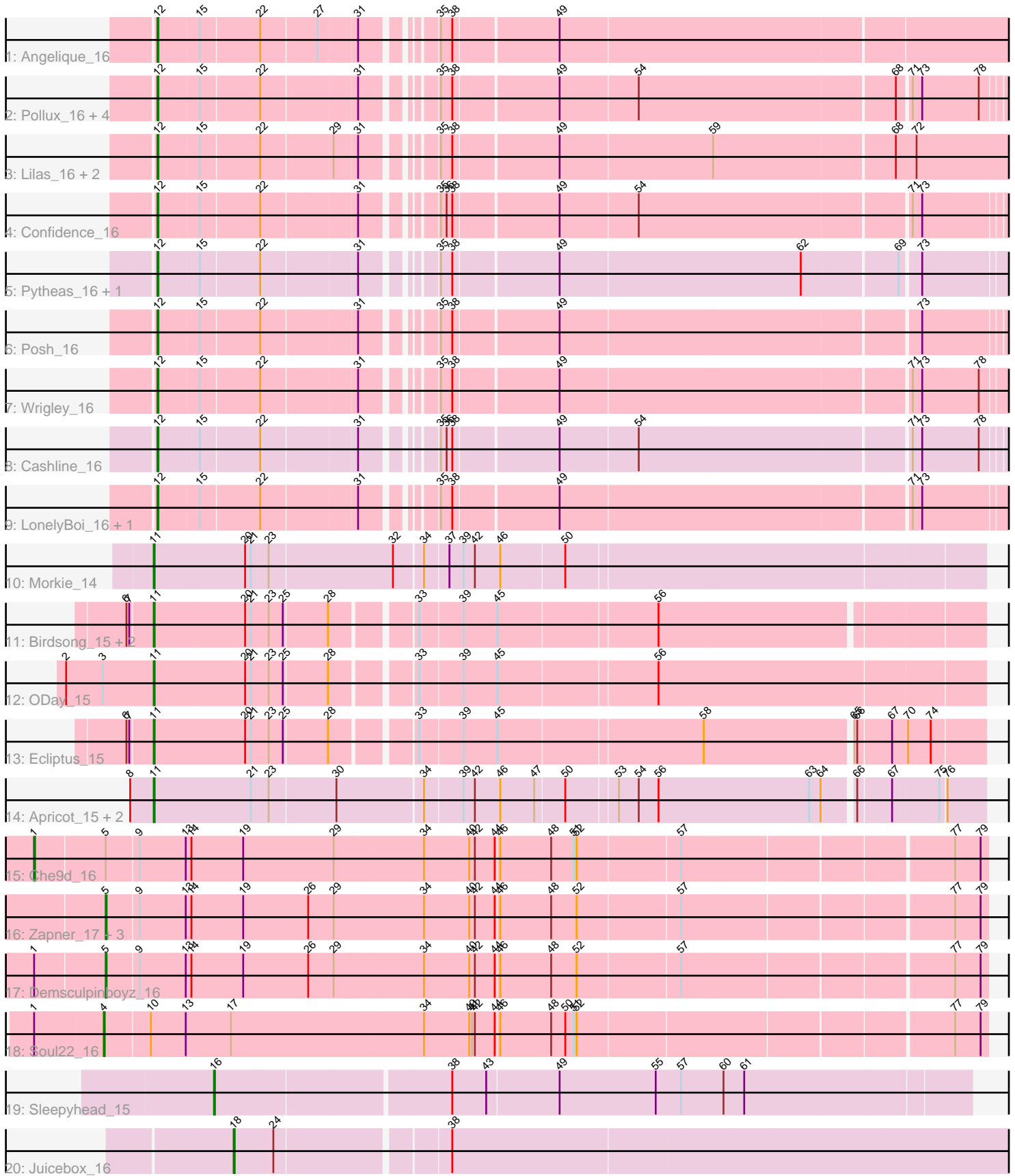


Pham 308957



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 308957 Report

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

Pham number 308957 has 35 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Angelique\_16
- Track 2 : Pollux\_16, BritBrat\_16, Floral\_16, Marteena\_16, EMSquaredA\_16
- Track 3 : Lilas\_16, EnalisNailo\_16, Bradissa\_16
- Track 4 : Confidence\_16
- Track 5 : Pytheas\_16, Jablanski\_16
- Track 6 : Posh\_16
- Track 7 : Wrigley\_16
- Track 8 : Cashline\_16
- Track 9 : LonelyBoi\_16, BeeGee\_16
- Track 10 : Morkie\_14
- Track 11 : Birdsong\_15, BearBQ\_15, MortyNRick\_15
- Track 12 : ODay\_15
- Track 13 : Ecliptus\_15
- Track 14 : Apricot\_15, Crater\_15, Kuwabara\_15
- Track 15 : Che9d\_16
- Track 16 : Zapner\_17, Jabbawokkie\_17, Yoshi\_16, Avani\_16
- Track 17 : Demsculpinboyz\_16
- Track 18 : Soul22\_16
- Track 19 : Sleepyhead\_15
- Track 20 : Juicebox\_16

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

The start number called the most often in the published annotations is 12, it was called in 17 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angelique\_16, BeeGee\_16, Bradissa\_16, BritBrat\_16, Cashline\_16, Confidence\_16, EMSquaredA\_16, EnalisNailo\_16, Floral\_16, Jablanski\_16, Lilas\_16, LonelyBoi\_16, Marteena\_16, Pollux\_16, Posh\_16, Pytheas\_16, Wrigley\_16,

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

-

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

- Apricot\_15, Avani\_16, BearBQ\_15, Birdsong\_15, Che9d\_16, Crater\_15, Demsculpinboyz\_16, Ecliptus\_15, Jabbawokkie\_17, Juicebox\_16, Kuwabara\_15, Morkie\_14, MortyNRick\_15, ODay\_15, Sleepyhead\_15, Soul22\_16, Yoshi\_16, Zapner\_17,

### Summary by start number:

Start 1:

- Found in 3 of 35 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Che9d\_16 (F2),

Start 4:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Soul22\_16 (F2),

Start 5:

- Found in 6 of 35 ( 17.1% ) of genes in pham
- Manual Annotations of this start: 5 of 35
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Avani\_16 (F2), Demsculpinboyz\_16 (F2), Jabbawokkie\_17 (F2), Yoshi\_16 (F2), Zapner\_17 (F2),

Start 11:

- Found in 9 of 35 ( 25.7% ) of genes in pham
- Manual Annotations of this start: 9 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot\_15 (DN3), BearBQ\_15 (DN), Birdsong\_15 (DN), Crater\_15 (DN3), Ecliptus\_15 (DN), Kuwabara\_15 (DN4), Morkie\_14 (DH), MortyNRick\_15 (DN), ODay\_15 (DN),

Start 12:

- Found in 17 of 35 ( 48.6% ) of genes in pham
- Manual Annotations of this start: 17 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique\_16 (CY1), BeeGee\_16 (CY5), Bradissa\_16 (CY1), BritBrat\_16 (CY2), Cashline\_16 (CY6), Confidence\_16 (CY1), EMSquaredA\_16 (CY1), EnalisNailo\_16 (CY1), Floral\_16 (CY1), Jablanski\_16 (CY3), Lilas\_16 (CY1), LonelyBoi\_16 (CY7), Marteena\_16 (CY1), Pollux\_16 (CY1), Posh\_16 (CY4), Pytheas\_16 (CY3), Wrigley\_16 (CY4),

Start 16:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead\_15 (singleton),

Start 18:

- Found in 1 of 35 ( 2.9% ) of genes in pham

- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juicebox\_16 (singleton),

### **Summary by clusters:**

There are 13 clusters represented in this pham: CY3, DN, CY1, CY7, DH, CY5, CY4, F2, DN4, DN3, singleton, CY2, CY6,

Info for manual annotations of cluster CY1:

- Start number 12 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 12 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 12 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 12 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 12 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 12 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 12 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DH:

- Start number 11 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

- Start number 11 was manually annotated 5 times for cluster DN.

Info for manual annotations of cluster DN3:

- Start number 11 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 11 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster F2:

- Start number 1 was manually annotated 1 time for cluster F2.
- Start number 4 was manually annotated 1 time for cluster F2.
- Start number 5 was manually annotated 5 times for cluster F2.

### **Gene Information:**

Gene: Angelique\_16 Start: 9687, Stop: 10513, Start Num: 12

Candidate Starts for Angelique\_16:

(Start: 12 @9687 has 17 MA's), (15, 9726), (22, 9786), (27, 9843), (31, 9882), (35, 9939), (38, 9951), (49, 10056),

Gene: Apricot\_15 Start: 8548, Stop: 9389, Start Num: 11

Candidate Starts for Apricot\_15:

(8, 8527), (Start: 11 @8548 has 9 MA's), (21, 8650), (23, 8668), (30, 8737), (34, 8824), (39, 8863), (42, 8875), (46, 8902), (47, 8938), (50, 8968), (53, 9019), (54, 9040), (56, 9061), (63, 9220), (64, 9232), (66, 9262), (67, 9295), (75, 9343), (76, 9349),

Gene: Avani\_16 Start: 8371, Stop: 9272, Start Num: 5

Candidate Starts for Avani\_16:

(Start: 5 @8371 has 5 MA's), (9, 8404), (13, 8452), (14, 8458), (19, 8512), (26, 8581), (29, 8608), (34, 8701), (40, 8749), (42, 8755), (44, 8776), (46, 8779), (48, 8833), (52, 8860), (57, 8965), (77, 9238), (79, 9265),

Gene: BearBQ\_15 Start: 8547, Stop: 9373, Start Num: 11

Candidate Starts for BearBQ\_15:

(6, 8523), (7, 8526), (Start: 11 @8547 has 9 MA's), (20, 8643), (21, 8649), (23, 8667), (25, 8682), (28, 8727), (33, 8805), (39, 8847), (45, 8883), (56, 9045),

Gene: BeeGee\_16 Start: 9683, Stop: 10503, Start Num: 12

Candidate Starts for BeeGee\_16:

(Start: 12 @9683 has 17 MA's), (15, 9722), (22, 9782), (31, 9878), (35, 9935), (38, 9947), (49, 10052), (71, 10409), (73, 10418),

Gene: Birdsong\_15 Start: 8547, Stop: 9373, Start Num: 11

Candidate Starts for Birdsong\_15:

(6, 8523), (7, 8526), (Start: 11 @8547 has 9 MA's), (20, 8643), (21, 8649), (23, 8667), (25, 8682), (28, 8727), (33, 8805), (39, 8847), (45, 8883), (56, 9045),

Gene: Bradissa\_16 Start: 9687, Stop: 10516, Start Num: 12

Candidate Starts for Bradissa\_16:

(Start: 12 @9687 has 17 MA's), (15, 9726), (22, 9786), (29, 9858), (31, 9882), (35, 9939), (38, 9951), (49, 10056), (59, 10215), (68, 10401), (72, 10422),

Gene: BritBrat\_16 Start: 9689, Stop: 10503, Start Num: 12

Candidate Starts for BritBrat\_16:

(Start: 12 @9689 has 17 MA's), (15, 9728), (22, 9788), (31, 9884), (35, 9941), (38, 9953), (49, 10058), (54, 10139), (68, 10403), (71, 10415), (73, 10424), (78, 10481),

Gene: Cashline\_16 Start: 9543, Stop: 10357, Start Num: 12

Candidate Starts for Cashline\_16:

(Start: 12 @9543 has 17 MA's), (15, 9582), (22, 9642), (31, 9738), (35, 9795), (36, 9801), (38, 9807), (49, 9912), (54, 9993), (71, 10269), (73, 10278), (78, 10335),

Gene: Che9d\_16 Start: 8307, Stop: 9280, Start Num: 1

Candidate Starts for Che9d\_16:

(Start: 1 @8307 has 1 MA's), (Start: 5 @8379 has 5 MA's), (9, 8412), (13, 8460), (14, 8466), (19, 8520), (29, 8616), (34, 8709), (40, 8757), (42, 8763), (44, 8784), (46, 8787), (48, 8841), (51, 8865), (52, 8868), (57, 8973), (77, 9246), (79, 9273),

Gene: Confidence\_16 Start: 9683, Stop: 10497, Start Num: 12

Candidate Starts for Confidence\_16:

(Start: 12 @9683 has 17 MA's), (15, 9722), (22, 9782), (31, 9878), (35, 9935), (36, 9941), (38, 9947), (49, 10052), (54, 10133), (71, 10409), (73, 10418),

Gene: Crater\_15 Start: 8548, Stop: 9389, Start Num: 11

Candidate Starts for Crater\_15:

(8, 8527), (Start: 11 @8548 has 9 MA's), (21, 8650), (23, 8668), (30, 8737), (34, 8824), (39, 8863), (42, 8875), (46, 8902), (47, 8938), (50, 8968), (53, 9019), (54, 9040), (56, 9061), (63, 9220), (64, 9232), (66, 9262), (67, 9295), (75, 9343), (76, 9349),

Gene: Demsculpinboyz\_16 Start: 8370, Stop: 9271, Start Num: 5

Candidate Starts for Demsculpinboyz\_16:

(Start: 1 @8298 has 1 MA's), (Start: 5 @8370 has 5 MA's), (9, 8403), (13, 8451), (14, 8457), (19, 8511), (26, 8580), (29, 8607), (34, 8700), (40, 8748), (42, 8754), (44, 8775), (46, 8778), (48, 8832), (52, 8859), (57, 8964), (77, 9237), (79, 9264),

Gene: EMSquaredA\_16 Start: 9689, Stop: 10503, Start Num: 12

Candidate Starts for EMSquaredA\_16:

(Start: 12 @9689 has 17 MA's), (15, 9728), (22, 9788), (31, 9884), (35, 9941), (38, 9953), (49, 10058), (54, 10139), (68, 10403), (71, 10415), (73, 10424), (78, 10481),

Gene: Ecliptus\_15 Start: 8276, Stop: 9102, Start Num: 11

Candidate Starts for Ecliptus\_15:

(6, 8252), (7, 8255), (Start: 11 @8276 has 9 MA's), (20, 8372), (21, 8378), (23, 8396), (25, 8411), (28, 8456), (33, 8534), (39, 8576), (45, 8612), (58, 8822), (65, 8972), (66, 8975), (67, 9008), (70, 9023), (74, 9047),

Gene: EnalisNailo\_16 Start: 9689, Stop: 10518, Start Num: 12

Candidate Starts for EnalisNailo\_16:

(Start: 12 @9689 has 17 MA's), (15, 9728), (22, 9788), (29, 9860), (31, 9884), (35, 9941), (38, 9953), (49, 10058), (59, 10217), (68, 10403), (72, 10424),

Gene: Floral\_16 Start: 9689, Stop: 10503, Start Num: 12

Candidate Starts for Floral\_16:

(Start: 12 @9689 has 17 MA's), (15, 9728), (22, 9788), (31, 9884), (35, 9941), (38, 9953), (49, 10058), (54, 10139), (68, 10403), (71, 10415), (73, 10424), (78, 10481),

Gene: Jabbawokkie\_17 Start: 8894, Stop: 9795, Start Num: 5

Candidate Starts for Jabbawokkie\_17:

(Start: 5 @8894 has 5 MA's), (9, 8927), (13, 8975), (14, 8981), (19, 9035), (26, 9104), (29, 9131), (34, 9224), (40, 9272), (42, 9278), (44, 9299), (46, 9302), (48, 9356), (52, 9383), (57, 9488), (77, 9761), (79, 9788),

Gene: Jablanski\_16 Start: 9536, Stop: 10353, Start Num: 12

Candidate Starts for Jablanski\_16:

(Start: 12 @9536 has 17 MA's), (15, 9575), (22, 9635), (31, 9731), (35, 9788), (38, 9800), (49, 9905), (62, 10157), (69, 10253), (73, 10271),

Gene: Juicebox\_16 Start: 10222, Stop: 11009, Start Num: 18

Candidate Starts for Juicebox\_16:

(Start: 18 @10222 has 1 MA's), (24, 10264), (38, 10432),

Gene: Kuwabara\_15 Start: 8548, Stop: 9389, Start Num: 11

Candidate Starts for Kuwabara\_15:

(8, 8527), (Start: 11 @8548 has 9 MA's), (21, 8650), (23, 8668), (30, 8737), (34, 8824), (39, 8863), (42, 8875), (46, 8902), (47, 8938), (50, 8968), (53, 9019), (54, 9040), (56, 9061), (63, 9220), (64, 9232), (66, 9262), (67, 9295), (75, 9343), (76, 9349),

Gene: Lilas\_16 Start: 9689, Stop: 10518, Start Num: 12

Candidate Starts for Lilas\_16:

(Start: 12 @9689 has 17 MA's), (15, 9728), (22, 9788), (29, 9860), (31, 9884), (35, 9941), (38, 9953), (49, 10058), (59, 10217), (68, 10403), (72, 10424),

Gene: LonelyBoi\_16 Start: 9536, Stop: 10353, Start Num: 12

Candidate Starts for LonelyBoi\_16:

(Start: 12 @9536 has 17 MA's), (15, 9575), (22, 9635), (31, 9731), (35, 9788), (38, 9800), (49, 9905), (71, 10262), (73, 10271),

Gene: Marteena\_16 Start: 9689, Stop: 10503, Start Num: 12

Candidate Starts for Marteena\_16:

(Start: 12 @9689 has 17 MA's), (15, 9728), (22, 9788), (31, 9884), (35, 9941), (38, 9953), (49, 10058), (54, 10139), (68, 10403), (71, 10415), (73, 10424), (78, 10481),

Gene: Morkie\_14 Start: 7759, Stop: 8609, Start Num: 11

Candidate Starts for Morkie\_14:

(Start: 11 @7759 has 9 MA's), (20, 7855), (21, 7861), (23, 7879), (32, 8008), (34, 8035), (37, 8059), (39, 8074), (42, 8086), (46, 8113), (50, 8179),

Gene: MortyNRick\_15 Start: 8547, Stop: 9373, Start Num: 11

Candidate Starts for MortyNRick\_15:

(6, 8523), (7, 8526), (Start: 11 @8547 has 9 MA's), (20, 8643), (21, 8649), (23, 8667), (25, 8682), (28, 8727), (33, 8805), (39, 8847), (45, 8883), (56, 9045),

Gene: ODay\_15 Start: 8273, Stop: 9108, Start Num: 11

Candidate Starts for ODay\_15:

(2, 8183), (3, 8222), (Start: 11 @8273 has 9 MA's), (20, 8369), (21, 8375), (23, 8393), (25, 8408), (28, 8453), (33, 8531), (39, 8573), (45, 8609), (56, 8771),

Gene: Pollux\_16 Start: 9689, Stop: 10503, Start Num: 12

Candidate Starts for Pollux\_16:

(Start: 12 @9689 has 17 MA's), (15, 9728), (22, 9788), (31, 9884), (35, 9941), (38, 9953), (49, 10058), (54, 10139), (68, 10403), (71, 10415), (73, 10424), (78, 10481),

Gene: Posh\_16 Start: 9689, Stop: 10503, Start Num: 12

Candidate Starts for Posh\_16:

(Start: 12 @9689 has 17 MA's), (15, 9728), (22, 9788), (31, 9884), (35, 9941), (38, 9953), (49, 10058), (73, 10424),

Gene: Pytheas\_16 Start: 9536, Stop: 10353, Start Num: 12

Candidate Starts for Pytheas\_16:

(Start: 12 @9536 has 17 MA's), (15, 9575), (22, 9635), (31, 9731), (35, 9788), (38, 9800), (49, 9905), (62, 10157), (69, 10253), (73, 10271),

Gene: Sleepyhead\_15 Start: 9319, Stop: 10097, Start Num: 16

Candidate Starts for Sleepyhead\_15:

(Start: 16 @9319 has 1 MA's), (38, 9559), (43, 9595), (49, 9670), (55, 9772), (57, 9799), (60, 9844), (61, 9865),

Gene: Soul22\_16 Start: 8369, Stop: 9270, Start Num: 4

Candidate Starts for Soul22\_16:

(Start: 1 @8297 has 1 MA's), (Start: 4 @8369 has 1 MA's), (10, 8414), (13, 8450), (17, 8498), (34, 8699), (40, 8747), (41, 8750), (42, 8753), (44, 8774), (46, 8777), (48, 8831), (50, 8846), (51, 8855), (52, 8858), (77, 9236), (79, 9263),

Gene: Wrigley\_16 Start: 9533, Stop: 10350, Start Num: 12

Candidate Starts for Wrigley\_16:

(Start: 12 @9533 has 17 MA's), (15, 9572), (22, 9632), (31, 9728), (35, 9785), (38, 9797), (49, 9902), (71, 10259), (73, 10268), (78, 10325),

Gene: Yoshi\_16 Start: 8370, Stop: 9271, Start Num: 5

Candidate Starts for Yoshi\_16:

(Start: 5 @8370 has 5 MA's), (9, 8403), (13, 8451), (14, 8457), (19, 8511), (26, 8580), (29, 8607), (34, 8700), (40, 8748), (42, 8754), (44, 8775), (46, 8778), (48, 8832), (52, 8859), (57, 8964), (77, 9237), (79, 9264),

Gene: Zapner\_17 Start: 8895, Stop: 9796, Start Num: 5

Candidate Starts for Zapner\_17:

(Start: 5 @8895 has 5 MA's), (9, 8928), (13, 8976), (14, 8982), (19, 9036), (26, 9105), (29, 9132), (34, 9225), (40, 9273), (42, 9279), (44, 9300), (46, 9303), (48, 9357), (52, 9384), (57, 9489), (77, 9762), (79, 9789),