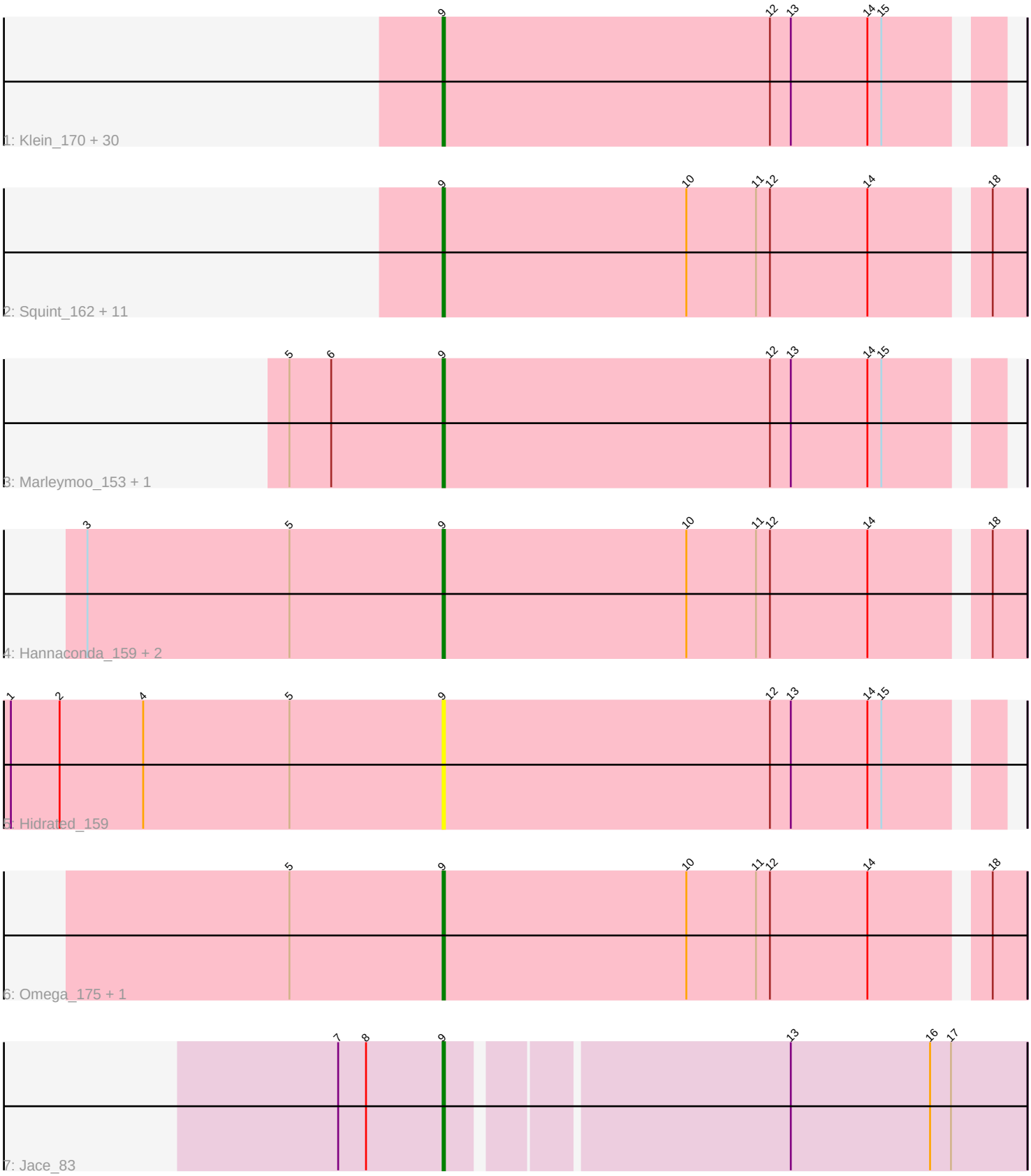
# Pham 296650


9
12
13
14
15
1: Klein_170 + 30
9
10
11
12
14
18
2: Squint_162 + 11
5
6
9
12
13
14
15
3: Marleymoo_153 + 1
3
5
9
10
11
12
14
18
4: Hannaconda_159 + 2
1
2
4
5
9
12
13
14
15
5: Hidrated_159
5
9
10
11
12
14
18
6: Omega_175 + 1
7
8
9
13
16
17
7: Jace_83

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 296650 Report

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

Pham number 296650 has 52 members, 11 are drafts.

Phages represented in each track:
• Track 1 : Klein_170, Redno2_160, Yeet_158, Beem_167, Halley_167, Bobby_159, Hughesyang_165, Constella_162, Xiaokay_162, Odette_170, ThreeRngTarjay_163, Dove_153, Duke13_169, HokkenD_161, Optimus_165, Schatzie_161, JuicyJay_161, EricMillard_164, Bagrid_175, Kalah2_163, Ejimix_157, NihilNomen_168, Thibault_150, BAKA_172, Phoebus_167, Zelink_159, Wanda_164, Bombitas_153, Minerva_166, Dallas_166, Pound_160
• Track 2 : Squint_162, LittleE_174, BronnyJames_162, Ariel_167, Superphikiman_165, MiaZeal_170, Courthouse_164, Shaboozey_165, Porcelain_167, Nekros_165, Nibley_160, Lucky2013_163
• Track 3 : Marleymoo_153, DmpstrDiver_167
• Track 4 : Hannaconda_159, Gonephishing_160, Rearden_166
• Track 5 : Hidrated_159
• Track 6 : Omega_175, KashFlow_164
• Track 7 : Jace_83

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

The start number called the most often in the published annotations is 9, it was called in 41 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ariel_167, BAKA_172, Bagrid_175, Beem_167, Bobby_159, Bombitas_153, BronnyJames_162, Constella_162, Courthouse_164, Dallas_166, DmpstrDiver_167, Dove_153, Duke13_169, Ejimix_157, EricMillard_164, Gonephishing_160, Halley_167, Hannaconda_159, Hidrated_159, HokkenD_161, Hughesyang_165, Jace_83, JuicyJay_161, Kalah2_163, KashFlow_164, Klein_170, LittleE_174, Lucky2013_163, Marleymoo_153, MiaZeal_170, Minerva_166, Nekros_165, Nibley_160, NihilNomen_168, Odette_170, Omega_175, Optimus_165, Phoebus_167, Porcelain_167, Pound_160, Rearden_166, Redno2_160, Schatzie_161, Shaboozey_165, Squint_162, Superphikiman_165, Thibault_150, ThreeRngTarjay_163, Wanda_164, Xiaokay_162, Yeet_158, Zelink_159,

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

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

**Summary by start number:**

Start 9:
• Found in 52 of 52 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 41 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ariel_167 (J), BAKA_172 (J), Bagrid_175 (J), Beem_167 (J), Bobby_159 (J), Bombitas_153 (J), BronnyJames_162 (J), Constella_162 (J), Courthouse_164 (J), Dallas_166 (J), DmpstrDiver_167 (J), Dove_153 (J), Duke13_169 (J), Ejimix_157 (J), EricMillard_164 (J), Gonephishing_160 (J), Halley_167 (J), Hannaconda_159 (J), Hidrated_159 (J), HokkenD_161 (J), Hughesyang_165 (J), Jace_83 (singleton), JuicyJay_161 (J), Kalah2_163 (J), KashFlow_164 (J), Klein_170 (J), LittleE_174 (J), Lucky2013_163 (J), Marleymoo_153 (J), MiaZeal_170 (J), Minerva_166 (J), Nekros_165 (J), Nibley_160 (J), NihilNomen_168 (J), Odette_170 (J), Omega_175 (J), Optimus_165 (J), Phoebus_167 (J), Porcelain_167 (J), Pound_160 (J), Rearden_166 (J), Redno2_160 (J), Schatzie_161 (J), Shaboozey_165 (J), Squint_162 (J), Superphikiman_165 (J), Thibault_150 (J), ThreeRngTarjay_163 (J), Wanda_164 (J), Xiaokay_162 (J), Yeet_158 (J), Zelink_159 (J),

**Summary by clusters:**

There are 2 clusters represented in this pham: singleton, J,

Info for manual annotations of cluster J:
•Start number 9 was manually annotated 40 times for cluster J.

***Gene Information:***

Gene: Ariel_167 Start: 85326, Stop: 85568, Start Num: 9
Candidate Starts for Ariel_167:
(Start: 9 @85326 has 41 MA's), (10, 85431), (11, 85461), (12, 85467), (14, 85509), (18, 85554),

Gene: BAKA_172 Start: 90313, Stop: 90546, Start Num: 9
Candidate Starts for BAKA_172:
(Start: 9 @90313 has 41 MA's), (12, 90454), (13, 90463), (14, 90496), (15, 90502),

Gene: Bagrid_175 Start: 90675, Stop: 90908, Start Num: 9
Candidate Starts for Bagrid_175:
(Start: 9 @90675 has 41 MA's), (12, 90816), (13, 90825), (14, 90858), (15, 90864),

Gene: Beem_167 Start: 89468, Stop: 89701, Start Num: 9
Candidate Starts for Beem_167:
(Start: 9 @89468 has 41 MA's), (12, 89609), (13, 89618), (14, 89651), (15, 89657),

Gene: Bobby_159 Start: 90463, Stop: 90696, Start Num: 9
Candidate Starts for Bobby_159:

(Start: 9 @90463 has 41 MA's), (12, 90604), (13, 90613), (14, 90646), (15, 90652),

Gene: Bombitas_153 Start: 85698, Stop: 85931, Start Num: 9
Candidate Starts for Bombitas_153:
(Start: 9 @85698 has 41 MA's), (12, 85839), (13, 85848), (14, 85881), (15, 85887),

Gene: BronnyJames_162 Start: 85372, Stop: 85614, Start Num: 9
Candidate Starts for BronnyJames_162:
(Start: 9 @85372 has 41 MA's), (10, 85477), (11, 85507), (12, 85513), (14, 85555), (18, 85600),

Gene: Constella_162 Start: 88202, Stop: 88435, Start Num: 9
Candidate Starts for Constella_162:
(Start: 9 @88202 has 41 MA's), (12, 88343), (13, 88352), (14, 88385), (15, 88391),

Gene: Courthouse_164 Start: 85770, Stop: 86012, Start Num: 9
Candidate Starts for Courthouse_164:
(Start: 9 @85770 has 41 MA's), (10, 85875), (11, 85905), (12, 85911), (14, 85953), (18, 85998),

Gene: Dallas_166 Start: 88691, Stop: 88924, Start Num: 9
Candidate Starts for Dallas_166:
(Start: 9 @88691 has 41 MA's), (12, 88832), (13, 88841), (14, 88874), (15, 88880),

Gene: DmpstrDiver_167 Start: 88386, Stop: 88619, Start Num: 9
Candidate Starts for DmpstrDiver_167:
(5, 88320), (6, 88338), (Start: 9 @88386 has 41 MA's), (12, 88527), (13, 88536), (14, 88569), (15, 88575),

Gene: Dove_153 Start: 84054, Stop: 84287, Start Num: 9
Candidate Starts for Dove_153:
(Start: 9 @84054 has 41 MA's), (12, 84195), (13, 84204), (14, 84237), (15, 84243),

Gene: Duke13_169 Start: 88809, Stop: 89042, Start Num: 9
Candidate Starts for Duke13_169:
(Start: 9 @88809 has 41 MA's), (12, 88950), (13, 88959), (14, 88992), (15, 88998),

Gene: Ejimix_157 Start: 87679, Stop: 87912, Start Num: 9
Candidate Starts for Ejimix_157:
(Start: 9 @87679 has 41 MA's), (12, 87820), (13, 87829), (14, 87862), (15, 87868),

Gene: EricMillard_164 Start: 89285, Stop: 89518, Start Num: 9
Candidate Starts for EricMillard_164:
(Start: 9 @89285 has 41 MA's), (12, 89426), (13, 89435), (14, 89468), (15, 89474),

Gene: Gonephishing_160 Start: 86587, Stop: 86829, Start Num: 9
Candidate Starts for Gonephishing_160:
(3, 86434), (5, 86521), (Start: 9 @86587 has 41 MA's), (10, 86692), (11, 86722), (12, 86728), (14, 86770), (18, 86815),

Gene: Halley_167 Start: 87995, Stop: 88228, Start Num: 9
Candidate Starts for Halley_167:
(Start: 9 @87995 has 41 MA's), (12, 88136), (13, 88145), (14, 88178), (15, 88184),

Gene: Hannaconda_159 Start: 88508, Stop: 88750, Start Num: 9

Candidate Starts for Hannaconda_159:
(3, 88355), (5, 88442), (Start: 9 @88508 has 41 MA's), (10, 88613), (11, 88643), (12, 88649), (14, 88691), (18, 88736),

Gene: Hidrated_159 Start: 89709, Stop: 89942, Start Num: 9
Candidate Starts for Hidrated_159:
(1, 89523), (2, 89544), (4, 89580), (5, 89643), (Start: 9 @89709 has 41 MA's), (12, 89850), (13, 89859), (14, 89892), (15, 89898),

Gene: HokkenD_161 Start: 89776, Stop: 90009, Start Num: 9
Candidate Starts for HokkenD_161:
(Start: 9 @89776 has 41 MA's), (12, 89917), (13, 89926), (14, 89959), (15, 89965),

Gene: Hughesyang_165 Start: 88477, Stop: 88710, Start Num: 9
Candidate Starts for Hughesyang_165:
(Start: 9 @88477 has 41 MA's), (12, 88618), (13, 88627), (14, 88660), (15, 88666),

Gene: Jace_83 Start: 45617, Stop: 45856, Start Num: 9
Candidate Starts for Jace_83:
(7, 45572), (8, 45584), (Start: 9 @45617 has 41 MA's), (13, 45755), (16, 45815), (17, 45824),

Gene: JuicyJay_161 Start: 89423, Stop: 89656, Start Num: 9
Candidate Starts for JuicyJay_161:
(Start: 9 @89423 has 41 MA's), (12, 89564), (13, 89573), (14, 89606), (15, 89612),

Gene: Kalah2_163 Start: 89761, Stop: 89994, Start Num: 9
Candidate Starts for Kalah2_163:
(Start: 9 @89761 has 41 MA's), (12, 89902), (13, 89911), (14, 89944), (15, 89950),

Gene: KashFlow_164 Start: 88321, Stop: 88563, Start Num: 9
Candidate Starts for KashFlow_164:
(5, 88255), (Start: 9 @88321 has 41 MA's), (10, 88426), (11, 88456), (12, 88462), (14, 88504), (18, 88549),

Gene: Klein_170 Start: 88100, Stop: 88333, Start Num: 9
Candidate Starts for Klein_170:
(Start: 9 @88100 has 41 MA's), (12, 88241), (13, 88250), (14, 88283), (15, 88289),

Gene: LittleE_174 Start: 89344, Stop: 89586, Start Num: 9
Candidate Starts for LittleE_174:
(Start: 9 @89344 has 41 MA's), (10, 89449), (11, 89479), (12, 89485), (14, 89527), (18, 89572),

Gene: Lucky2013_163 Start: 84841, Stop: 85083, Start Num: 9
Candidate Starts for Lucky2013_163:
(Start: 9 @84841 has 41 MA's), (10, 84946), (11, 84976), (12, 84982), (14, 85024), (18, 85069),

Gene: Marleymoo_153 Start: 86613, Stop: 86846, Start Num: 9
Candidate Starts for Marleymoo_153:
(5, 86547), (6, 86565), (Start: 9 @86613 has 41 MA's), (12, 86754), (13, 86763), (14, 86796), (15, 86802),

Gene: MiaZeal_170 Start: 85988, Stop: 86230, Start Num: 9
Candidate Starts for MiaZeal_170:

(Start: 9 @85988 has 41 MA's), (10, 86093), (11, 86123), (12, 86129), (14, 86171), (18, 86216),

Gene: Minerva_166 Start: 87841, Stop: 88074, Start Num: 9
Candidate Starts for Minerva_166:
(Start: 9 @87841 has 41 MA's), (12, 87982), (13, 87991), (14, 88024), (15, 88030),

Gene: Nekros_165 Start: 87788, Stop: 88030, Start Num: 9
Candidate Starts for Nekros_165:
(Start: 9 @87788 has 41 MA's), (10, 87893), (11, 87923), (12, 87929), (14, 87971), (18, 88016),

Gene: Nibley_160 Start: 84949, Stop: 85191, Start Num: 9
Candidate Starts for Nibley_160:
(Start: 9 @84949 has 41 MA's), (10, 85054), (11, 85084), (12, 85090), (14, 85132), (18, 85177),

Gene: NihilNomen_168 Start: 87549, Stop: 87782, Start Num: 9
Candidate Starts for NihilNomen_168:
(Start: 9 @87549 has 41 MA's), (12, 87690), (13, 87699), (14, 87732), (15, 87738),

Gene: Odette_170 Start: 90230, Stop: 90463, Start Num: 9
Candidate Starts for Odette_170:
(Start: 9 @90230 has 41 MA's), (12, 90371), (13, 90380), (14, 90413), (15, 90419),

Gene: Omega_175 Start: 90315, Stop: 90557, Start Num: 9
Candidate Starts for Omega_175:
(5, 90249), (Start: 9 @90315 has 41 MA's), (10, 90420), (11, 90450), (12, 90456), (14, 90498), (18, 90543),

Gene: Optimus_165 Start: 88756, Stop: 88989, Start Num: 9
Candidate Starts for Optimus_165:
(Start: 9 @88756 has 41 MA's), (12, 88897), (13, 88906), (14, 88939), (15, 88945),

Gene: Phoebus_167 Start: 91236, Stop: 91469, Start Num: 9
Candidate Starts for Phoebus_167:
(Start: 9 @91236 has 41 MA's), (12, 91377), (13, 91386), (14, 91419), (15, 91425),

Gene: Porcelain_167 Start: 85787, Stop: 86029, Start Num: 9
Candidate Starts for Porcelain_167:
(Start: 9 @85787 has 41 MA's), (10, 85892), (11, 85922), (12, 85928), (14, 85970), (18, 86015),

Gene: Pound_160 Start: 87285, Stop: 87518, Start Num: 9
Candidate Starts for Pound_160:
(Start: 9 @87285 has 41 MA's), (12, 87426), (13, 87435), (14, 87468), (15, 87474),

Gene: Rearden_166 Start: 86290, Stop: 86532, Start Num: 9
Candidate Starts for Rearden_166:
(3, 86137), (5, 86224), (Start: 9 @86290 has 41 MA's), (10, 86395), (11, 86425), (12, 86431), (14, 86473), (18, 86518),

Gene: Redno2_160 Start: 85349, Stop: 85582, Start Num: 9
Candidate Starts for Redno2_160:
(Start: 9 @85349 has 41 MA's), (12, 85490), (13, 85499), (14, 85532), (15, 85538),

Gene: Schatzie_161 Start: 88284, Stop: 88517, Start Num: 9

Candidate Starts for Schatzie_161:
(Start: 9 @88284 has 41 MA's), (12, 88425), (13, 88434), (14, 88467), (15, 88473),

Gene: Shaboozey_165 Start: 85393, Stop: 85635, Start Num: 9
Candidate Starts for Shaboozey_165:
(Start: 9 @85393 has 41 MA's), (10, 85498), (11, 85528), (12, 85534), (14, 85576), (18, 85621),

Gene: Squint_162 Start: 86297, Stop: 86539, Start Num: 9
Candidate Starts for Squint_162:
(Start: 9 @86297 has 41 MA's), (10, 86402), (11, 86432), (12, 86438), (14, 86480), (18, 86525),

Gene: Superphikiman_165 Start: 85466, Stop: 85708, Start Num: 9
Candidate Starts for Superphikiman_165:
(Start: 9 @85466 has 41 MA's), (10, 85571), (11, 85601), (12, 85607), (14, 85649), (18, 85694),

Gene: Thibault_150 Start: 85164, Stop: 85397, Start Num: 9
Candidate Starts for Thibault_150:
(Start: 9 @85164 has 41 MA's), (12, 85305), (13, 85314), (14, 85347), (15, 85353),

Gene: ThreeRngTarjay_163 Start: 89158, Stop: 89391, Start Num: 9
Candidate Starts for ThreeRngTarjay_163:
(Start: 9 @89158 has 41 MA's), (12, 89299), (13, 89308), (14, 89341), (15, 89347),

Gene: Wanda_164 Start: 85749, Stop: 85982, Start Num: 9
Candidate Starts for Wanda_164:
(Start: 9 @85749 has 41 MA's), (12, 85890), (13, 85899), (14, 85932), (15, 85938),

Gene: Xiaokay_162 Start: 89184, Stop: 89417, Start Num: 9
Candidate Starts for Xiaokay_162:
(Start: 9 @89184 has 41 MA's), (12, 89325), (13, 89334), (14, 89367), (15, 89373),

Gene: Yeet_158 Start: 87137, Stop: 87370, Start Num: 9
Candidate Starts for Yeet_158:
(Start: 9 @87137 has 41 MA's), (12, 87278), (13, 87287), (14, 87320), (15, 87326),

Gene: Zelink_159 Start: 87472, Stop: 87705, Start Num: 9
Candidate Starts for Zelink_159:
(Start: 9 @87472 has 41 MA's), (12, 87613), (13, 87622), (14, 87655), (15, 87661),