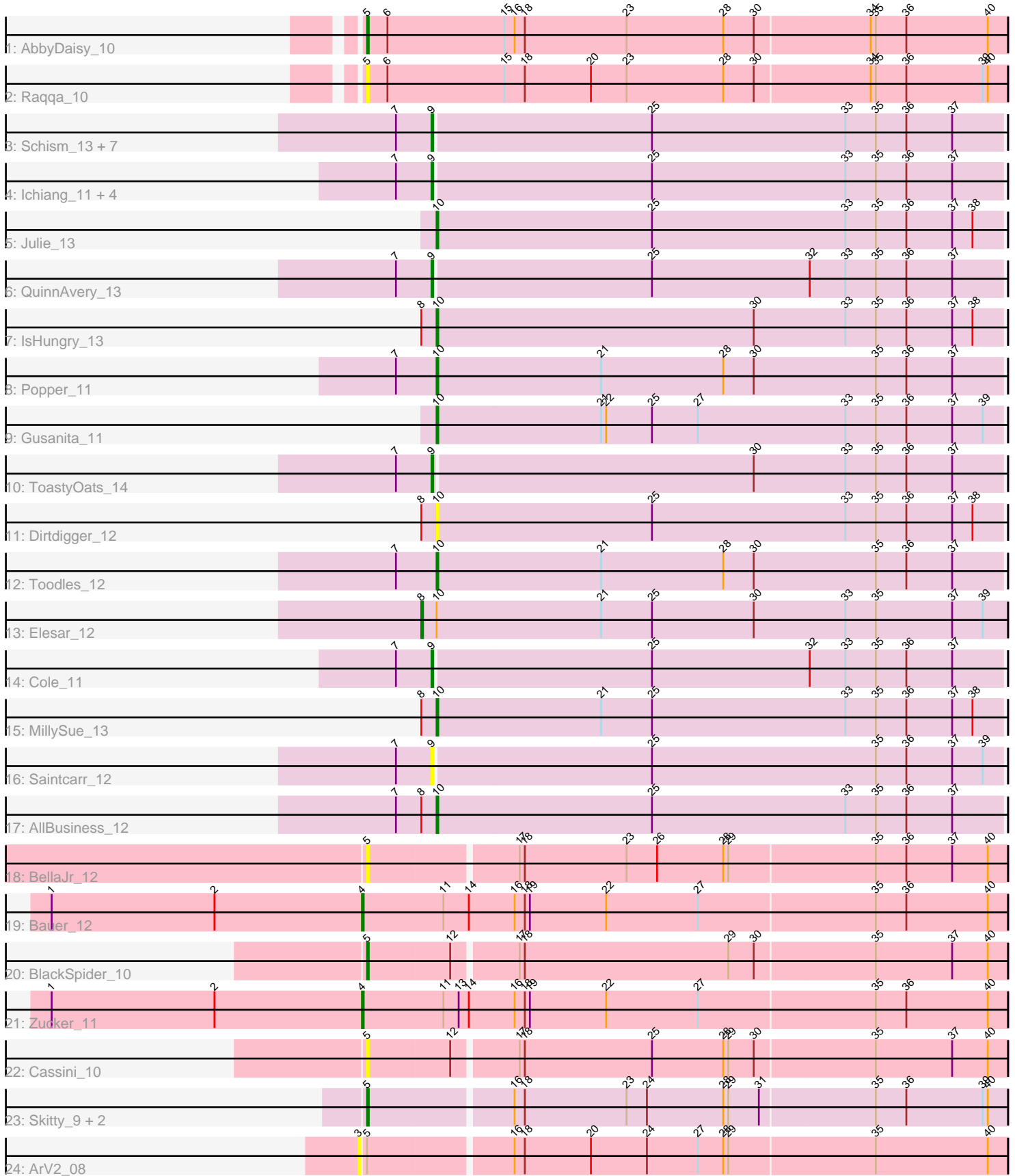


# Pham 311807



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 311807 Report

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

Pham number 311807 has 37 members, 9 are drafts.

Phages represented in each track:

- Track 1 : AbbyDaisy\_10
- Track 2 : Raqqa\_10
- Track 3 : Schism\_13, BigSherm\_13, Zaheer\_13, GoodLuckBabe\_13, Nandita\_13, Guinevere\_13, Lenoxika\_13, Kihatsu\_14
- Track 4 : Ichiang\_11, Halloweekend\_11, Yonex\_13, Ryan\_13, Donatella\_12
- Track 5 : Julie\_13
- Track 6 : QuinnAvery\_13
- Track 7 : IsHungry\_13
- Track 8 : Popper\_11
- Track 9 : Gusanita\_11
- Track 10 : ToastyOats\_14
- Track 11 : Dirdigger\_12
- Track 12 : Toodles\_12
- Track 13 : Elesar\_12
- Track 14 : Cole\_11
- Track 15 : MillySue\_13
- Track 16 : Saintcarr\_12
- Track 17 : AllBusiness\_12
- Track 18 : BellaJr\_12
- Track 19 : Bauer\_12
- Track 20 : BlackSpider\_10
- Track 21 : Zucker\_11
- Track 22 : Cassini\_10
- Track 23 : Skitty\_9, Merpity\_10, MrSmee\_9
- Track 24 : ArV2\_08

### ***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 14 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BigSherm\_13, Cole\_11, Donatella\_12, GoodLuckBabe\_13, Guinevere\_13, Halloweekend\_11, Ichiang\_11, Kihatsu\_14, Lenoxika\_13, Nandita\_13,

QuinnAvery\_13, Ryan\_13, Saintcarr\_12, Schism\_13, ToastyOats\_14, Yonex\_13, Zaheer\_13,

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

- 

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

• AbbyDaisy\_10, AllBusiness\_12, ArV2\_08, Bauer\_12, BellaJr\_12, BlackSpider\_10, Cassini\_10, Dirdigger\_12, Elesar\_12, Gusanita\_11, IsHungry\_13, Julie\_13, Merpity\_10, MillySue\_13, MrSmee\_9, Popper\_11, Raqqa\_10, Skitty\_9, Toodles\_12, Zucker\_11,

### Summary by start number:

Start 3:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArV2\_08 (singleton),

Start 4:

- Found in 2 of 37 ( 5.4% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bauer\_12 (FN), Zucker\_11 (FN),

Start 5:

- Found in 9 of 37 ( 24.3% ) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 88.9% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_10 (AY), BellaJr\_12 (FN), BlackSpider\_10 (FN), Cassini\_10 (FN), Merpity\_10 (FQ1), MrSmee\_9 (FQ1), Raqqa\_10 (AY), Skitty\_9 (FQ1),

Start 8:

- Found in 5 of 37 ( 13.5% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Elesar\_12 (FF),

Start 9:

- Found in 17 of 37 ( 45.9% ) of genes in pham
- Manual Annotations of this start: 14 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigSherm\_13 (FF), Cole\_11 (FF), Donatella\_12 (FF), GoodLuckBabe\_13 (FF), Guinevere\_13 (FF), Halloweekend\_11 (FF), Ichiang\_11 (FF), Kihatsu\_14 (FF), Lenoxika\_13 (FF), Nandita\_13 (FF), QuinnAvery\_13 (FF), Ryan\_13 (FF), Saintcarr\_12 (FF), Schism\_13 (FF), ToastyOats\_14 (FF), Yonex\_13 (FF), Zaheer\_13 (FF),

Start 10:

- Found in 9 of 37 ( 24.3% ) of genes in pham
- Manual Annotations of this start: 7 of 28

- Called 88.9% of time when present
- Phage (with cluster) where this start called: AllBusiness\_12 (FF), Dirtdigger\_12 (FF), Gusanita\_11 (FF), IsHungry\_13 (FF), Julie\_13 (FF), MillySue\_13 (FF), Popper\_11 (FF), Toodles\_12 (FF),

### **Summary by clusters:**

There are 5 clusters represented in this pham: AY, singleton, FQ1, FN, FF,

Info for manual annotations of cluster AY:

- Start number 5 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FF:

- Start number 8 was manually annotated 1 time for cluster FF.
- Start number 9 was manually annotated 14 times for cluster FF.
- Start number 10 was manually annotated 7 times for cluster FF.

Info for manual annotations of cluster FN:

- Start number 4 was manually annotated 2 times for cluster FN.
- Start number 5 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FQ1:

- Start number 5 was manually annotated 2 times for cluster FQ1.

### **Gene Information:**

Gene: AbbyDaisy\_10 Start: 6755, Stop: 7129, Start Num: 5

Candidate Starts for AbbyDaisy\_10:

(Start: 5 @6755 has 4 MA's), (6, 6767), (15, 6836), (16, 6842), (18, 6848), (23, 6908), (28, 6965), (30, 6983), (34, 7049), (35, 7052), (36, 7070), (40, 7118),

Gene: AllBusiness\_12 Start: 8235, Stop: 8567, Start Num: 10

Candidate Starts for AllBusiness\_12:

(7, 8211), (Start: 8 @8226 has 1 MA's), (Start: 10 @8235 has 7 MA's), (25, 8361), (33, 8475), (35, 8493), (36, 8511), (37, 8538),

Gene: ArV2\_08 Start: 6286, Stop: 6657, Start Num: 3

Candidate Starts for ArV2\_08:

(3, 6286), (Start: 5 @6289 has 4 MA's), (16, 6370), (18, 6376), (20, 6415), (24, 6448), (27, 6478), (28, 6493), (29, 6496), (35, 6580), (40, 6646),

Gene: Bauer\_12 Start: 8128, Stop: 8505, Start Num: 4

Candidate Starts for Bauer\_12:

(1, 7945), (2, 8041), (Start: 4 @8128 has 2 MA's), (11, 8176), (14, 8191), (16, 8218), (18, 8224), (19, 8227), (22, 8272), (27, 8326), (35, 8428), (36, 8446), (40, 8494),

Gene: BellaJr\_12 Start: 8172, Stop: 8540, Start Num: 5

Candidate Starts for BellaJr\_12:

(Start: 5 @8172 has 4 MA's), (17, 8256), (18, 8259), (23, 8319), (26, 8337), (28, 8376), (29, 8379), (35, 8463), (36, 8481), (37, 8508), (40, 8529),

Gene: BigSherm\_13 Start: 8181, Stop: 8513, Start Num: 9  
Candidate Starts for BigSherm\_13:  
(7, 8160), (Start: 9 @8181 has 14 MA's), (25, 8307), (33, 8421), (35, 8439), (36, 8457), (37, 8484),

Gene: BlackSpider\_10 Start: 7167, Stop: 7535, Start Num: 5  
Candidate Starts for BlackSpider\_10:  
(Start: 5 @7167 has 4 MA's), (12, 7215), (17, 7251), (18, 7254), (29, 7374), (30, 7389), (35, 7458), (37, 7503), (40, 7524),

Gene: Cassini\_10 Start: 7136, Stop: 7504, Start Num: 5  
Candidate Starts for Cassini\_10:  
(Start: 5 @7136 has 4 MA's), (12, 7184), (17, 7220), (18, 7223), (25, 7298), (28, 7340), (29, 7343), (30, 7358), (35, 7427), (37, 7472), (40, 7493),

Gene: Cole\_11 Start: 7840, Stop: 8172, Start Num: 9  
Candidate Starts for Cole\_11:  
(7, 7819), (Start: 9 @7840 has 14 MA's), (25, 7966), (32, 8059), (33, 8080), (35, 8098), (36, 8116), (37, 8143),

Gene: Dirtdigger\_12 Start: 8046, Stop: 8378, Start Num: 10  
Candidate Starts for Dirtdigger\_12:  
(Start: 8 @8037 has 1 MA's), (Start: 10 @8046 has 7 MA's), (25, 8172), (33, 8286), (35, 8304), (36, 8322), (37, 8349), (38, 8361),

Gene: Donatella\_12 Start: 8307, Stop: 8639, Start Num: 9  
Candidate Starts for Donatella\_12:  
(7, 8286), (Start: 9 @8307 has 14 MA's), (25, 8433), (33, 8547), (35, 8565), (36, 8583), (37, 8610),

Gene: Elesar\_12 Start: 8224, Stop: 8568, Start Num: 8  
Candidate Starts for Elesar\_12:  
(Start: 8 @8224 has 1 MA's), (Start: 10 @8233 has 7 MA's), (21, 8329), (25, 8359), (30, 8419), (33, 8473), (35, 8491), (37, 8536), (39, 8554),

Gene: GoodLuckBabe\_13 Start: 8135, Stop: 8467, Start Num: 9  
Candidate Starts for GoodLuckBabe\_13:  
(7, 8114), (Start: 9 @8135 has 14 MA's), (25, 8261), (33, 8375), (35, 8393), (36, 8411), (37, 8438),

Gene: Guinevere\_13 Start: 8166, Stop: 8498, Start Num: 9  
Candidate Starts for Guinevere\_13:  
(7, 8145), (Start: 9 @8166 has 14 MA's), (25, 8292), (33, 8406), (35, 8424), (36, 8442), (37, 8469),

Gene: Gusanita\_11 Start: 8057, Stop: 8389, Start Num: 10  
Candidate Starts for Gusanita\_11:  
(Start: 10 @8057 has 7 MA's), (21, 8153), (22, 8156), (25, 8183), (27, 8210), (33, 8297), (35, 8315), (36, 8333), (37, 8360), (39, 8378),

Gene: Halloweekend\_11 Start: 7807, Stop: 8139, Start Num: 9  
Candidate Starts for Halloweekend\_11:  
(7, 7786), (Start: 9 @7807 has 14 MA's), (25, 7933), (33, 8047), (35, 8065), (36, 8083), (37, 8110),

Gene: Ichiang\_11 Start: 7822, Stop: 8154, Start Num: 9  
Candidate Starts for Ichiang\_11:  
(7, 7801), (Start: 9 @7822 has 14 MA's), (25, 7948), (33, 8062), (35, 8080), (36, 8098), (37, 8125),

Gene: IsHungry\_13 Start: 8131, Stop: 8463, Start Num: 10

Candidate Starts for IsHungry\_13:

(Start: 8 @8122 has 1 MA's), (Start: 10 @8131 has 7 MA's), (30, 8317), (33, 8371), (35, 8389), (36, 8407), (37, 8434), (38, 8446),

Gene: Julie\_13 Start: 8394, Stop: 8726, Start Num: 10

Candidate Starts for Julie\_13:

(Start: 10 @8394 has 7 MA's), (25, 8520), (33, 8634), (35, 8652), (36, 8670), (37, 8697), (38, 8709),

Gene: Kihatsu\_14 Start: 8488, Stop: 8820, Start Num: 9

Candidate Starts for Kihatsu\_14:

(7, 8467), (Start: 9 @8488 has 14 MA's), (25, 8614), (33, 8728), (35, 8746), (36, 8764), (37, 8791),

Gene: Lenoxika\_13 Start: 8168, Stop: 8500, Start Num: 9

Candidate Starts for Lenoxika\_13:

(7, 8147), (Start: 9 @8168 has 14 MA's), (25, 8294), (33, 8408), (35, 8426), (36, 8444), (37, 8471),

Gene: Merpity\_10 Start: 5923, Stop: 6291, Start Num: 5

Candidate Starts for Merpity\_10:

(Start: 5 @5923 has 4 MA's), (16, 6004), (18, 6010), (23, 6070), (24, 6082), (28, 6127), (29, 6130), (31, 6148), (35, 6214), (36, 6232), (39, 6277), (40, 6280),

Gene: MillySue\_13 Start: 8180, Stop: 8512, Start Num: 10

Candidate Starts for MillySue\_13:

(Start: 8 @8171 has 1 MA's), (Start: 10 @8180 has 7 MA's), (21, 8276), (25, 8306), (33, 8420), (35, 8438), (36, 8456), (37, 8483), (38, 8495),

Gene: MrSmee\_9 Start: 5923, Stop: 6291, Start Num: 5

Candidate Starts for MrSmee\_9:

(Start: 5 @5923 has 4 MA's), (16, 6004), (18, 6010), (23, 6070), (24, 6082), (28, 6127), (29, 6130), (31, 6148), (35, 6214), (36, 6232), (39, 6277), (40, 6280),

Gene: Nandita\_13 Start: 8166, Stop: 8498, Start Num: 9

Candidate Starts for Nandita\_13:

(7, 8145), (Start: 9 @8166 has 14 MA's), (25, 8292), (33, 8406), (35, 8424), (36, 8442), (37, 8469),

Gene: Popper\_11 Start: 7697, Stop: 8029, Start Num: 10

Candidate Starts for Popper\_11:

(7, 7673), (Start: 10 @7697 has 7 MA's), (21, 7793), (28, 7865), (30, 7883), (35, 7955), (36, 7973), (37, 8000),

Gene: QuinnAvery\_13 Start: 8181, Stop: 8513, Start Num: 9

Candidate Starts for QuinnAvery\_13:

(7, 8160), (Start: 9 @8181 has 14 MA's), (25, 8307), (32, 8400), (33, 8421), (35, 8439), (36, 8457), (37, 8484),

Gene: Raqqa\_10 Start: 7063, Stop: 7437, Start Num: 5

Candidate Starts for Raqqa\_10:

(Start: 5 @7063 has 4 MA's), (6, 7075), (15, 7144), (18, 7156), (20, 7195), (23, 7216), (28, 7273), (30, 7291), (34, 7357), (35, 7360), (36, 7378), (39, 7423), (40, 7426),

Gene: Ryan\_13 Start: 8312, Stop: 8644, Start Num: 9

Candidate Starts for Ryan\_13:

(7, 8291), (Start: 9 @8312 has 14 MA's), (25, 8438), (33, 8552), (35, 8570), (36, 8588), (37, 8615),

Gene: Saintcarr\_12 Start: 8186, Stop: 8518, Start Num: 9

Candidate Starts for Saintcarr\_12:

(7, 8165), (Start: 9 @8186 has 14 MA's), (25, 8312), (35, 8444), (36, 8462), (37, 8489), (39, 8507),

Gene: Schism\_13 Start: 8166, Stop: 8498, Start Num: 9

Candidate Starts for Schism\_13:

(7, 8145), (Start: 9 @8166 has 14 MA's), (25, 8292), (33, 8406), (35, 8424), (36, 8442), (37, 8469),

Gene: Skitty\_9 Start: 5923, Stop: 6291, Start Num: 5

Candidate Starts for Skitty\_9:

(Start: 5 @5923 has 4 MA's), (16, 6004), (18, 6010), (23, 6070), (24, 6082), (28, 6127), (29, 6130), (31, 6148), (35, 6214), (36, 6232), (39, 6277), (40, 6280),

Gene: ToastyOats\_14 Start: 8535, Stop: 8867, Start Num: 9

Candidate Starts for ToastyOats\_14:

(7, 8514), (Start: 9 @8535 has 14 MA's), (30, 8721), (33, 8775), (35, 8793), (36, 8811), (37, 8838),

Gene: Toodles\_12 Start: 8267, Stop: 8599, Start Num: 10

Candidate Starts for Toodles\_12:

(7, 8243), (Start: 10 @8267 has 7 MA's), (21, 8363), (28, 8435), (30, 8453), (35, 8525), (36, 8543), (37, 8570),

Gene: Yonex\_13 Start: 8312, Stop: 8644, Start Num: 9

Candidate Starts for Yonex\_13:

(7, 8291), (Start: 9 @8312 has 14 MA's), (25, 8438), (33, 8552), (35, 8570), (36, 8588), (37, 8615),

Gene: Zaheer\_13 Start: 8401, Stop: 8733, Start Num: 9

Candidate Starts for Zaheer\_13:

(7, 8380), (Start: 9 @8401 has 14 MA's), (25, 8527), (33, 8641), (35, 8659), (36, 8677), (37, 8704),

Gene: Zucker\_11 Start: 7441, Stop: 7818, Start Num: 4

Candidate Starts for Zucker\_11:

(1, 7258), (2, 7354), (Start: 4 @7441 has 2 MA's), (11, 7489), (13, 7498), (14, 7504), (16, 7531), (18, 7537), (19, 7540), (22, 7585), (27, 7639), (35, 7741), (36, 7759), (40, 7807),