70352), (7, 70373), (Start: 11 @70418 has 28 MA's), (15, 70460), (19, 70508), (28, 70706),

Gene: Hannaconda_113 Start: 64342, Stop: 64650, Start Num: 12

Candidate Starts for Hannaconda_113:

(Start: 9 @64330 has 1 MA's), (Start: 12 @64342 has 10 MA's),

Gene: Hidrated_111 Start: 66687, Stop: 67004, Start Num: 11

Candidate Starts for Hidrated_111:

(4, 66621), (7, 66642), (Start: 11 @66687 has 28 MA's), (15, 66729), (19, 66777), (28, 66975),

Gene: HokkenD_116 Start: 68748, Stop: 69065, Start Num: 11

Candidate Starts for HokkenD_116:

(4, 68682), (7, 68703), (Start: 11 @68748 has 28 MA's), (15, 68790), (19, 68838), (27, 69015), (28, 69036),

Gene: Hughesyang_126 Start: 70110, Stop: 70427, Start Num: 11

Candidate Starts for Hughesyang_126:

(Start: 2 @70029 has 1 MA's), (Start: 11 @70110 has 28 MA's), (15, 70152), (19, 70200), (28, 70398),

Gene: JuicyJay_123 Start: 71655, Stop: 71972, Start Num: 11

Candidate Starts for JuicyJay_123:

(4, 71589), (7, 71610), (Start: 11 @71655 has 28 MA's), (15, 71697), (19, 71745), (27, 71922), (28, 71943),

Gene: Kalah2_117 Start: 68949, Stop: 69266, Start Num: 11

Candidate Starts for Kalah2_117:

(8, 68937), (Start: 11 @68949 has 28 MA's), (15, 68991), (19, 69039), (28, 69237),

Gene: KashFlow_119 Start: 66847, Stop: 67155, Start Num: 12

Candidate Starts for KashFlow_119:

(Start: 9 @66835 has 1 MA's), (Start: 12 @66847 has 10 MA's),

Gene: Klein_122 Start: 67306, Stop: 67623, Start Num: 11

Candidate Starts for Klein_122:

(8, 67294), (Start: 11 @67306 has 28 MA's), (15, 67348), (19, 67396), (28, 67594),

Gene: LittleE_126 Start: 68598, Stop: 68906, Start Num: 12

Candidate Starts for LittleE_126:

(5, 68535), (7, 68547), (Start: 12 @68598 has 10 MA's),

Gene: Lucky2013_119 Start: 65726, Stop: 66034, Start Num: 12

Candidate Starts for Lucky2013_119:

(Start: 9 @65714 has 1 MA's), (Start: 12 @65726 has 10 MA's),

Gene: Marleymoo_111 Start: 65865, Stop: 66182, Start Num: 11

Candidate Starts for Marleymoo_111:

(3, 65796), (4, 65799), (7, 65820), (Start: 11 @65865 has 28 MA's), (15, 65907), (19, 65955), (28, 66153),

Gene: MiaZeal_122 Start: 66071, Stop: 66379, Start Num: 12

Candidate Starts for MiaZeal_122:

(5, 66008), (7, 66020), (Start: 12 @66071 has 10 MA's),

Gene: Minerva_124 Start: 68711, Stop: 69028, Start Num: 11
Candidate Starts for Minerva_124:
(Start: 2 @68630 has 1 MA's), (Start: 11 @68711 has 28 MA's), (15, 68753), (19, 68801), (28, 68999),

Gene: Nekros_125 Start: 69567, Stop: 69875, Start Num: 12
Candidate Starts for Nekros_125:
(Start: 9 @69555 has 1 MA's), (Start: 12 @69567 has 10 MA's),

Gene: Nibley_119 Start: 65950, Stop: 66258, Start Num: 12
Candidate Starts for Nibley_119:
(5, 65887), (7, 65899), (Start: 12 @65950 has 10 MA's),

Gene: NihilNomen_128 Start: 69600, Stop: 69917, Start Num: 11
Candidate Starts for NihilNomen_128:
(Start: 2 @69519 has 1 MA's), (Start: 11 @69600 has 28 MA's), (15, 69642), (19, 69690), (27, 69867),
(28, 69888),

Gene: Omega_133 Start: 70267, Stop: 70587, Start Num: 9
Candidate Starts for Omega_133:
(Start: 9 @70267 has 1 MA's), (Start: 12 @70279 has 10 MA's),

Gene: Optimus_117 Start: 67107, Stop: 67424, Start Num: 11
Candidate Starts for Optimus_117:
(Start: 2 @67026 has 1 MA's), (Start: 11 @67107 has 28 MA's), (15, 67149), (19, 67197), (28, 67395),

Gene: Peregrin_174 Start: 93147, Stop: 93467, Start Num: 10
Candidate Starts for Peregrin_174:
(Start: 10 @93147 has 3 MA's), (21, 93333), (23, 93372),

Gene: Phoebus_127 Start: 71464, Stop: 71781, Start Num: 11
Candidate Starts for Phoebus_127:
(4, 71398), (7, 71419), (Start: 11 @71464 has 28 MA's), (15, 71506), (19, 71554), (27, 71731), (28,
71752),

Gene: Porcelain_122 Start: 66672, Stop: 66980, Start Num: 12
Candidate Starts for Porcelain_122:
(Start: 9 @66660 has 1 MA's), (Start: 12 @66672 has 10 MA's),

Gene: Pound_115 Start: 67880, Stop: 68197, Start Num: 11
Candidate Starts for Pound_115:
(8, 67868), (Start: 11 @67880 has 28 MA's), (15, 67922), (19, 67970), (28, 68168),

Gene: Rearden_120 Start: 65970, Stop: 66278, Start Num: 12
Candidate Starts for Rearden_120:
(5, 65907), (7, 65919), (Start: 12 @65970 has 10 MA's),

Gene: Redno2_118 Start: 66930, Stop: 67247, Start Num: 11
Candidate Starts for Redno2_118:
(4, 66864), (7, 66885), (Start: 11 @66930 has 28 MA's), (15, 66972), (19, 67020), (27, 67197), (28,
67218),

Gene: Schatzie_122 Start: 69560, Stop: 69877, Start Num: 11
Candidate Starts for Schatzie_122:

(8, 69548), (Start: 11 @69560 has 28 MA's), (15, 69602), (19, 69650), (28, 69848),

Gene: Shaboozey_123 Start: 66394, Stop: 66702, Start Num: 12

Candidate Starts for Shaboozey_123:

(5, 66331), (7, 66343), (Start: 12 @66394 has 10 MA's),

Gene: Squint_120 Start: 66184, Stop: 66492, Start Num: 12

Candidate Starts for Squint_120:

(5, 66121), (7, 66133), (Start: 12 @66184 has 10 MA's),

Gene: Superphikiman_119 Start: 65275, Stop: 65583, Start Num: 12

Candidate Starts for Superphikiman_119:

(5, 65212), (7, 65224), (Start: 12 @65275 has 10 MA's),

Gene: Thibault_108 Start: 64265, Stop: 64582, Start Num: 11

Candidate Starts for Thibault_108:

(4, 64199), (7, 64220), (Start: 11 @64265 has 28 MA's), (15, 64307), (19, 64355), (27, 64532), (28, 64553),

Gene: ThreeRngTarjay_122 Start: 70055, Stop: 70372, Start Num: 11

Candidate Starts for ThreeRngTarjay_122:

(Start: 2 @69974 has 1 MA's), (6, 70001), (Start: 11 @70055 has 28 MA's), (15, 70097), (19, 70145), (28, 70343),

Gene: Wanda_125 Start: 67190, Stop: 67507, Start Num: 11

Candidate Starts for Wanda_125:

(Start: 2 @67109 has 1 MA's), (Start: 11 @67190 has 28 MA's), (15, 67232), (19, 67280), (28, 67478),

Gene: Weasels2_181 Start: 97792, Stop: 98115, Start Num: 10

Candidate Starts for Weasels2_181:

(Start: 10 @97792 has 3 MA's), (13, 97828), (17, 97882), (23, 98020), (25, 98032), (31, 98092), (33, 98110),

Gene: Xiaokay_120 Start: 67161, Stop: 67478, Start Num: 11

Candidate Starts for Xiaokay_120:

(4, 67095), (7, 67116), (Start: 11 @67161 has 28 MA's), (15, 67203), (19, 67251), (27, 67428), (28, 67449),

Gene: Yeet_118 Start: 68813, Stop: 69127, Start Num: 11

Candidate Starts for Yeet_118:

(8, 68801), (Start: 11 @68813 has 28 MA's), (27, 69077), (28, 69098),

Gene: Zelink_121 Start: 70002, Stop: 70319, Start Num: 11

Candidate Starts for Zelink_121:

(Start: 2 @69921 has 1 MA's), (Start: 11 @70002 has 28 MA's), (15, 70044), (19, 70092), (28, 70290),