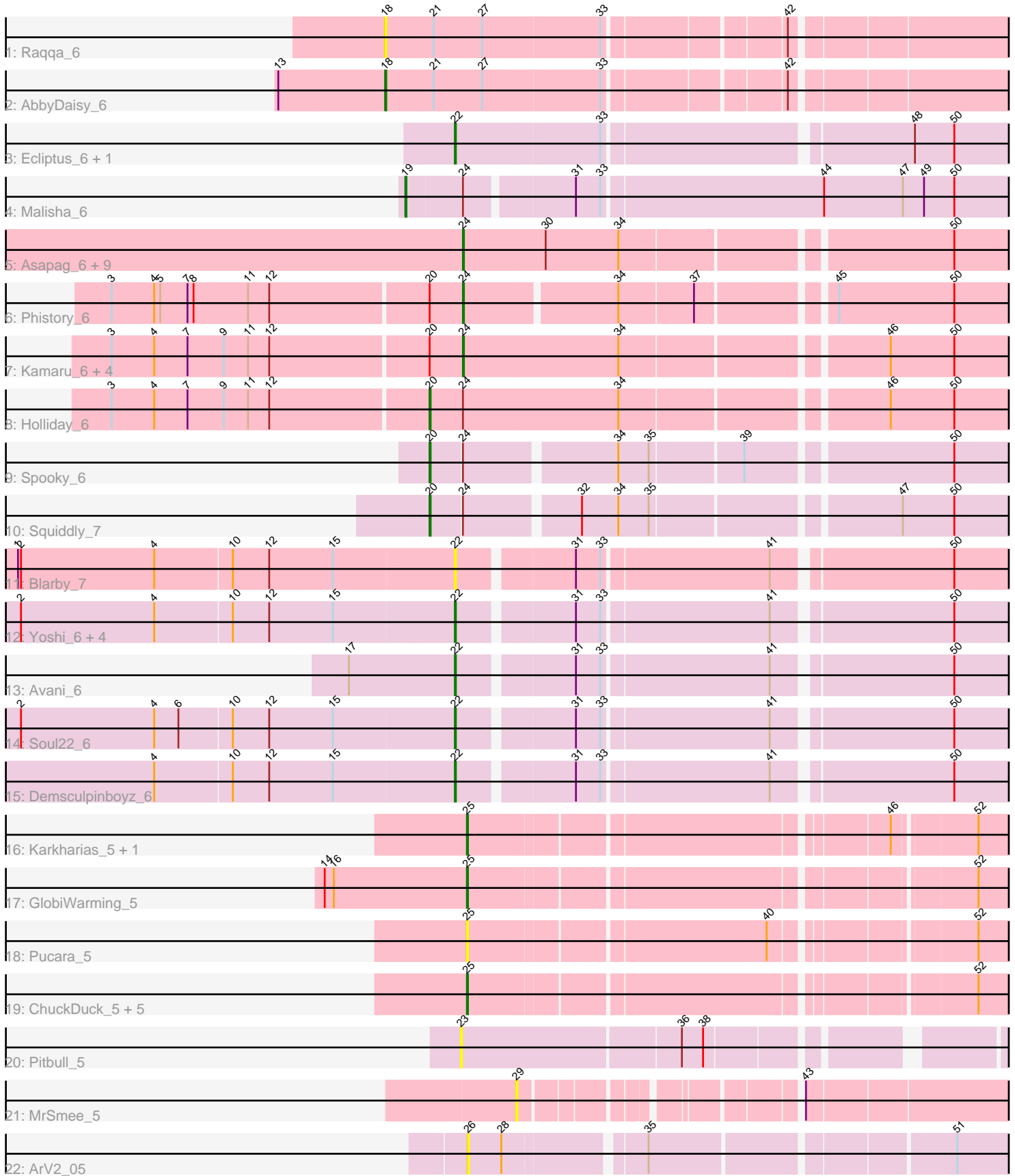


Pham 171565



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 171565 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171565 has 46 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Raqqa\_6
- Track 2 : AbbyDaisy\_6
- Track 3 : Ecliptus\_6, ODay\_6
- Track 4 : Malisha\_6
- Track 5 : Asapag\_6, Getalong\_6, Lutum\_6, BENtherdunthat\_6, Kenna\_6, Periwinkle\_6, Leroy\_6, Frickyeah\_6, Horus\_6, Whitney\_6
- Track 6 : Phistory\_6
- Track 7 : Kamaru\_6, Budski\_6, Phabuloso\_6, LitninMcQueen\_6, CheeseTouch\_6
- Track 8 : Holliday\_6
- Track 9 : Spooky\_6
- Track 10 : Squiddly\_7
- Track 11 : Blarby\_7
- Track 12 : Yoshi\_6, Jabbawokkie\_7, Zapner\_7, Che9d\_6, Ogopogo\_7
- Track 13 : Avani\_6
- Track 14 : Soul22\_6
- Track 15 : Demsculpinboyz\_6
- Track 16 : Karkharias\_5, Bridgette\_5
- Track 17 : GlobiWarming\_5
- Track 18 : Pucara\_5
- Track 19 : ChuckDuck\_5, PeggyLeg03\_5, Judy\_5, Eileen\_5, Constance\_5, Peas\_5
- Track 20 : Pitbull\_5
- Track 21 : MrSmee\_5
- Track 22 : ArV2\_05

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

The start number called the most often in the published annotations is 24, it was called in 15 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Asapag\_6, BENtherdunthat\_6, Budski\_6, CheeseTouch\_6, Frickyeah\_6, Getalong\_6, Horus\_6, Kamaru\_6, Kenna\_6, Leroy\_6, LitninMcQueen\_6, Lutum\_6, Periwinkle\_6, Phabuloso\_6, Phistory\_6, Whitney\_6,

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

- Holliday\_6, Malisha\_6, Spooky\_6, Squiddly\_7,

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

- AbbyDaisy\_6, ArV2\_05, Avani\_6, Blarby\_7, Bridgette\_5, Che9d\_6, ChuckDuck\_5, Constance\_5, Demsculpinboyz\_6, Ecliptus\_6, Eileen\_5, GlobiWarming\_5, Jabbawokkie\_7, Judy\_5, Karkharias\_5, MrSmee\_5, ODay\_6, Ogopogo\_7, Peas\_5, PeggyLeg03\_5, Pitbull\_5, Pucara\_5, Raqqa\_6, Soul22\_6, Yoshi\_6, Zapner\_7,

### Summary by start number:

Start 18:

- Found in 2 of 46 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_6 (AY), Raqqa\_6 (AY),

Start 19:

- Found in 1 of 46 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Malisha\_6 (DN),

Start 20:

- Found in 9 of 46 ( 19.6% ) of genes in pham
- Manual Annotations of this start: 3 of 37
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Holliday\_6 (DN1), Spooky\_6 (DN2), Squiddly\_7 (DN2),

Start 22:

- Found in 11 of 46 ( 23.9% ) of genes in pham
- Manual Annotations of this start: 10 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Avani\_6 (F2), Blarby\_7 (F), Che9d\_6 (F2), Demsculpinboyz\_6 (F2), Ecliptus\_6 (DN), Jabbawokkie\_7 (F2), ODay\_6 (DN), Ogopogo\_7 (F1), Soul22\_6 (F2), Yoshi\_6 (F2), Zapner\_7 (F2),

Start 23:

- Found in 1 of 46 ( 2.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pitbull\_5 (FQ),

Start 24:

- Found in 20 of 46 ( 43.5% ) of genes in pham
- Manual Annotations of this start: 15 of 37
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Asapag\_6 (DN1), BENtherdunthat\_6 (DN1), Budski\_6 (DN), CheeseTouch\_6 (DN1), Frickyeh\_6 (DN1), Getalong\_6 (DN1), Horus\_6 (DN1), Kamaru\_6 (DN1), Kenna\_6 (DN1), Leroy\_6 (DN1), LitninMcQueen\_6 (DN1), Lutum\_6 (DN1), Periwinkle\_6 (DN1), Phabuloso\_6 (DN1), Phistory\_6 (DN1), Whitney\_6 (DN1),

Start 25:

- Found in 10 of 46 ( 21.7% ) of genes in pham
- Manual Annotations of this start: 7 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bridgette\_5 (FA), ChuckDuck\_5 (FA), Constance\_5 (FA), Eileen\_5 (FA), GlobiWarming\_5 (FA), Judy\_5 (FA), Karkharias\_5 (FA), Peas\_5 (FA), PeggyLeg03\_5 (FA), Pucara\_5 (FA),

Start 26:

- Found in 1 of 46 ( 2.2% ) 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\_05 (singleton),

Start 29:

- Found in 1 of 46 ( 2.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MrSmee\_5 (UNK),

**Summary by clusters:**

There are 11 clusters represented in this pham: DN, FQ, F2, F, singleton, F1, FA, DN1, DN2, AY, UNK,

Info for manual annotations of cluster AY:

- Start number 18 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster DN:

- Start number 19 was manually annotated 1 time for cluster DN.
- Start number 22 was manually annotated 2 times for cluster DN.
- Start number 24 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 20 was manually annotated 1 time for cluster DN1.
- Start number 24 was manually annotated 14 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 20 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster F1:

- Start number 22 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 22 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster FA:

- Start number 25 was manually annotated 7 times for cluster FA.

**Gene Information:**

Gene: AbbyDaisy\_6 Start: 4441, Stop: 5022, Start Num: 18

Candidate Starts for AbbyDaisy\_6:

(13, 4336), (Start: 18 @4441 has 1 MA's), (21, 4489), (27, 4537), (33, 4651), (42, 4813),

Gene: ArV2\_05 Start: 4203, Stop: 4730, Start Num: 26

Candidate Starts for ArV2\_05:

(26, 4203), (28, 4236), (35, 4362), (51, 4641),

Gene: Asapag\_6 Start: 4327, Stop: 4878, Start Num: 24

Candidate Starts for Asapag\_6:

(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: Avani\_6 Start: 4307, Stop: 4855, Start Num: 22

Candidate Starts for Avani\_6:

(17, 4205), (Start: 22 @4307 has 10 MA's), (31, 4412), (33, 4436), (41, 4595), (50, 4760),

Gene: BENtherdunthat\_6 Start: 4327, Stop: 4878, Start Num: 24

Candidate Starts for BENtherdunthat\_6:

(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: Blarby\_7 Start: 4831, Stop: 5379, Start Num: 22

Candidate Starts for Blarby\_7:

(1, 4405), (2, 4408), (4, 4540), (10, 4615), (12, 4651), (15, 4714), (Start: 22 @4831 has 10 MA's), (31, 4936), (33, 4960), (41, 5119), (50, 5284),

Gene: Bridgette\_5 Start: 5076, Stop: 5570, Start Num: 25

Candidate Starts for Bridgette\_5:

(Start: 25 @5076 has 7 MA's), (46, 5457), (52, 5532),

Gene: Budski\_6 Start: 4327, Stop: 4875, Start Num: 24

Candidate Starts for Budski\_6:

(3, 3985), (4, 4027), (7, 4060), (9, 4096), (11, 4120), (12, 4141), (Start: 20 @4294 has 3 MA's), (Start: 24 @4327 has 15 MA's), (34, 4480), (46, 4723), (50, 4786),

Gene: Che9d\_6 Start: 4316, Stop: 4864, Start Num: 22

Candidate Starts for Che9d\_6:

(2, 3893), (4, 4025), (10, 4100), (12, 4136), (15, 4199), (Start: 22 @4316 has 10 MA's), (31, 4421), (33, 4445), (41, 4604), (50, 4769),

Gene: CheeseTouch\_6 Start: 4327, Stop: 4875, Start Num: 24

Candidate Starts for CheeseTouch\_6:

(3, 3985), (4, 4027), (7, 4060), (9, 4096), (11, 4120), (12, 4141), (Start: 20 @4294 has 3 MA's), (Start: 24 @4327 has 15 MA's), (34, 4480), (46, 4723), (50, 4786),

Gene: ChuckDuck\_5 Start: 5037, Stop: 5531, Start Num: 25

Candidate Starts for ChuckDuck\_5:

(Start: 25 @5037 has 7 MA's), (52, 5493),

Gene: Constance\_5 Start: 5077, Stop: 5574, Start Num: 25

Candidate Starts for Constance\_5:  
(Start: 25 @5077 has 7 MA's), (52, 5536),

Gene: Demsculpinboyz\_6 Start: 4307, Stop: 4855, Start Num: 22  
Candidate Starts for Demsculpinboyz\_6:  
(4, 4016), (10, 4091), (12, 4127), (15, 4190), (Start: 22 @4307 has 10 MA's), (31, 4412), (33, 4436),  
(41, 4595), (50, 4760),

Gene: Ecliptus\_6 Start: 4342, Stop: 4902, Start Num: 22  
Candidate Starts for Ecliptus\_6:  
(Start: 22 @4342 has 10 MA's), (33, 4483), (48, 4768), (50, 4807),

Gene: Eileen\_5 Start: 5037, Stop: 5534, Start Num: 25  
Candidate Starts for Eileen\_5:  
(Start: 25 @5037 has 7 MA's), (52, 5496),

Gene: Frickyeah\_6 Start: 4327, Stop: 4878, Start Num: 24  
Candidate Starts for Frickyeah\_6:  
(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: Getalong\_6 Start: 4327, Stop: 4878, Start Num: 24  
Candidate Starts for Getalong\_6:  
(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: GlobiWarming\_5 Start: 5032, Stop: 5529, Start Num: 25  
Candidate Starts for GlobiWarming\_5:  
(14, 4891), (16, 4900), (Start: 25 @5032 has 7 MA's), (52, 5491),

Gene: Holliday\_6 Start: 4294, Stop: 4875, Start Num: 20  
Candidate Starts for Holliday\_6:  
(3, 3985), (4, 4027), (7, 4060), (9, 4096), (11, 4120), (12, 4141), (Start: 20 @4294 has 3 MA's), (Start:  
24 @4327 has 15 MA's), (34, 4480), (46, 4723), (50, 4786),

Gene: Horus\_6 Start: 4327, Stop: 4878, Start Num: 24  
Candidate Starts for Horus\_6:  
(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: Jabbawokkie\_7 Start: 4830, Stop: 5378, Start Num: 22  
Candidate Starts for Jabbawokkie\_7:  
(2, 4407), (4, 4539), (10, 4614), (12, 4650), (15, 4713), (Start: 22 @4830 has 10 MA's), (31, 4935), (33,  
4959), (41, 5118), (50, 5283),

Gene: Judy\_5 Start: 5076, Stop: 5573, Start Num: 25  
Candidate Starts for Judy\_5:  
(Start: 25 @5076 has 7 MA's), (52, 5535),

Gene: Kamaru\_6 Start: 4327, Stop: 4875, Start Num: 24  
Candidate Starts for Kamaru\_6:  
(3, 3985), (4, 4027), (7, 4060), (9, 4096), (11, 4120), (12, 4141), (Start: 20 @4294 has 3 MA's), (Start:  
24 @4327 has 15 MA's), (34, 4480), (46, 4723), (50, 4786),

Gene: Karkharias\_5 Start: 5037, Stop: 5531, Start Num: 25  
Candidate Starts for Karkharias\_5:

(Start: 25 @5037 has 7 MA's), (46, 5418), (52, 5493),

Gene: Kenna\_6 Start: 4327, Stop: 4878, Start Num: 24

Candidate Starts for Kenna\_6:

(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: Leroy\_6 Start: 4328, Stop: 4879, Start Num: 24

Candidate Starts for Leroy\_6:

(Start: 24 @4328 has 15 MA's), (30, 4409), (34, 4481), (50, 4787),

Gene: LitninMcQueen\_6 Start: 4327, Stop: 4875, Start Num: 24

Candidate Starts for LitninMcQueen\_6:

(3, 3985), (4, 4027), (7, 4060), (9, 4096), (11, 4120), (12, 4141), (Start: 20 @4294 has 3 MA's), (Start: 24 @4327 has 15 MA's), (34, 4480), (46, 4723), (50, 4786),

Gene: Lutum\_6 Start: 4327, Stop: 4878, Start Num: 24

Candidate Starts for Lutum\_6:

(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: Malisha\_6 Start: 5305, Stop: 5919, Start Num: 19

Candidate Starts for Malisha\_6:

(Start: 19 @5305 has 1 MA's), (Start: 24 @5359 has 15 MA's), (31, 5458), (33, 5482), (44, 5695), (47, 5773), (49, 5794), (50, 5824),

Gene: MrSmee\_5 Start: 3961, Stop: 4389, Start Num: 29

Candidate Starts for MrSmee\_5:

(29, 3961), (43, 4189),

Gene: ODay\_6 Start: 4340, Stop: 4900, Start Num: 22

Candidate Starts for ODay\_6:

(Start: 22 @4340 has 10 MA's), (33, 4481), (48, 4766), (50, 4805),

Gene: Ogopogo\_7 Start: 4568, Stop: 5116, Start Num: 22

Candidate Starts for Ogopogo\_7:

(2, 4145), (4, 4277), (10, 4352), (12, 4388), (15, 4451), (Start: 22 @4568 has 10 MA's), (31, 4673), (33, 4697), (41, 4856), (50, 5021),

Gene: Peas\_5 Start: 5037, Stop: 5534, Start Num: 25

Candidate Starts for Peas\_5:

(Start: 25 @5037 has 7 MA's), (52, 5496),

Gene: PeggyLeg03\_5 Start: 5077, Stop: 5574, Start Num: 25

Candidate Starts for PeggyLeg03\_5:

(Start: 25 @5077 has 7 MA's), (52, 5536),

Gene: Periwinkle\_6 Start: 4327, Stop: 4878, Start Num: 24

Candidate Starts for Periwinkle\_6:

(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: Phabuloso\_6 Start: 4327, Stop: 4875, Start Num: 24

Candidate Starts for Phabuloso\_6:

(3, 3985), (4, 4027), (7, 4060), (9, 4096), (11, 4120), (12, 4141), (Start: 20 @4294 has 3 MA's), (Start: 24 @4327 has 15 MA's), (34, 4480), (46, 4723), (50, 4786),

Gene: Phistory\_6 Start: 4325, Stop: 4867, Start Num: 24

Candidate Starts for Phistory\_6:

(3, 3986), (4, 4028), (5, 4034), (7, 4061), (8, 4067), (11, 4121), (12, 4142), (Start: 20 @4295 has 3 MA's), (Start: 24 @4325 has 15 MA's), (34, 4469), (37, 4541), (45, 4661), (50, 4775),

Gene: Pitbull\_5 Start: 3934, Stop: 4455, Start Num: 23

Candidate Starts for Pitbull\_5:

(23, 3934), (36, 4144), (38, 4165),

Gene: Pucara\_5 Start: 5039, Stop: 5533, Start Num: 25

Candidate Starts for Pucara\_5:

(Start: 25 @5039 has 7 MA's), (40, 5318), (52, 5495),

Gene: Raqqa\_6 Start: 4752, Stop: 5333, Start Num: 18

Candidate Starts for Raqqa\_6:

(Start: 18 @4752 has 1 MA's), (21, 4800), (27, 4848), (33, 4962), (42, 5124),

Gene: Soul22\_6 Start: 4306, Stop: 4854, Start Num: 22

Candidate Starts for Soul22\_6:

(2, 3883), (4, 4015), (6, 4039), (10, 4090), (12, 4126), (15, 4189), (Start: 22 @4306 has 10 MA's), (31, 4411), (33, 4435), (41, 4594), (50, 4759),

Gene: Spooky\_6 Start: 4301, Stop: 4870, Start Num: 20

Candidate Starts for Spooky\_6:

(Start: 20 @4301 has 3 MA's), (Start: 24 @4331 has 15 MA's), (34, 4472), (35, 4502), (39, 4589), (50, 4778),

Gene: Squiddly\_7 Start: 4994, Stop: 5563, Start Num: 20

Candidate Starts for Squiddly\_7:

(Start: 20 @4994 has 3 MA's), (Start: 24 @5024 has 15 MA's), (32, 5129), (34, 5165), (35, 5195), (47, 5420), (50, 5471),

Gene: Whitney\_6 Start: 4327, Stop: 4878, Start Num: 24

Candidate Starts for Whitney\_6:

(Start: 24 @4327 has 15 MA's), (30, 4408), (34, 4480), (50, 4786),

Gene: Yoshi\_6 Start: 4306, Stop: 4854, Start Num: 22

Candidate Starts for Yoshi\_6:

(2, 3883), (4, 4015), (10, 4090), (12, 4126), (15, 4189), (Start: 22 @4306 has 10 MA's), (31, 4411), (33, 4435), (41, 4594), (50, 4759),

Gene: Zapner\_7 Start: 4831, Stop: 5379, Start Num: 22

Candidate Starts for Zapner\_7:

(2, 4408), (4, 4540), (10, 4615), (12, 4651), (15, 4714), (Start: 22 @4831 has 10 MA's), (31, 4936), (33, 4960), (41, 5119), (50, 5284),