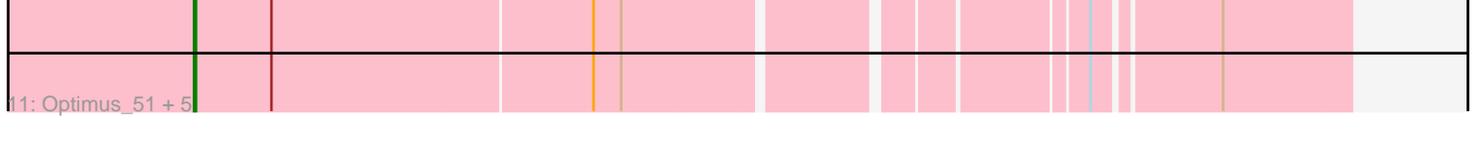
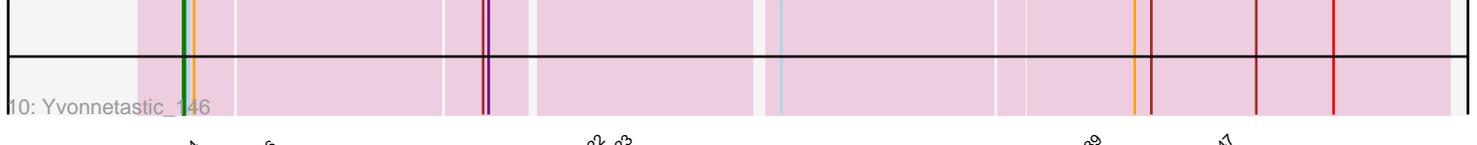
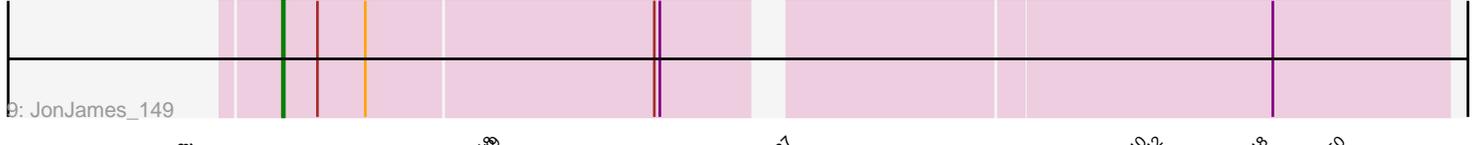
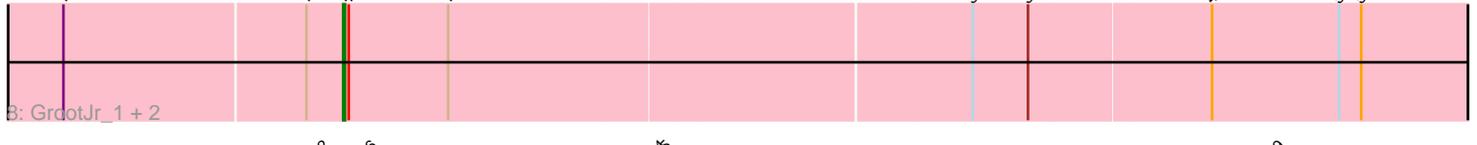
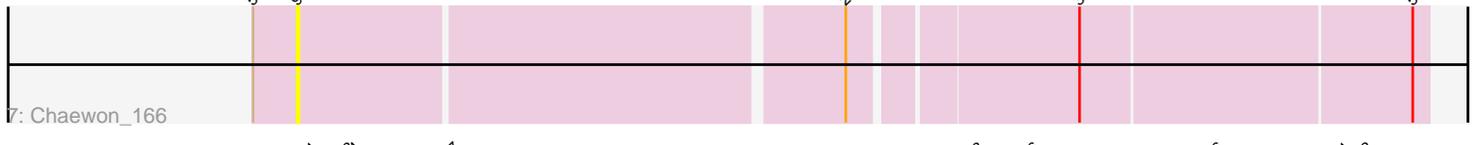
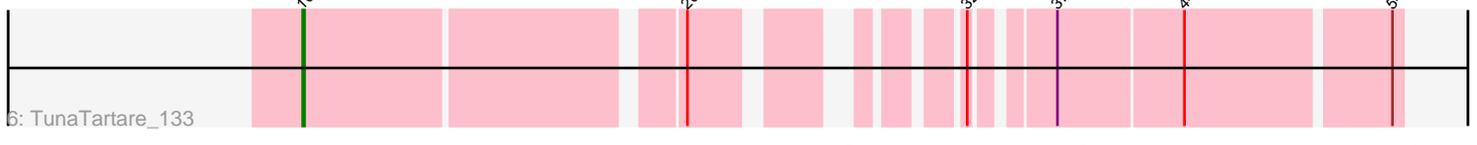
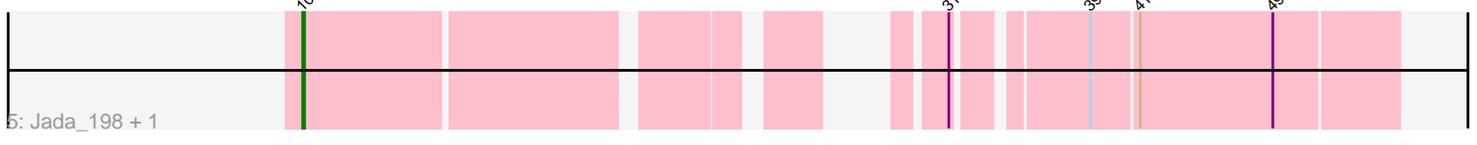
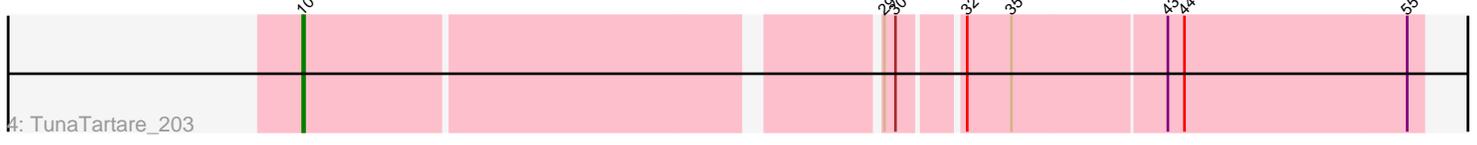
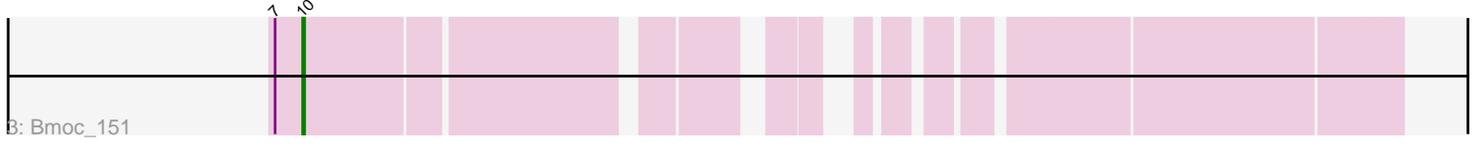
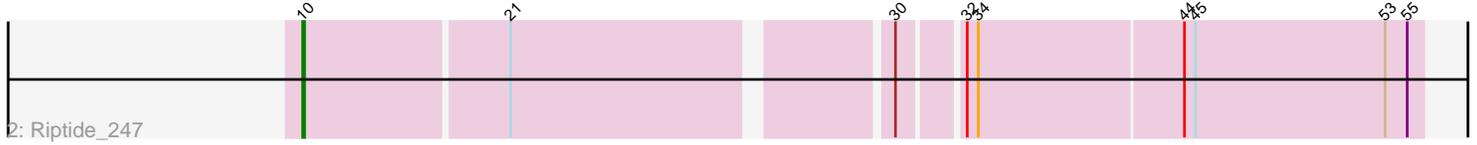
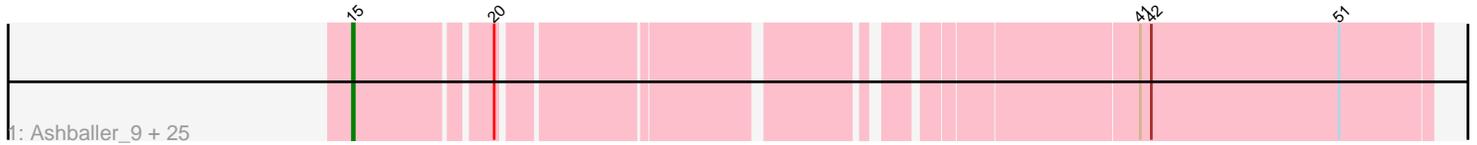


Pham 291298



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 291298 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291298 has 44 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Ashballer_9, Rubeus_11, Fajezeel_12, Jerm2_11, PattyP_12, Rufus_11, Pippin_12, DreamCatcher_13, Museum_12, Greg_12, Fushigi_11, Bruns_9, GageAP_12, Marge_11, Kenmech_13, Niza_12, Treddle_12, SpikeBT_12, Gyzlar_12, Sibs6_12, Rutherferd_12, Monet_12, Mkhusei_10, Acme_12, Burton_11, BigMau_12
- Track 2 : Riptide_247
- Track 3 : Bmoc_151
- Track 4 : TunaTartare_203
- Track 5 : Jada_198, Forrest_200
- Track 6 : TunaTartare_133
- Track 7 : Chaewon_166
- Track 8 : GrootJr_1, NatB6_1, NovumRegina_1
- Track 9 : JonJames_149
- Track 10 : Yvonnetastic_146
- Track 11 : Optimus_51, Wanda_52, DmpstrDiver_47, Minerva_52, Duke13_49, BAKA_50

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

The start number called the most often in the published annotations is 15, it was called in 25 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acme_12, Ashballer_9, BigMau_12, Bruns_9, Burton_11, DreamCatcher_13, Fajezeel_12, Fushigi_11, GageAP_12, Greg_12, Gyzlar_12, Jerm2_11, Kenmech_13, Marge_11, Mkhusei_10, Monet_12, Museum_12, Niza_12, PattyP_12, Pippin_12, Rubeus_11, Rufus_11, Rutherferd_12, Sibs6_12, SpikeBT_12, Treddle_12,

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

-

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

- BAKA_50, Bmoc_151, Chaewon_166, DmpstrDiver_47, Duke13_49, Forrest_200, GrootJr_1, Jada_198, JonJames_149, Minerva_52, NatB6_1, NovumRegina_1, Optimus_51, Riptide_247, TunaTartare_133, TunaTartare_203, Wanda_52, Yvonnestic_146,

Summary by start number:

Start 2:

- Found in 1 of 44 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yvonnestic_146 (DD),

Start 4:

- Found in 7 of 44 (15.9%) of genes in pham
- Manual Annotations of this start: 6 of 42
- Called 85.7% of time when present
- Phage (with cluster) where this start called: BAKA_50 (J), DmpstrDiver_47 (J), Duke13_49 (J), Minerva_52 (J), Optimus_51 (J), Wanda_52 (J),

Start 8:

- Found in 1 of 44 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames_149 (DD),

Start 9:

- Found in 1 of 44 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chaewon_166 (BK2),

Start 10:

- Found in 6 of 44 (13.6%) of genes in pham
- Manual Annotations of this start: 6 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bmoc_151 (BE1), Forrest_200 (BK1), Jada_198 (BK1), Riptide_247 (BE1), TunaTartare_133 (BK1), TunaTartare_203 (BK1),

Start 13:

- Found in 3 of 44 (6.8%) of genes in pham
- Manual Annotations of this start: 3 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GrootJr_1 (CR2), NatB6_1 (CR2), NovumRegina_1 (CR2),

Start 15:

- Found in 26 of 44 (59.1%) of genes in pham
- Manual Annotations of this start: 25 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acme_12 (A1), Ashballer_9 (A1), BigMau_12 (A1), Bruns_9 (A1), Burton_11 (A1), DreamCatcher_13 (A1), Fajezeel_12

(A1), Fushigi_11 (A1), GageAP_12 (A1), Greg_12 (A1), Gyzlar_12 (A1), Jerm2_11 (A1), Kenmech_13 (A1), Marge_11 (A1), Mkhuseleli_10 (A1), Monet_12 (A1), Museum_12 (A1), Niza_12 (A1), PattyP_12 (A1), Pippin_12 (A1), Rubeus_11 (A1), Rufus_11 (A1), Rutherford_12 (A1), Sibs6_12 (A1), SpikeBT_12 (A1), Treddle_12 (A1),

Summary by clusters:

There are 7 clusters represented in this pham: CR2, DD, J, A1, BK1, BK2, BE1,

Info for manual annotations of cluster A1:

- Start number 15 was manually annotated 25 times for cluster A1.

Info for manual annotations of cluster BE1:

- Start number 10 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BK1:

- Start number 10 was manually annotated 4 times for cluster BK1.

Info for manual annotations of cluster CR2:

- Start number 13 was manually annotated 3 times for cluster CR2.

Info for manual annotations of cluster DD:

- Start number 2 was manually annotated 1 time for cluster DD.
- Start number 8 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster J:

- Start number 4 was manually annotated 6 times for cluster J.

Gene Information:

Gene: Acme_12 Start: 6852, Stop: 7370, Start Num: 15

Candidate Starts for Acme_12:

(Start: 15 @6852 has 25 MA's), (20, 6918), (41, 7215), (42, 7221), (51, 7323),

Gene: Ashballer_9 Start: 6492, Stop: 7010, Start Num: 15

Candidate Starts for Ashballer_9:

(Start: 15 @6492 has 25 MA's), (20, 6558), (41, 6855), (42, 6861), (51, 6963),

Gene: BAKA_50 Start: 40286, Stop: 40870, Start Num: 4

Candidate Starts for BAKA_50:

(Start: 4 @40286 has 6 MA's), (6, 40328), (22, 40499), (23, 40514), (39, 40739), (47, 40802),

Gene: BigMau_12 Start: 6719, Stop: 7237, Start Num: 15

Candidate Starts for BigMau_12:

(Start: 15 @6719 has 25 MA's), (20, 6785), (41, 7082), (42, 7088), (51, 7190),

Gene: Bmoc_151 Start: 88009, Stop: 88512, Start Num: 10

Candidate Starts for Bmoc_151:

(7, 87994), (Start: 10 @88009 has 6 MA's),

Gene: Bruns_9 Start: 6422, Stop: 6940, Start Num: 15
Candidate Starts for Bruns_9:
(Start: 15 @6422 has 25 MA's), (20, 6488), (41, 6785), (42, 6791), (51, 6893),

Gene: Burton_11 Start: 6622, Stop: 7140, Start Num: 15
Candidate Starts for Burton_11:
(Start: 15 @6622 has 25 MA's), (20, 6688), (41, 6985), (42, 6991), (51, 7093),

Gene: Chaewon_166 Start: 92297, Stop: 92878, Start Num: 9
Candidate Starts for Chaewon_166:
(5, 92273), (9, 92297), (28, 92582), (38, 92696), (56, 92870),

Gene: DmpstrDiver_47 Start: 39715, Stop: 40299, Start Num: 4
Candidate Starts for DmpstrDiver_47:
(Start: 4 @39715 has 6 MA's), (6, 39757), (22, 39928), (23, 39943), (39, 40168), (47, 40231),

Gene: DreamCatcher_13 Start: 7699, Stop: 8217, Start Num: 15
Candidate Starts for DreamCatcher_13:
(Start: 15 @7699 has 25 MA's), (20, 7765), (41, 8062), (42, 8068), (51, 8170),

Gene: Duke13_49 Start: 40033, Stop: 40617, Start Num: 4
Candidate Starts for Duke13_49:
(Start: 4 @40033 has 6 MA's), (6, 40075), (22, 40246), (23, 40261), (39, 40486), (47, 40549),

Gene: Fajezeel_12 Start: 6818, Stop: 7336, Start Num: 15
Candidate Starts for Fajezeel_12:
(Start: 15 @6818 has 25 MA's), (20, 6884), (41, 7181), (42, 7187), (51, 7289),

Gene: Forrest_200 Start: 100263, Stop: 100757, Start Num: 10
Candidate Starts for Forrest_200:
(Start: 10 @100263 has 6 MA's), (31, 100536), (39, 100596), (41, 100620), (49, 100692),

Gene: Fushigi_11 Start: 6909, Stop: 7427, Start Num: 15
Candidate Starts for Fushigi_11:
(Start: 15 @6909 has 25 MA's), (20, 6975), (41, 7272), (42, 7278), (51, 7380),

Gene: GageAP_12 Start: 7234, Stop: 7752, Start Num: 15
Candidate Starts for GageAP_12:
(Start: 15 @7234 has 25 MA's), (20, 7300), (41, 7597), (42, 7603), (51, 7705),

Gene: Greg_12 Start: 6818, Stop: 7336, Start Num: 15
Candidate Starts for Greg_12:
(Start: 15 @6818 has 25 MA's), (20, 6884), (41, 7181), (42, 7187), (51, 7289),

Gene: GrootJr_1 Start: 214, Stop: 828, Start Num: 13
Candidate Starts for GrootJr_1:
(1, 67), (11, 196), (Start: 13 @214 has 3 MA's), (14, 217), (17, 271), (33, 547), (36, 577), (46, 673), (51, 742), (52, 754),

Gene: Gyzlar_12 Start: 7448, Stop: 7966, Start Num: 15
Candidate Starts for Gyzlar_12:
(Start: 15 @7448 has 25 MA's), (20, 7514), (41, 7811), (42, 7817), (51, 7919),

Gene: Jada_198 Start: 99135, Stop: 99629, Start Num: 10

Candidate Starts for Jada_198:

(Start: 10 @99135 has 6 MA's), (31, 99408), (39, 99468), (41, 99492), (49, 99564),

Gene: Jerm2_11 Start: 6719, Stop: 7237, Start Num: 15

Candidate Starts for Jerm2_11:

(Start: 15 @6719 has 25 MA's), (20, 6785), (41, 7082), (42, 7088), (51, 7190),

Gene: JonJames_149 Start: 83143, Stop: 83742, Start Num: 8

Candidate Starts for JonJames_149:

(Start: 8 @83143 has 1 MA's), (12, 83161), (16, 83185), (24, 83338), (25, 83341), (49, 83647),

Gene: Kenmech_13 Start: 7591, Stop: 8109, Start Num: 15

Candidate Starts for Kenmech_13:

(Start: 15 @7591 has 25 MA's), (20, 7657), (41, 7954), (42, 7960), (51, 8062),

Gene: Marge_11 Start: 6955, Stop: 7473, Start Num: 15

Candidate Starts for Marge_11:

(Start: 15 @6955 has 25 MA's), (20, 7021), (41, 7318), (42, 7324), (51, 7426),

Gene: Minerva_52 Start: 41582, Stop: 42166, Start Num: 4

Candidate Starts for Minerva_52:

(Start: 4 @41582 has 6 MA's), (6, 41624), (22, 41795), (23, 41810), (39, 42035), (47, 42098),

Gene: Mkhuseli_10 Start: 6576, Stop: 7094, Start Num: 15

Candidate Starts for Mkhuseli_10:

(Start: 15 @6576 has 25 MA's), (20, 6642), (41, 6939), (42, 6945), (51, 7047),

Gene: Monet_12 Start: 7472, Stop: 7990, Start Num: 15

Candidate Starts for Monet_12:

(Start: 15 @7472 has 25 MA's), (20, 7538), (41, 7835), (42, 7841), (51, 7943),

Gene: Museum_12 Start: 6561, Stop: 7079, Start Num: 15

Candidate Starts for Museum_12:

(Start: 15 @6561 has 25 MA's), (20, 6627), (41, 6924), (42, 6930), (51, 7032),

Gene: NatB6_1 Start: 214, Stop: 828, Start Num: 13

Candidate Starts for NatB6_1:

(1, 67), (11, 196), (Start: 13 @214 has 3 MA's), (14, 217), (17, 271), (33, 547), (36, 577), (46, 673), (51, 742), (52, 754),

Gene: Niza_12 Start: 7581, Stop: 8099, Start Num: 15

Candidate Starts for Niza_12:

(Start: 15 @7581 has 25 MA's), (20, 7647), (41, 7944), (42, 7950), (51, 8052),

Gene: NovumRegina_1 Start: 214, Stop: 828, Start Num: 13

Candidate Starts for NovumRegina_1:

(1, 67), (11, 196), (Start: 13 @214 has 3 MA's), (14, 217), (17, 271), (33, 547), (36, 577), (46, 673), (51, 742), (52, 754),

Gene: Optimus_51 Start: 41167, Stop: 41751, Start Num: 4

Candidate Starts for Optimus_51:

(Start: 4 @41167 has 6 MA's), (6, 41209), (22, 41380), (23, 41395), (39, 41620), (47, 41683),

Gene: PattyP_12 Start: 6770, Stop: 7288, Start Num: 15

Candidate Starts for PattyP_12:

(Start: 15 @6770 has 25 MA's), (20, 6836), (41, 7133), (42, 7139), (51, 7241),

Gene: Pippin_12 Start: 6820, Stop: 7338, Start Num: 15

Candidate Starts for Pippin_12:

(Start: 15 @6820 has 25 MA's), (20, 6886), (41, 7183), (42, 7189), (51, 7291),

Gene: Riptide_247 Start: 118061, Stop: 118630, Start Num: 10

Candidate Starts for Riptide_247:

(Start: 10 @118061 has 6 MA's), (21, 118169), (30, 118358), (32, 118388), (34, 118394), (44, 118502), (45, 118508), (53, 118610), (55, 118622),

Gene: Rubeus_11 Start: 6578, Stop: 7096, Start Num: 15

Candidate Starts for Rubeus_11:

(Start: 15 @6578 has 25 MA's), (20, 6644), (41, 6941), (42, 6947), (51, 7049),

Gene: Rufus_11 Start: 6635, Stop: 7153, Start Num: 15

Candidate Starts for Rufus_11:

(Start: 15 @6635 has 25 MA's), (20, 6701), (41, 6998), (42, 7004), (51, 7106),

Gene: Rutherferd_12 Start: 7096, Stop: 7614, Start Num: 15

Candidate Starts for Rutherferd_12:

(Start: 15 @7096 has 25 MA's), (20, 7162), (41, 7459), (42, 7465), (51, 7567),

Gene: Sibs6_12 Start: 6771, Stop: 7289, Start Num: 15

Candidate Starts for Sibs6_12:

(Start: 15 @6771 has 25 MA's), (20, 6837), (41, 7134), (42, 7140), (51, 7242),

Gene: SpikeBT_12 Start: 7407, Stop: 7925, Start Num: 15

Candidate Starts for SpikeBT_12:

(Start: 15 @7407 has 25 MA's), (20, 7473), (41, 7770), (42, 7776), (51, 7878),

Gene: Treddle_12 Start: 7473, Stop: 7991, Start Num: 15

Candidate Starts for Treddle_12:

(Start: 15 @7473 has 25 MA's), (20, 7539), (41, 7836), (42, 7842), (51, 7944),

Gene: TunaTartare_203 Start: 105397, Stop: 105966, Start Num: 10

Candidate Starts for TunaTartare_203:

(Start: 10 @105397 has 6 MA's), (29, 105688), (30, 105694), (32, 105724), (35, 105748), (43, 105829), (44, 105838), (55, 105958),

Gene: TunaTartare_133 Start: 80340, Stop: 80837, Start Num: 10

Candidate Starts for TunaTartare_133:

(Start: 10 @80340 has 6 MA's), (26, 80529), (32, 80631), (37, 80664), (44, 80730), (54, 80832),

Gene: Wanda_52 Start: 40059, Stop: 40643, Start Num: 4

Candidate Starts for Wanda_52:

(Start: 4 @40059 has 6 MA's), (6, 40101), (22, 40272), (23, 40287), (39, 40512), (47, 40575),

Gene: Yvonnetastic_146 Start: 79771, Stop: 80427, Start Num: 2

Candidate Starts for Yvonnetastic_146:

(Start: 2 @79771 has 1 MA's), (3, 79774), (Start: 4 @79777 has 6 MA's), (18, 79924), (19, 79927), (27, 80071), (40, 80257), (42, 80266), (48, 80323), (50, 80365),