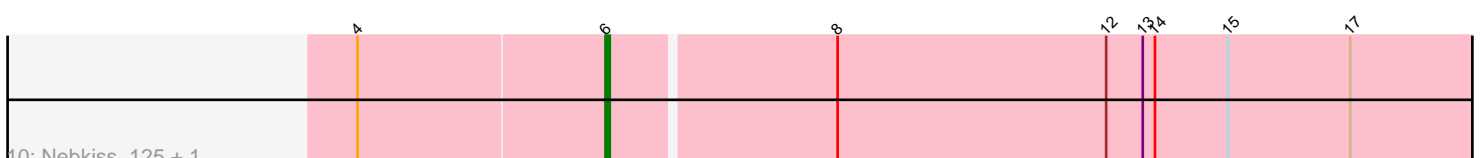
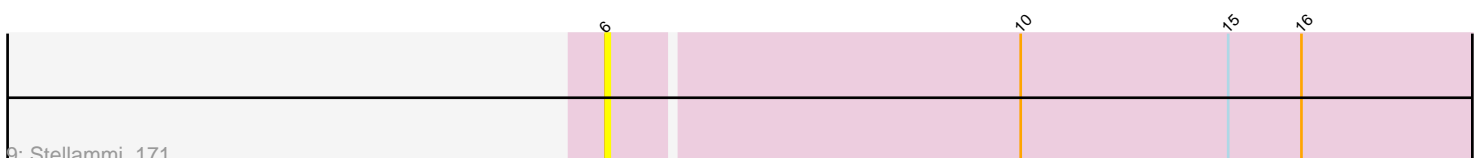
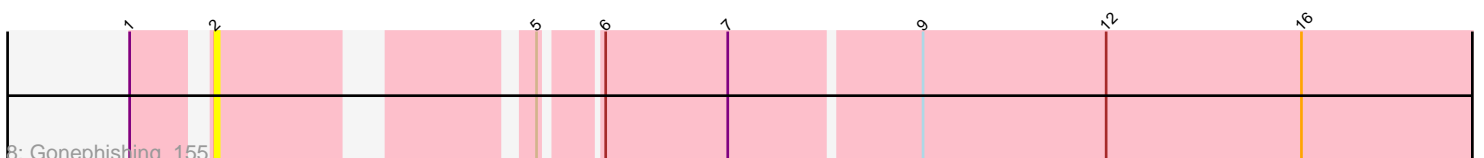
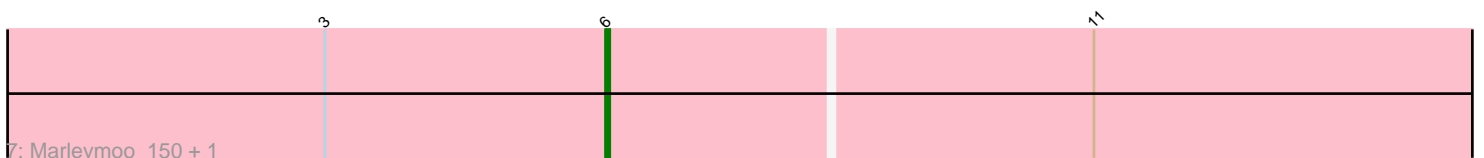
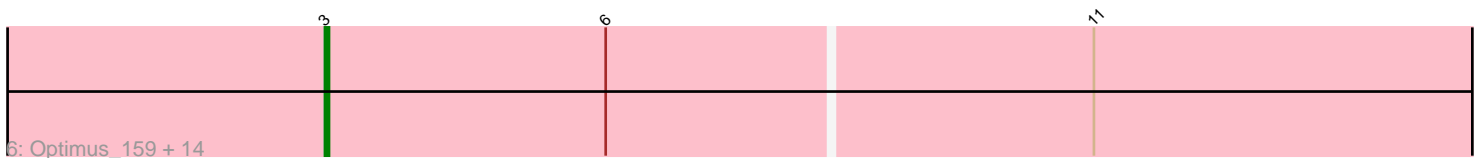
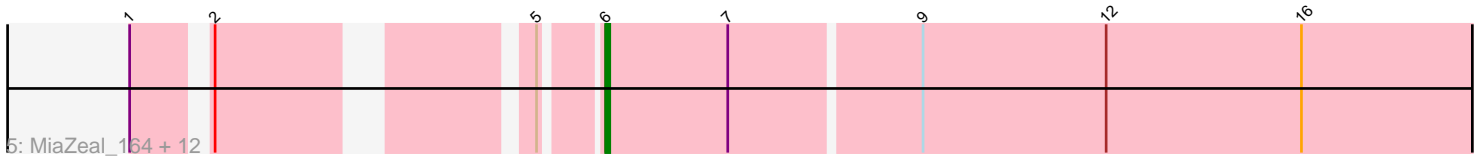
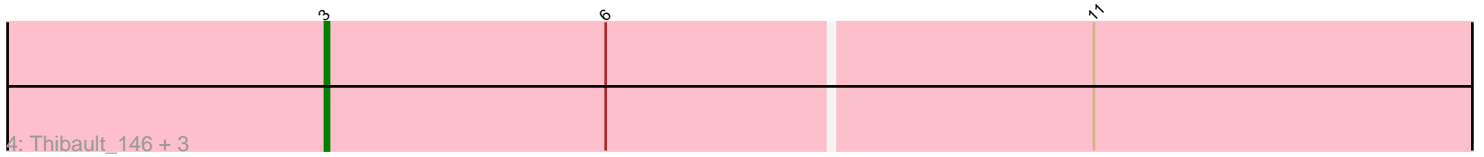
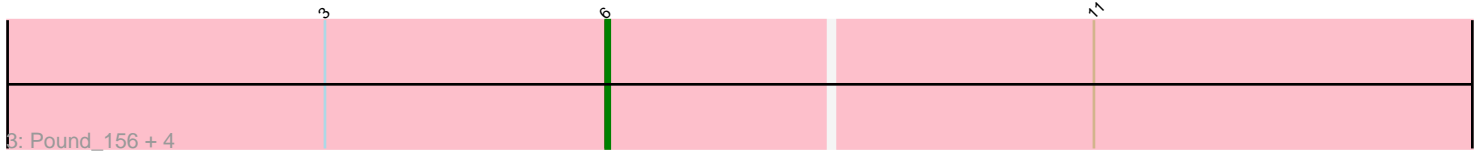
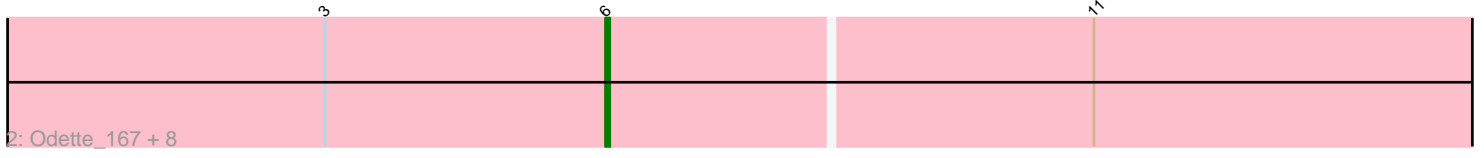
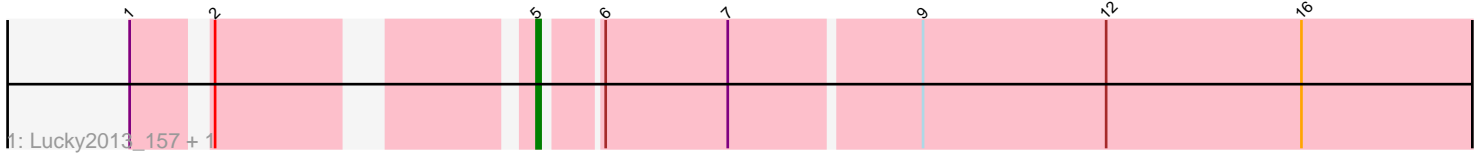


Pham 296630



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 296630 Report

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

Pham number 296630 has 54 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Lucky2013_157, Courthouse_158
- Track 2 : Odette_167, Yeet_155, Xiaokay_159, Hidrated_156, Bagrid_172, DmpstrDiver_162, Zelink_156, Minerva_163, Dallas_163
- Track 3 : Pound_156, HokkenD_158, JuicyJay_158, Bombitas_150, NihilNomen_165
- Track 4 : Thibault_146, Redno2_157, Dove_150, Phoebus_164
- Track 5 : MiaZeal_164, Nibley_155, Squint_155, Nekros_160, Hannaconda_156, Ariel_161, Superphikiman_159, KashFlow_161, BronnyJames_157, LittleE_169, Porcelain_161, Rearden_161, Shaboozey_160
- Track 6 : Optimus_159, Beem_164, Kalah2_159, BAKA_168, Hughesyang_162, Omega_172, ThreeRngTarjay_160, Schatzie_158, Klein_166, Constella_159, Ejimix_154, EricMillard_161, Duke13_165, Halley_164, Wanda_161
- Track 7 : Marleymoo_150, Bobby_155
- Track 8 : Gonephishing_155
- Track 9 : Stellammi_171
- Track 10 : Nebkiss_125, Gaia_124

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

The start number called the most often in the published annotations is 6, it was called in 21 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel_161, Bagrid_172, Bobby_155, Bombitas_150, BronnyJames_157, Dallas_163, DmpstrDiver_162, Gaia_124, Hannaconda_156, Hidrated_156, HokkenD_158, JuicyJay_158, KashFlow_161, LittleE_169, Marleymoo_150, MiaZeal_164, Minerva_163, Nebkiss_125, Nekros_160, Nibley_155, NihilNomen_165, Odette_167, Porcelain_161, Pound_156, Rearden_161, Shaboozey_160, Squint_155, Stellammi_171, Superphikiman_159, Xiaokay_159, Yeet_155, Zelink_156,

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

- BAKA_168, Beem_164, Constella_159, Courthouse_158, Dove_150, Duke13_165, Ejimix_154, EricMillard_161, Gonephishing_155, Halley_164, Hughesyang_162, Kalah2_159, Klein_166, Lucky2013_157, Omega_172, Optimus_159, Phoebus_164,

Redno2_157, Schatzie_158, Thibault_146, ThreeRngTarjay_160, Wanda_161,

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

•

Summary by start number:

Start 2:

- Found in 16 of 54 (29.6%) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Gonephishing_155 (J),

Start 3:

- Found in 35 of 54 (64.8%) of genes in pham
- Manual Annotations of this start: 19 of 42
- Called 54.3% of time when present
- Phage (with cluster) where this start called: BAKA_168 (J), Beem_164 (J), Constella_159 (J), Dove_150 (J), Duke13_165 (J), Ejimix_154 (J), EricMillard_161 (J), Halley_164 (J), Hughesyang_162 (J), Kalah2_159 (J), Klein_166 (J), Omega_172 (J), Optimus_159 (J), Phoebus_164 (J), Redno2_157 (J), Schatzie_158 (J), Thibault_146 (J), ThreeRngTarjay_160 (J), Wanda_161 (J),

Start 5:

- Found in 16 of 54 (29.6%) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Courthouse_158 (J), Lucky2013_157 (J),

Start 6:

- Found in 54 of 54 (100.0%) of genes in pham
- Manual Annotations of this start: 21 of 42
- Called 59.3% of time when present
- Phage (with cluster) where this start called: Ariel_161 (J), Bagrid_172 (J), Bobby_155 (J), Bombitas_150 (J), BronnyJames_157 (J), Dallas_163 (J), DmpstrDiver_162 (J), Gaia_124 (X), Hannaconda_156 (J), Hidrated_156 (J), HokkenD_158 (J), JuicyJay_158 (J), KashFlow_161 (J), LittleE_169 (J), Marleymoo_150 (J), MiaZeal_164 (J), Minerva_163 (J), Nebkiss_125 (X), Nekros_160 (J), Nibley_155 (J), NihilNomen_165 (J), Odette_167 (J), Porcelain_161 (J), Pound_156 (J), Rearden_161 (J), Shaboozey_160 (J), Squint_155 (J), Stellammi_171 (UNK), Superphikiman_159 (J), Xiaokay_159 (J), Yeet_155 (J), Zelink_156 (J),

Summary by clusters:

There are 3 clusters represented in this pham: X, UNK, J,

Info for manual annotations of cluster J:

- Start number 3 was manually annotated 19 times for cluster J.
- Start number 5 was manually annotated 2 times for cluster J.
- Start number 6 was manually annotated 19 times for cluster J.

Info for manual annotations of cluster X:

- Start number 6 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Ariel_161 Start: 83041, Stop: 83286, Start Num: 6

Candidate Starts for Ariel_161:

(1, 82951), (2, 82966), (Start: 5 @83029 has 2 MA's), (Start: 6 @83041 has 21 MA's), (7, 83071), (9, 83116), (12, 83161), (16, 83209),

Gene: BAKA_168 Start: 87886, Stop: 88200, Start Num: 3

Candidate Starts for BAKA_168:

(Start: 3 @87886 has 19 MA's), (Start: 6 @87955 has 21 MA's), (11, 88072),

Gene: Bagrid_172 Start: 89184, Stop: 89429, Start Num: 6

Candidate Starts for Bagrid_172:

(Start: 3 @89115 has 19 MA's), (Start: 6 @89184 has 21 MA's), (11, 89301),

Gene: Beem_164 Start: 87883, Stop: 88197, Start Num: 3

Candidate Starts for Beem_164:

(Start: 3 @87883 has 19 MA's), (Start: 6 @87952 has 21 MA's), (11, 88069),

Gene: Bobby_155 Start: 88907, Stop: 89152, Start Num: 6

Candidate Starts for Bobby_155:

(Start: 3 @88838 has 19 MA's), (Start: 6 @88907 has 21 MA's), (11, 89024),

Gene: Bombitas_150 Start: 84182, Stop: 84427, Start Num: 6

Candidate Starts for Bombitas_150:

(Start: 3 @84113 has 19 MA's), (Start: 6 @84182 has 21 MA's), (11, 84299),

Gene: BronnyJames_157 Start: 83845, Stop: 84090, Start Num: 6

Candidate Starts for BronnyJames_157:

(1, 83755), (2, 83770), (Start: 5 @83833 has 2 MA's), (Start: 6 @83845 has 21 MA's), (7, 83875), (9, 83920), (12, 83965), (16, 84013),

Gene: Constella_159 Start: 86642, Stop: 86956, Start Num: 3

Candidate Starts for Constella_159:

(Start: 3 @86642 has 19 MA's), (Start: 6 @86711 has 21 MA's), (11, 86828),

Gene: Courthouse_158 Start: 83473, Stop: 83730, Start Num: 5

Candidate Starts for Courthouse_158:

(1, 83395), (2, 83410), (Start: 5 @83473 has 2 MA's), (Start: 6 @83485 has 21 MA's), (7, 83515), (9, 83560), (12, 83605), (16, 83653),

Gene: Dallas_163 Start: 87175, Stop: 87420, Start Num: 6

Candidate Starts for Dallas_163:

(Start: 3 @87106 has 19 MA's), (Start: 6 @87175 has 21 MA's), (11, 87292),

Gene: DmpstrDiver_162 Start: 85902, Stop: 86147, Start Num: 6

Candidate Starts for DmpstrDiver_162:

(Start: 3 @85833 has 19 MA's), (Start: 6 @85902 has 21 MA's), (11, 86019),

Gene: Dove_150 Start: 82469, Stop: 82783, Start Num: 3
Candidate Starts for Dove_150:
(Start: 3 @82469 has 19 MA's), (Start: 6 @82538 has 21 MA's), (11, 82655),

Gene: Duke13_165 Start: 86382, Stop: 86696, Start Num: 3
Candidate Starts for Duke13_165:
(Start: 3 @86382 has 19 MA's), (Start: 6 @86451 has 21 MA's), (11, 86568),

Gene: Ejimix_154 Start: 86094, Stop: 86408, Start Num: 3
Candidate Starts for Ejimix_154:
(Start: 3 @86094 has 19 MA's), (Start: 6 @86163 has 21 MA's), (11, 86280),

Gene: EricMillard_161 Start: 87725, Stop: 88039, Start Num: 3
Candidate Starts for EricMillard_161:
(Start: 3 @87725 has 19 MA's), (Start: 6 @87794 has 21 MA's), (11, 87911),

Gene: Gaia_124 Start: 69033, Stop: 69269, Start Num: 6
Candidate Starts for Gaia_124:
(4, 68973), (Start: 6 @69033 has 21 MA's), (8, 69087), (12, 69153), (13, 69162), (14, 69165), (15, 69183), (17, 69213),

Gene: Gonephishing_155 Start: 84870, Stop: 85190, Start Num: 2
Candidate Starts for Gonephishing_155:
(1, 84855), (2, 84870), (Start: 5 @84933 has 2 MA's), (Start: 6 @84945 has 21 MA's), (7, 84975), (9, 85020), (12, 85065), (16, 85113),

Gene: Halley_164 Start: 86410, Stop: 86724, Start Num: 3
Candidate Starts for Halley_164:
(Start: 3 @86410 has 19 MA's), (Start: 6 @86479 has 21 MA's), (11, 86596),

Gene: Hannaconda_156 Start: 86966, Stop: 87211, Start Num: 6
Candidate Starts for Hannaconda_156:
(1, 86876), (2, 86891), (Start: 5 @86954 has 2 MA's), (Start: 6 @86966 has 21 MA's), (7, 86996), (9, 87041), (12, 87086), (16, 87134),

Gene: Hidrated_156 Start: 88206, Stop: 88451, Start Num: 6
Candidate Starts for Hidrated_156:
(Start: 3 @88137 has 19 MA's), (Start: 6 @88206 has 21 MA's), (11, 88323),

Gene: HokkenD_158 Start: 88260, Stop: 88505, Start Num: 6
Candidate Starts for HokkenD_158:
(Start: 3 @88191 has 19 MA's), (Start: 6 @88260 has 21 MA's), (11, 88377),

Gene: Hughesyang_162 Start: 86917, Stop: 87231, Start Num: 3
Candidate Starts for Hughesyang_162:
(Start: 3 @86917 has 19 MA's), (Start: 6 @86986 has 21 MA's), (11, 87103),

Gene: JuicyJay_158 Start: 87907, Stop: 88152, Start Num: 6
Candidate Starts for JuicyJay_158:
(Start: 3 @87838 has 19 MA's), (Start: 6 @87907 has 21 MA's), (11, 88024),

Gene: Kalah2_159 Start: 87313, Stop: 87627, Start Num: 3
Candidate Starts for Kalah2_159:

(Start: 3 @87313 has 19 MA's), (Start: 6 @87382 has 21 MA's), (11, 87499),

Gene: KashFlow_161 Start: 86779, Stop: 87024, Start Num: 6

Candidate Starts for KashFlow_161:

(1, 86689), (2, 86704), (Start: 5 @86767 has 2 MA's), (Start: 6 @86779 has 21 MA's), (7, 86809), (9, 86854), (12, 86899), (16, 86947),

Gene: Klein_166 Start: 85673, Stop: 85987, Start Num: 3

Candidate Starts for Klein_166:

(Start: 3 @85673 has 19 MA's), (Start: 6 @85742 has 21 MA's), (11, 85859),

Gene: LittleE_169 Start: 87841, Stop: 88086, Start Num: 6

Candidate Starts for LittleE_169:

(1, 87751), (2, 87766), (Start: 5 @87829 has 2 MA's), (Start: 6 @87841 has 21 MA's), (7, 87871), (9, 87916), (12, 87961), (16, 88009),

Gene: Lucky2013_157 Start: 82436, Stop: 82693, Start Num: 5

Candidate Starts for Lucky2013_157:

(1, 82358), (2, 82373), (Start: 5 @82436 has 2 MA's), (Start: 6 @82448 has 21 MA's), (7, 82478), (9, 82523), (12, 82568), (16, 82616),

Gene: Marleymoo_150 Start: 84999, Stop: 85244, Start Num: 6

Candidate Starts for Marleymoo_150:

(Start: 3 @84930 has 19 MA's), (Start: 6 @84999 has 21 MA's), (11, 85116),

Gene: MiaZeal_164 Start: 83595, Stop: 83840, Start Num: 6

Candidate Starts for MiaZeal_164:

(1, 83505), (2, 83520), (Start: 5 @83583 has 2 MA's), (Start: 6 @83595 has 21 MA's), (7, 83625), (9, 83670), (12, 83715), (16, 83763),

Gene: Minerva_163 Start: 86325, Stop: 86570, Start Num: 6

Candidate Starts for Minerva_163:

(Start: 3 @86256 has 19 MA's), (Start: 6 @86325 has 21 MA's), (11, 86442),

Gene: Nebkiss_125 Start: 67959, Stop: 68195, Start Num: 6

Candidate Starts for Nebkiss_125:

(4, 67899), (Start: 6 @67959 has 21 MA's), (8, 68013), (12, 68079), (13, 68088), (14, 68091), (15, 68109), (17, 68139),

Gene: Nekros_160 Start: 86261, Stop: 86506, Start Num: 6

Candidate Starts for Nekros_160:

(1, 86171), (2, 86186), (Start: 5 @86249 has 2 MA's), (Start: 6 @86261 has 21 MA's), (7, 86291), (9, 86336), (12, 86381), (16, 86429),

Gene: Nibley_155 Start: 83422, Stop: 83667, Start Num: 6

Candidate Starts for Nibley_155:

(1, 83332), (2, 83347), (Start: 5 @83410 has 2 MA's), (Start: 6 @83422 has 21 MA's), (7, 83452), (9, 83497), (12, 83542), (16, 83590),

Gene: NihilNomen_165 Start: 86033, Stop: 86278, Start Num: 6

Candidate Starts for NihilNomen_165:

(Start: 3 @85964 has 19 MA's), (Start: 6 @86033 has 21 MA's), (11, 86150),

Gene: Odette_167 Start: 88739, Stop: 88984, Start Num: 6
Candidate Starts for Odette_167:
(Start: 3 @88670 has 19 MA's), (Start: 6 @88739 has 21 MA's), (11, 88856),

Gene: Omega_172 Start: 88730, Stop: 89044, Start Num: 3
Candidate Starts for Omega_172:
(Start: 3 @88730 has 19 MA's), (Start: 6 @88799 has 21 MA's), (11, 88916),

Gene: Optimus_159 Start: 86202, Stop: 86516, Start Num: 3
Candidate Starts for Optimus_159:
(Start: 3 @86202 has 19 MA's), (Start: 6 @86271 has 21 MA's), (11, 86388),

Gene: Phoebus_164 Start: 89651, Stop: 89965, Start Num: 3
Candidate Starts for Phoebus_164:
(Start: 3 @89651 has 19 MA's), (Start: 6 @89720 has 21 MA's), (11, 89837),

Gene: Porcelain_161 Start: 83394, Stop: 83639, Start Num: 6
Candidate Starts for Porcelain_161:
(1, 83304), (2, 83319), (Start: 5 @83382 has 2 MA's), (Start: 6 @83394 has 21 MA's), (7, 83424), (9, 83469), (12, 83514), (16, 83562),

Gene: Pound_156 Start: 84927, Stop: 85172, Start Num: 6
Candidate Starts for Pound_156:
(Start: 3 @84858 has 19 MA's), (Start: 6 @84927 has 21 MA's), (11, 85044),

Gene: Rearden_161 Start: 84648, Stop: 84893, Start Num: 6
Candidate Starts for Rearden_161:
(1, 84558), (2, 84573), (Start: 5 @84636 has 2 MA's), (Start: 6 @84648 has 21 MA's), (7, 84678), (9, 84723), (12, 84768), (16, 84816),

Gene: Redno2_157 Start: 83764, Stop: 84078, Start Num: 3
Candidate Starts for Redno2_157:
(Start: 3 @83764 has 19 MA's), (Start: 6 @83833 has 21 MA's), (11, 83950),

Gene: Schatzie_158 Start: 86724, Stop: 87038, Start Num: 3
Candidate Starts for Schatzie_158:
(Start: 3 @86724 has 19 MA's), (Start: 6 @86793 has 21 MA's), (11, 86910),

Gene: Shaboozey_160 Start: 83866, Stop: 84111, Start Num: 6
Candidate Starts for Shaboozey_160:
(1, 83776), (2, 83791), (Start: 5 @83854 has 2 MA's), (Start: 6 @83866 has 21 MA's), (7, 83896), (9, 83941), (12, 83986), (16, 84034),

Gene: Squint_155 Start: 83260, Stop: 83505, Start Num: 6
Candidate Starts for Squint_155:
(1, 83170), (2, 83185), (Start: 5 @83248 has 2 MA's), (Start: 6 @83260 has 21 MA's), (7, 83290), (9, 83335), (12, 83380), (16, 83428),

Gene: Stellammi_171 Start: 74291, Stop: 74536, Start Num: 6
Candidate Starts for Stellammi_171:
(Start: 6 @74291 has 21 MA's), (10, 74390), (15, 74441), (16, 74459),

Gene: Superphikiman_159 Start: 83181, Stop: 83426, Start Num: 6

Candidate Starts for Superphikiman_159:

(1, 83091), (2, 83106), (Start: 5 @83169 has 2 MA's), (Start: 6 @83181 has 21 MA's), (7, 83211), (9, 83256), (12, 83301), (16, 83349),

Gene: Thibault_146 Start: 83138, Stop: 83452, Start Num: 3

Candidate Starts for Thibault_146:

(Start: 3 @83138 has 19 MA's), (Start: 6 @83207 has 21 MA's), (11, 83324),

Gene: ThreeRngTarjay_160 Start: 87598, Stop: 87912, Start Num: 3

Candidate Starts for ThreeRngTarjay_160:

(Start: 3 @87598 has 19 MA's), (Start: 6 @87667 has 21 MA's), (11, 87784),

Gene: Wanda_161 Start: 84189, Stop: 84503, Start Num: 3

Candidate Starts for Wanda_161:

(Start: 3 @84189 has 19 MA's), (Start: 6 @84258 has 21 MA's), (11, 84375),

Gene: Xiaokay_159 Start: 87675, Stop: 87920, Start Num: 6

Candidate Starts for Xiaokay_159:

(Start: 3 @87606 has 19 MA's), (Start: 6 @87675 has 21 MA's), (11, 87792),

Gene: Yeet_155 Start: 85621, Stop: 85866, Start Num: 6

Candidate Starts for Yeet_155:

(Start: 3 @85552 has 19 MA's), (Start: 6 @85621 has 21 MA's), (11, 85738),

Gene: Zelink_156 Start: 85981, Stop: 86226, Start Num: 6

Candidate Starts for Zelink_156:

(Start: 3 @85912 has 19 MA's), (Start: 6 @85981 has 21 MA's), (11, 86098),