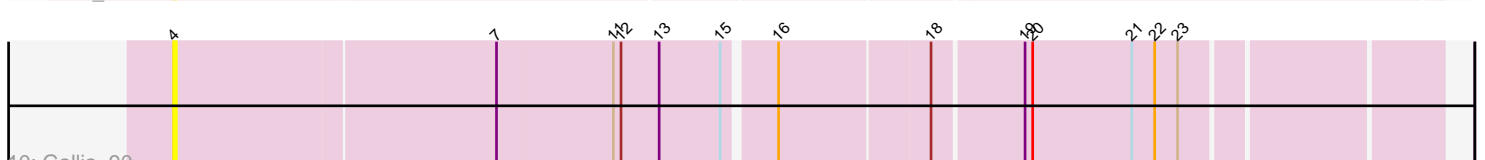
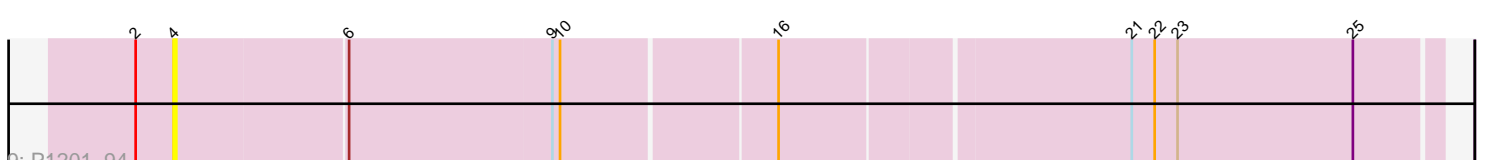
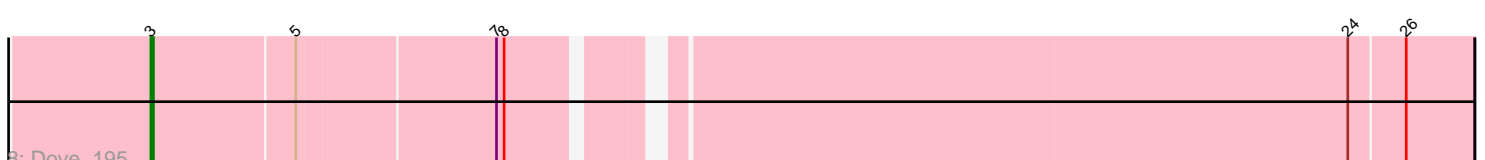
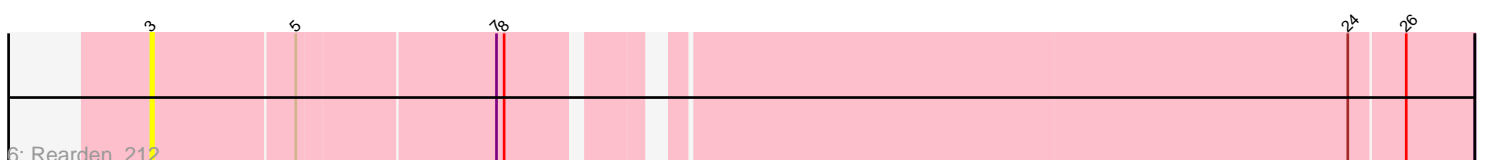
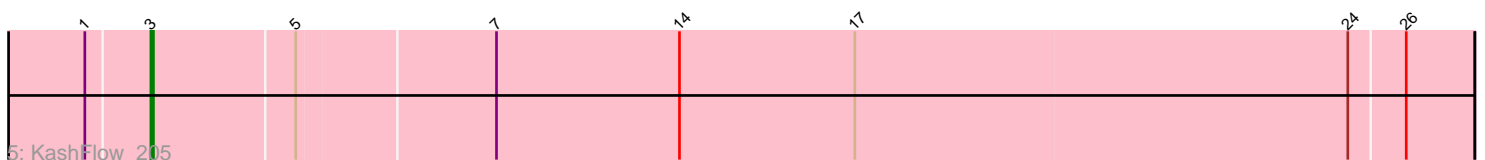
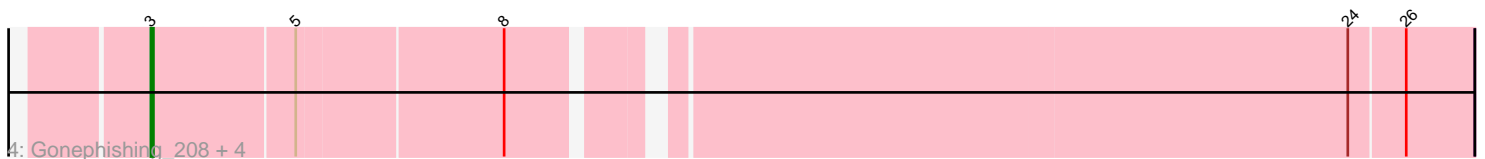
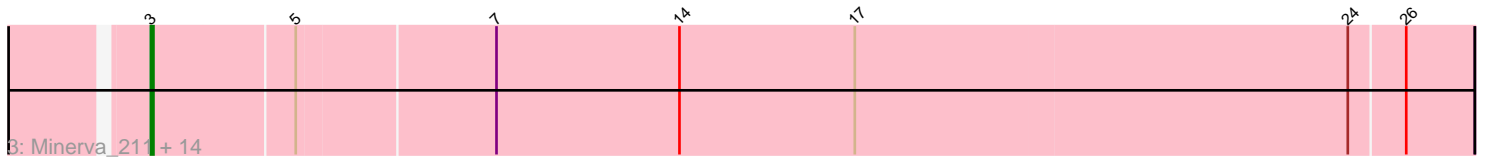
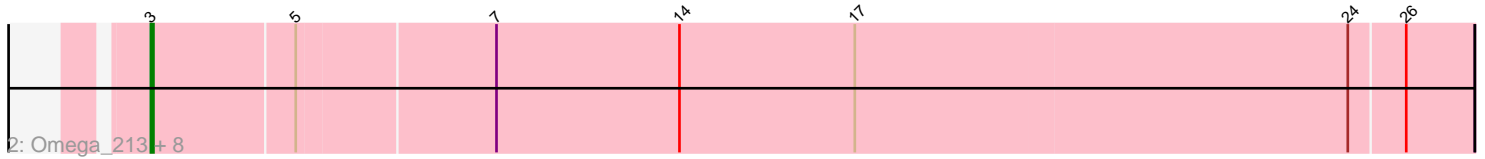
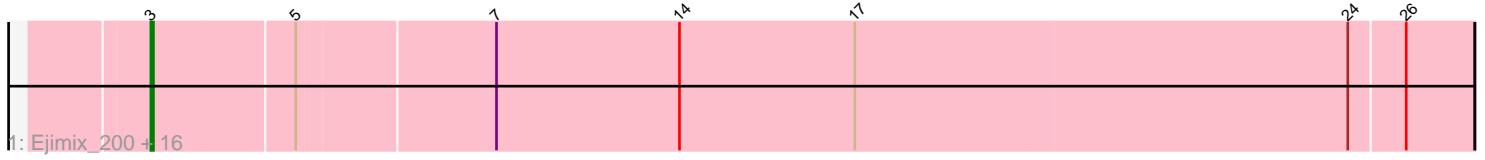


Pham 311668



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 311668 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311668 has 53 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Ejimix\_200, Yeet\_202, Courthouse\_215, Hannaconda\_203, Shaboozey\_209, Kalah2\_212, Hughesyang\_209, Klein\_217, BronnyJames\_206, Nekros\_212, Nibley\_204, Superphikiman\_211, Ariel\_218, Halley\_212, Marleymoo\_195, Duke13\_211, Wanda\_209
- Track 2 : Omega\_213, Thibault\_188, Beem\_212, Redno2\_202, HokkenD\_205, JuicyJay\_205, Squint\_208, Bobby\_194, Phoebus\_212
- Track 3 : Minerva\_211, Schatzie\_206, Pound\_203, Optimus\_206, Porcelain\_212, DmpstrDiver\_213, Zelink\_203, Odette\_215, Dallas\_210, ThreeRngTarjay\_210, MiaZeal\_221, Bagrid\_218, BAKA\_219, EricMillard\_208, Lucky2013\_209
- Track 4 : Gonephishing\_208, Hidrated\_199, Constella\_203, LittleE\_212, Xiaokay\_200
- Track 5 : KashFlow\_205
- Track 6 : Rearden\_212
- Track 7 : Bombitas\_195, NihilNomen\_213
- Track 8 : Dove\_195
- Track 9 : P1201\_94
- Track 10 : Gallia\_90

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

The start number called the most often in the published annotations is 3, it was called in 40 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel\_218, BAKA\_219, Bagrid\_218, Beem\_212, Bobby\_194, Bombitas\_195, BronnyJames\_206, Constella\_203, Courthouse\_215, Dallas\_210, DmpstrDiver\_213, Dove\_195, Duke13\_211, Ejimix\_200, EricMillard\_208, Gonephishing\_208, Halley\_212, Hannaconda\_203, Hidrated\_199, HokkenD\_205, Hughesyang\_209, JuicyJay\_205, Kalah2\_212, KashFlow\_205, Klein\_217, LittleE\_212, Lucky2013\_209, Marleymoo\_195, MiaZeal\_221, Minerva\_211, Nekros\_212, Nibley\_204, NihilNomen\_213, Odette\_215, Omega\_213, Optimus\_206, Phoebus\_212, Porcelain\_212, Pound\_203, Rearden\_212, Redno2\_202, Schatzie\_206, Shaboozey\_209, Squint\_208, Superphikiman\_211, Thibault\_188, ThreeRngTarjay\_210, Wanda\_209, Xiaokay\_200, Yeet\_202, Zelink\_203,

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

- 

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

- Gallia\_90, P1201\_94,

### Summary by start number:

Start 3:

- Found in 51 of 53 ( 96.2% ) of genes in pham
- Manual Annotations of this start: 40 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel\_218 (J), BAKA\_219 (J), Bagrid\_218 (J), Beem\_212 (J), Bobby\_194 (J), Bombitas\_195 (J), BronnyJames\_206 (J), Constella\_203 (J), Courthouse\_215 (J), Dallas\_210 (J), DmpstrDiver\_213 (J), Dove\_195 (J), Duke13\_211 (J), Ejimix\_200 (J), EricMillard\_208 (J), Gonephishing\_208 (J), Halley\_212 (J), Hannaconda\_203 (J), Hidrated\_199 (J), HokkenD\_205 (J), Hughesyang\_209 (J), JuicyJay\_205 (J), Kalah2\_212 (J), KashFlow\_205 (J), Klein\_217 (J), LittleE\_212 (J), Lucky2013\_209 (J), Marleymoo\_195 (J), MiaZeal\_221 (J), Minerva\_211 (J), Nekros\_212 (J), Nibley\_204 (J), NihilNomen\_213 (J), Odette\_215 (J), Omega\_213 (J), Optimus\_206 (J), Phoebus\_212 (J), Porcelain\_212 (J), Pound\_203 (J), Rearden\_212 (J), Redno2\_202 (J), Schatzie\_206 (J), Shaboozey\_209 (J), Squint\_208 (J), Superphikiman\_211 (J), Thibault\_188 (J), ThreeRngTarjay\_210 (J), Wanda\_209 (J), Xiaokay\_200 (J), Yeet\_202 (J), Zelink\_203 (J),

Start 4:

- Found in 2 of 53 ( 3.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gallia\_90 (singleton), P1201\_94 (singleton),

### Summary by clusters:

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

Info for manual annotations of cluster J:

- Start number 3 was manually annotated 40 times for cluster J.

### Gene Information:

Gene: Ariel\_218 Start: 102219, Stop: 101710, Start Num: 3

Candidate Starts for Ariel\_218:

(Start: 3 @102219 has 40 MA's), (5, 102165), (7, 102090), (14, 102018), (17, 101949), (24, 101757), (26, 101736),

Gene: BAKA\_219 Start: 105534, Stop: 105025, Start Num: 3

Candidate Starts for BAKA\_219:

(Start: 3 @105534 has 40 MA's), (5, 105480), (7, 105405), (14, 105333), (17, 105264), (24, 105072), (26, 105051),

Gene: Bagrid\_218 Start: 105896, Stop: 105387, Start Num: 3

Candidate Starts for Bagrid\_218:

(Start: 3 @105896 has 40 MA's), (5, 105842), (7, 105767), (14, 105695), (17, 105626), (24, 105434), (26, 105413),

Gene: Beem\_212 Start: 104661, Stop: 104152, Start Num: 3

Candidate Starts for Beem\_212:

(Start: 3 @104661 has 40 MA's), (5, 104607), (7, 104532), (14, 104460), (17, 104391), (24, 104199), (26, 104178),

Gene: Bobby\_194 Start: 103431, Stop: 102931, Start Num: 3

Candidate Starts for Bobby\_194:

(Start: 3 @103431 has 40 MA's), (5, 103377), (7, 103302), (14, 103230), (17, 103161), (24, 102969), (26, 102948),

Gene: Bombitas\_195 Start: 101149, Stop: 100640, Start Num: 3

Candidate Starts for Bombitas\_195:

(Start: 3 @101149 has 40 MA's), (5, 101095), (14, 100948), (24, 100687), (26, 100666),

Gene: BronnyJames\_206 Start: 100552, Stop: 100043, Start Num: 3

Candidate Starts for BronnyJames\_206:

(Start: 3 @100552 has 40 MA's), (5, 100498), (7, 100423), (14, 100351), (17, 100282), (24, 100090), (26, 100069),

Gene: Constella\_203 Start: 103256, Stop: 102777, Start Num: 3

Candidate Starts for Constella\_203:

(Start: 3 @103256 has 40 MA's), (5, 103202), (8, 103124), (24, 102815), (26, 102794),

Gene: Courthouse\_215 Start: 103079, Stop: 102570, Start Num: 3

Candidate Starts for Courthouse\_215:

(Start: 3 @103079 has 40 MA's), (5, 103025), (7, 102950), (14, 102878), (17, 102809), (24, 102617), (26, 102596),

Gene: Dallas\_210 Start: 103440, Stop: 102931, Start Num: 3

Candidate Starts for Dallas\_210:

(Start: 3 @103440 has 40 MA's), (5, 103386), (7, 103311), (14, 103239), (17, 103170), (24, 102978), (26, 102957),

Gene: DmpstrDiver\_213 Start: 104143, Stop: 103634, Start Num: 3

Candidate Starts for DmpstrDiver\_213:

(Start: 3 @104143 has 40 MA's), (5, 104089), (7, 104014), (14, 103942), (17, 103873), (24, 103681), (26, 103660),

Gene: Dove\_195 Start: 99775, Stop: 99287, Start Num: 3

Candidate Starts for Dove\_195:

(Start: 3 @99775 has 40 MA's), (5, 99721), (7, 99646), (8, 99643), (24, 99334), (26, 99313),

Gene: Duke13\_211 Start: 103709, Stop: 103200, Start Num: 3

Candidate Starts for Duke13\_211:

(Start: 3 @103709 has 40 MA's), (5, 103655), (7, 103580), (14, 103508), (17, 103439), (24, 103247), (26, 103226),

Gene: Ejimix\_200 Start: 102666, Stop: 102157, Start Num: 3

Candidate Starts for Ejimix\_200:

(Start: 3 @102666 has 40 MA's), (5, 102612), (7, 102537), (14, 102465), (17, 102396), (24, 102204), (26, 102183),

Gene: EricMillard\_208 Start: 104788, Stop: 104279, Start Num: 3

Candidate Starts for EricMillard\_208:

(Start: 3 @104788 has 40 MA's), (5, 104734), (7, 104659), (14, 104587), (17, 104518), (24, 104326), (26, 104305),

Gene: Gallia\_90 Start: 67509, Stop: 67982, Start Num: 4

Candidate Starts for Gallia\_90:

(4, 67509), (7, 67632), (11, 67677), (12, 67680), (13, 67695), (15, 67719), (16, 67737), (18, 67794), (19, 67827), (20, 67830), (21, 67869), (22, 67878), (23, 67887),

Gene: Gonephishing\_208 Start: 102696, Stop: 102208, Start Num: 3

Candidate Starts for Gonephishing\_208:

(Start: 3 @102696 has 40 MA's), (5, 102642), (8, 102564), (24, 102255), (26, 102234),

Gene: Halley\_212 Start: 103279, Stop: 102770, Start Num: 3

Candidate Starts for Halley\_212:

(Start: 3 @103279 has 40 MA's), (5, 103225), (7, 103150), (14, 103078), (17, 103009), (24, 102817), (26, 102796),

Gene: Hannaconda\_203 Start: 103524, Stop: 103015, Start Num: 3

Candidate Starts for Hannaconda\_203:

(Start: 3 @103524 has 40 MA's), (5, 103470), (7, 103395), (14, 103323), (17, 103254), (24, 103062), (26, 103041),

Gene: Hidrated\_199 Start: 104763, Stop: 104284, Start Num: 3

Candidate Starts for Hidrated\_199:

(Start: 3 @104763 has 40 MA's), (5, 104709), (8, 104631), (24, 104322), (26, 104301),

Gene: HokkenD\_205 Start: 105424, Stop: 104915, Start Num: 3

Candidate Starts for HokkenD\_205:

(Start: 3 @105424 has 40 MA's), (5, 105370), (7, 105295), (14, 105223), (17, 105154), (24, 104962), (26, 104941),

Gene: Hughesyang\_209 Start: 103942, Stop: 103433, Start Num: 3

Candidate Starts for Hughesyang\_209:

(Start: 3 @103942 has 40 MA's), (5, 103888), (7, 103813), (14, 103741), (17, 103672), (24, 103480), (26, 103459),

Gene: JuicyJay\_205 Start: 104613, Stop: 104104, Start Num: 3

Candidate Starts for JuicyJay\_205:

(Start: 3 @104613 has 40 MA's), (5, 104559), (7, 104484), (14, 104412), (17, 104343), (24, 104151), (26, 104130),

Gene: Kalah2\_212 Start: 105829, Stop: 105320, Start Num: 3

Candidate Starts for Kalah2\_212:

(Start: 3 @105829 has 40 MA's), (5, 105775), (7, 105700), (14, 105628), (17, 105559), (24, 105367), (26, 105346),

Gene: KashFlow\_205 Start: 103609, Stop: 103100, Start Num: 3  
Candidate Starts for KashFlow\_205:

(1, 103633), (Start: 3 @103609 has 40 MA's), (5, 103555), (7, 103480), (14, 103408), (17, 103339), (24, 103147), (26, 103126),

Gene: Klein\_217 Start: 103837, Stop: 103328, Start Num: 3  
Candidate Starts for Klein\_217:

(Start: 3 @103837 has 40 MA's), (5, 103783), (7, 103708), (14, 103636), (17, 103567), (24, 103375), (26, 103354),

Gene: LittleE\_212 Start: 104019, Stop: 103540, Start Num: 3  
Candidate Starts for LittleE\_212:

(Start: 3 @104019 has 40 MA's), (5, 103965), (8, 103887), (24, 103578), (26, 103557),

Gene: Lucky2013\_209 Start: 100883, Stop: 100374, Start Num: 3  
Candidate Starts for Lucky2013\_209:

(Start: 3 @100883 has 40 MA's), (5, 100829), (7, 100754), (14, 100682), (17, 100613), (24, 100421), (26, 100400),

Gene: Marleymoo\_195 Start: 102008, Stop: 101499, Start Num: 3  
Candidate Starts for Marleymoo\_195:

(Start: 3 @102008 has 40 MA's), (5, 101954), (7, 101879), (14, 101807), (17, 101738), (24, 101546), (26, 101525),

Gene: MiaZeal\_221 Start: 103022, Stop: 102513, Start Num: 3  
Candidate Starts for MiaZeal\_221:

(Start: 3 @103022 has 40 MA's), (5, 102968), (7, 102893), (14, 102821), (17, 102752), (24, 102560), (26, 102539),

Gene: Minerva\_211 Start: 102736, Stop: 102227, Start Num: 3  
Candidate Starts for Minerva\_211:

(Start: 3 @102736 has 40 MA's), (5, 102682), (7, 102607), (14, 102535), (17, 102466), (24, 102274), (26, 102253),

Gene: Nekros\_212 Start: 104008, Stop: 103499, Start Num: 3  
Candidate Starts for Nekros\_212:

(Start: 3 @104008 has 40 MA's), (5, 103954), (7, 103879), (14, 103807), (17, 103738), (24, 103546), (26, 103525),

Gene: Nibley\_204 Start: 100129, Stop: 99620, Start Num: 3  
Candidate Starts for Nibley\_204:

(Start: 3 @100129 has 40 MA's), (5, 100075), (7, 100000), (14, 99928), (17, 99859), (24, 99667), (26, 99646),

Gene: NihilNomen\_213 Start: 102859, Stop: 102350, Start Num: 3  
Candidate Starts for NihilNomen\_213:

(Start: 3 @102859 has 40 MA's), (5, 102805), (14, 102658), (24, 102397), (26, 102376),

Gene: Odette\_215 Start: 105581, Stop: 105072, Start Num: 3  
Candidate Starts for Odette\_215:

(Start: 3 @105581 has 40 MA's), (5, 105527), (7, 105452), (14, 105380), (17, 105311), (24, 105119), (26, 105098),

Gene: Omega\_213 Start: 104389, Stop: 103880, Start Num: 3

Candidate Starts for Omega\_213:

(Start: 3 @104389 has 40 MA's), (5, 104335), (7, 104260), (14, 104188), (17, 104119), (24, 103927), (26, 103906),

Gene: Optimus\_206 Start: 103167, Stop: 102658, Start Num: 3

Candidate Starts for Optimus\_206:

(Start: 3 @103167 has 40 MA's), (5, 103113), (7, 103038), (14, 102966), (17, 102897), (24, 102705), (26, 102684),

Gene: P1201\_94 Start: 66726, Stop: 67205, Start Num: 4

Candidate Starts for P1201\_94:

(2, 66711), (4, 66726), (6, 66792), (9, 66870), (10, 66873), (16, 66954), (21, 67086), (22, 67095), (23, 67104), (25, 67173),

Gene: Phoebus\_212 Start: 106942, Stop: 106433, Start Num: 3

Candidate Starts for Phoebus\_212:

(Start: 3 @106942 has 40 MA's), (5, 106888), (7, 106813), (14, 106741), (17, 106672), (24, 106480), (26, 106459),

Gene: Porcelain\_212 Start: 101830, Stop: 101321, Start Num: 3

Candidate Starts for Porcelain\_212:

(Start: 3 @101830 has 40 MA's), (5, 101776), (7, 101701), (14, 101629), (17, 101560), (24, 101368), (26, 101347),

Gene: Pound\_203 Start: 102924, Stop: 102415, Start Num: 3

Candidate Starts for Pound\_203:

(Start: 3 @102924 has 40 MA's), (5, 102870), (7, 102795), (14, 102723), (17, 102654), (24, 102462), (26, 102441),

Gene: Rearden\_212 Start: 102256, Stop: 101768, Start Num: 3

Candidate Starts for Rearden\_212:

(Start: 3 @102256 has 40 MA's), (5, 102202), (7, 102127), (8, 102124), (24, 101815), (26, 101794),

Gene: Redno2\_202 Start: 100503, Stop: 99994, Start Num: 3

Candidate Starts for Redno2\_202:

(Start: 3 @100503 has 40 MA's), (5, 100449), (7, 100374), (14, 100302), (17, 100233), (24, 100041), (26, 100020),

Gene: Schatzie\_206 Start: 103458, Stop: 102949, Start Num: 3

Candidate Starts for Schatzie\_206:

(Start: 3 @103458 has 40 MA's), (5, 103404), (7, 103329), (14, 103257), (17, 103188), (24, 102996), (26, 102975),

Gene: Shaboozey\_209 Start: 100572, Stop: 100063, Start Num: 3

Candidate Starts for Shaboozey\_209:

(Start: 3 @100572 has 40 MA's), (5, 100518), (7, 100443), (14, 100371), (17, 100302), (24, 100110), (26, 100089),

Gene: Squint\_208 Start: 101551, Stop: 101042, Start Num: 3

Candidate Starts for Squint\_208:

(Start: 3 @101551 has 40 MA's), (5, 101497), (7, 101422), (14, 101350), (17, 101281), (24, 101089), (26, 101068),

Gene: Superphikiman\_211 Start: 102040, Stop: 101531, Start Num: 3

Candidate Starts for Superphikiman\_211:

(Start: 3 @102040 has 40 MA's), (5, 101986), (7, 101911), (14, 101839), (17, 101770), (24, 101578), (26, 101557),

Gene: Thibault\_188 Start: 99414, Stop: 98905, Start Num: 3

Candidate Starts for Thibault\_188:

(Start: 3 @99414 has 40 MA's), (5, 99360), (7, 99285), (14, 99213), (17, 99144), (24, 98952), (26, 98931),

Gene: ThreeRngTarjay\_210 Start: 105107, Stop: 104598, Start Num: 3

Candidate Starts for ThreeRngTarjay\_210:

(Start: 3 @105107 has 40 MA's), (5, 105053), (7, 104978), (14, 104906), (17, 104837), (24, 104645), (26, 104624),

Gene: Wanda\_209 Start: 101467, Stop: 100958, Start Num: 3

Candidate Starts for Wanda\_209:

(Start: 3 @101467 has 40 MA's), (5, 101413), (7, 101338), (14, 101266), (17, 101197), (24, 101005), (26, 100984),

Gene: Xiaokay\_200 Start: 103357, Stop: 102878, Start Num: 3

Candidate Starts for Xiaokay\_200:

(Start: 3 @103357 has 40 MA's), (5, 103303), (8, 103225), (24, 102916), (26, 102895),

Gene: Yeet\_202 Start: 102302, Stop: 101793, Start Num: 3

Candidate Starts for Yeet\_202:

(Start: 3 @102302 has 40 MA's), (5, 102248), (7, 102173), (14, 102101), (17, 102032), (24, 101840), (26, 101819),

Gene: Zelink\_203 Start: 102837, Stop: 102328, Start Num: 3

Candidate Starts for Zelink\_203:

(Start: 3 @102837 has 40 MA's), (5, 102783), (7, 102708), (14, 102636), (17, 102567), (24, 102375), (26, 102354),