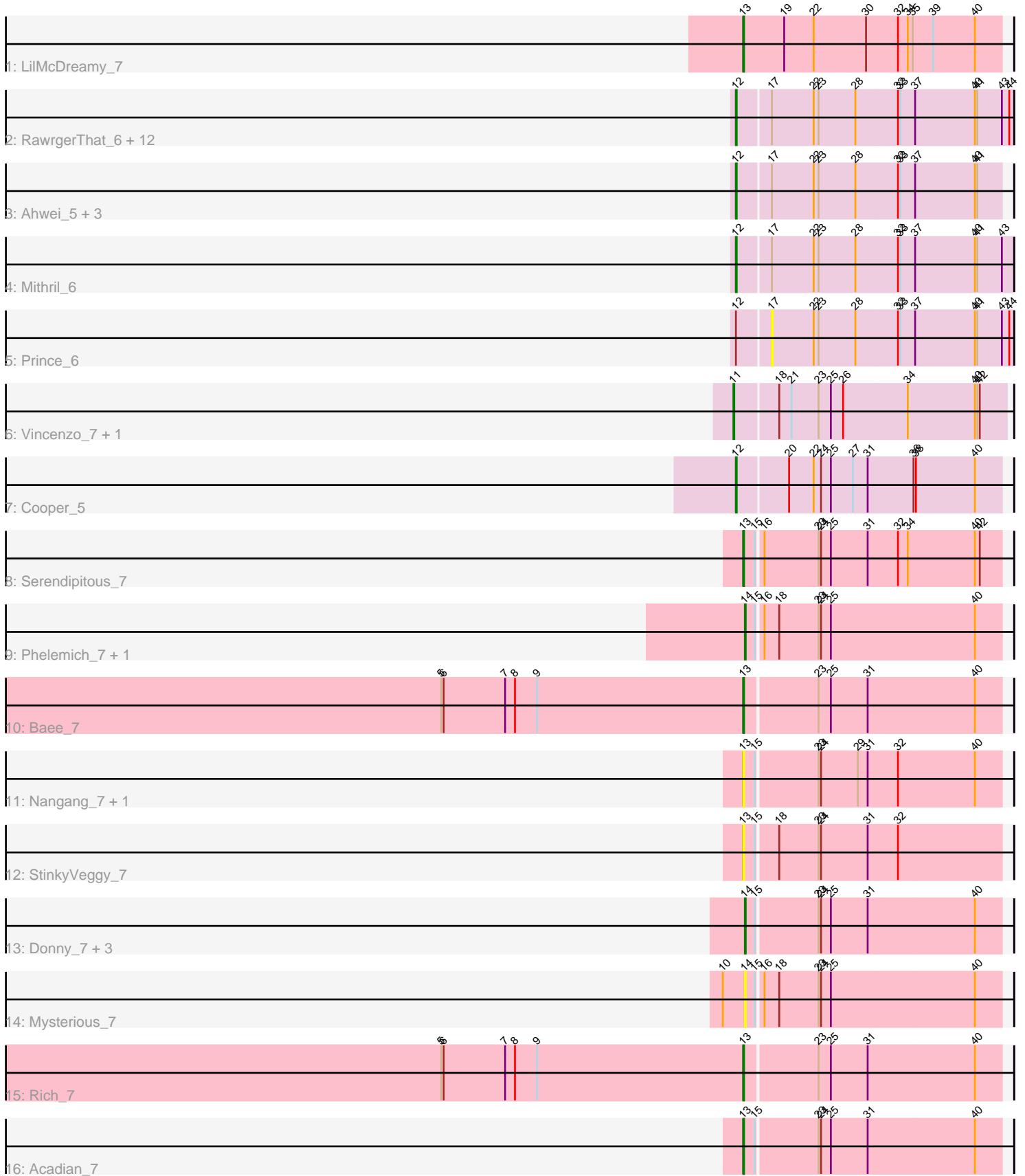


# Zoomed Pham 168377



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 168377 Report

This analysis was run 07/09/24 on database version 566.

Pham number 168377 has 37 members, 10 are drafts.

Phages represented in each track:

- Track 1 : LilMcDreamy\_7
- Track 2 : RawrgerThat\_6, Hydro\_6, Magpie\_6, Zemanar\_6, Lolalove\_6, Waleliano\_6, VioletZ\_6, Mudslide\_6, Hangman\_6, BrownCNA\_6, Austelle\_6, Heath\_6, Fortunato\_5
- Track 3 : Ahwei\_5, ChrisnMich\_5, Nanao\_5, Poster\_5
- Track 4 : Mithril\_6
- Track 5 : Prince\_6
- Track 6 : Vincenzo\_7, AlanGrant\_7
- Track 7 : Cooper\_5
- Track 8 : Serendipitous\_7
- Track 9 : Phelemich\_7, Reprobate\_7
- Track 10 : Bae\_7
- Track 11 : Nangang\_7, DigitDog\_7
- Track 12 : StinkyVeggy\_7
- Track 13 : Donny\_7, EastView9101\_7, SirJeffery\_7, Suigeneris\_7
- Track 14 : Mysterious\_7
- Track 15 : Rich\_7
- Track 16 : Acadian\_7

### ***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 16 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ahwei\_5, Austelle\_6, BrownCNA\_6, ChrisnMich\_5, Cooper\_5, Fortunato\_5, Hangman\_6, Heath\_6, Hydro\_6, Lolalove\_6, Magpie\_6, Mithril\_6, Mudslide\_6, Nanao\_5, Poster\_5, RawrgerThat\_6, VioletZ\_6, Waleliano\_6, Zemanar\_6,

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

- Prince\_6,

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

- Acadian\_7, AlanGrant\_7, Bae\_7, DigitDog\_7, Donny\_7, EastView9101\_7, LilMcDreamy\_7, Mysterious\_7, Nangang\_7, Phelemich\_7, Reprobate\_7, Rich\_7, Serendipitous\_7, SirJeffery\_7, StinkyVeggy\_7, Suigeneris\_7, Vincenzo\_7,

### Summary by start number:

#### Start 11:

- Found in 2 of 37 ( 5.4% ) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant\_7 (B4), Vincenzo\_7 (B4),

#### Start 12:

- Found in 20 of 37 ( 54.1% ) of genes in pham
- Manual Annotations of this start: 16 of 27
- Called 95.0% of time when present
- Phage (with cluster) where this start called: Ahwei\_5 (B4), Austelle\_6 (B4), BrownCNA\_6 (B4), ChrisnMich\_5 (B4), Cooper\_5 (B4), Fortunato\_5 (B4), Hangman\_6 (B4), Heath\_6 (B4), Hydro\_6 (B4), Lolalove\_6 (B4), Magpie\_6 (B4), Mithril\_6 (B4), Mudslide\_6 (B4), Nanao\_5 (B4), Poster\_5 (B4), RawrgerThat\_6 (B4), VioletZ\_6 (B4), Waleliano\_6 (B4), Zemanar\_6 (B4),

#### Start 13:

- Found in 8 of 37 ( 21.6% ) of genes in pham
- Manual Annotations of this start: 5 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian\_7 (B5), Bae\_7 (B5), DigitDog\_7 (B5), LilMcDreamy\_7 (B12), Nangang\_7 (B5), Rich\_7 (B5), Serendipitous\_7 (B5), StinkyVeggy\_7 (B5),

#### Start 14:

- Found in 7 of 37 ( 18.9% ) of genes in pham
- Manual Annotations of this start: 4 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Donny\_7 (B5), EastView9101\_7 (B5), Mysterious\_7 (B5), Phelemich\_7 (B5), Reprobate\_7 (B5), SirJeffery\_7 (B5), Suigeneris\_7 (B5),

#### Start 17:

- Found in 19 of 37 ( 51.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Prince\_6 (B4),

### Summary by clusters:

There are 3 clusters represented in this pham: B4, B5, B12,

#### Info for manual annotations of cluster B12:

- Start number 13 was manually annotated 1 time for cluster B12.

#### Info for manual annotations of cluster B4:

- Start number 11 was manually annotated 2 times for cluster B4.

- Start number 12 was manually annotated 16 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 13 was manually annotated 4 times for cluster B5.
- Start number 14 was manually annotated 4 times for cluster B5.

### **Gene Information:**

Gene: Acadian\_7 Start: 5649, Stop: 5344, Start Num: 13

Candidate Starts for Acadian\_7:

(Start: 13 @5649 has 5 MA's), (15, 5637), (23, 5565), (24, 5562), (25, 5550), (31, 5505), (40, 5376),

Gene: Ahwei\_5 Start: 4423, Stop: 4106, Start Num: 12

Candidate Starts for Ahwei\_5:

(Start: 12 @4423 has 16 MA's), (17, 4384), (22, 4333), (23, 4327), (28, 4282), (32, 4231), (33, 4228), (37, 4210), (40, 4138), (41, 4135),

Gene: AlanGrant\_7 Start: 6363, Stop: 6037, Start Num: 11

Candidate Starts for AlanGrant\_7:

(Start: 11 @6363 has 2 MA's), (18, 6312), (21, 6297), (23, 6264), (25, 6249), (26, 6234), (34, 6156), (40, 6075), (41, 6072), (42, 6069),

Gene: Austelle\_6 Start: 5520, Stop: 5188, Start Num: 12

Candidate Starts for Austelle\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202), (44, 5193),

Gene: Bae\_7 Start: 5655, Stop: 5350, Start Num: 13

Candidate Starts for Bae\_7:

(1, 6708), (2, 6675), (3, 6603), (4, 6564), (5, 6024), (6, 6021), (7, 5946), (8, 5934), (9, 5907), (Start: 13 @5655 has 5 MA's), (23, 5571), (25, 5556), (31, 5511), (40, 5382),

Gene: BrownCNA\_6 Start: 5520, Stop: 5188, Start Num: 12

Candidate Starts for BrownCNA\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202), (44, 5193),

Gene: ChrisnMich\_5 Start: 4423, Stop: 4106, Start Num: 12

Candidate Starts for ChrisnMich\_5:

(Start: 12 @4423 has 16 MA's), (17, 4384), (22, 4333), (23, 4327), (28, 4282), (32, 4231), (33, 4228), (37, 4210), (40, 4138), (41, 4135),

Gene: Cooper\_5 Start: 4445, Stop: 4128, Start Num: 12

Candidate Starts for Cooper\_5:

(Start: 12 @4445 has 16 MA's), (20, 4385), (22, 4355), (24, 4346), (25, 4334), (27, 4307), (31, 4289), (36, 4235), (38, 4232), (40, 4160),

Gene: DigitDog\_7 Start: 5640, Stop: 5335, Start Num: 13

Candidate Starts for DigitDog\_7:

(Start: 13 @5640 has 5 MA's), (15, 5628), (23, 5556), (24, 5553), (29, 5508), (31, 5496), (32, 5460), (40, 5367),

Gene: Donny\_7 Start: 5649, Stop: 5344, Start Num: 14

Candidate Starts for Donny\_7:

(Start: 14 @5649 has 4 MA's), (15, 5637), (23, 5565), (24, 5562), (25, 5550), (31, 5505), (40, 5376),

Gene: EastView9101\_7 Start: 5649, Stop: 5344, Start Num: 14

Candidate Starts for EastView9101\_7:

(Start: 14 @5649 has 4 MA's), (15, 5637), (23, 5565), (24, 5562), (25, 5550), (31, 5505), (40, 5376),

Gene: Fortunato\_5 Start: 5517, Stop: 5185, Start Num: 12

Candidate Starts for Fortunato\_5:

(Start: 12 @5517 has 16 MA's), (17, 5478), (22, 5427), (23, 5421), (28, 5376), (32, 5325), (33, 5322), (37, 5304), (40, 5232), (41, 5229), (43, 5199), (44, 5190),

Gene: Hangman\_6 Start: 5520, Stop: 5188, Start Num: 12

Candidate Starts for Hangman\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202), (44, 5193),

Gene: Heath\_6 Start: 5520, Stop: 5188, Start Num: 12

Candidate Starts for Heath\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202), (44, 5193),

Gene: Hydro\_6 Start: 5517, Stop: 5185, Start Num: 12

Candidate Starts for Hydro\_6:

(Start: 12 @5517 has 16 MA's), (17, 5478), (22, 5427), (23, 5421), (28, 5376), (32, 5325), (33, 5322), (37, 5304), (40, 5232), (41, 5229), (43, 5199), (44, 5190),

Gene: LilMcDreamy\_7 Start: 6421, Stop: 6110, Start Num: 13

Candidate Starts for LilMcDreamy\_7:

(Start: 13 @6421 has 5 MA's), (19, 6373), (22, 6337), (30, 6274), (32, 6235), (34, 6223), (35, 6217), (39, 6193), (40, 6142),

Gene: Lolalove\_6 Start: 5517, Stop: 5185, Start Num: 12

Candidate Starts for Lolalove\_6:

(Start: 12 @5517 has 16 MA's), (17, 5478), (22, 5427), (23, 5421), (28, 5376), (32, 5325), (33, 5322), (37, 5304), (40, 5232), (41, 5229), (43, 5199), (44, 5190),

Gene: Magpie\_6 Start: 5517, Stop: 5185, Start Num: 12

Candidate Starts for Magpie\_6:

(Start: 12 @5517 has 16 MA's), (17, 5478), (22, 5427), (23, 5421), (28, 5376), (32, 5325), (33, 5322), (37, 5304), (40, 5232), (41, 5229), (43, 5199), (44, 5190),

Gene: Mithril\_6 Start: 5520, Stop: 5188, Start Num: 12

Candidate Starts for Mithril\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202),

Gene: Mudslide\_6 Start: 5517, Stop: 5185, Start Num: 12

Candidate Starts for Mudslide\_6:

(Start: 12 @5517 has 16 MA's), (17, 5478), (22, 5427), (23, 5421), (28, 5376), (32, 5325), (33, 5322), (37, 5304), (40, 5232), (41, 5229), (43, 5199), (44, 5190),

Gene: Mysterious\_7 Start: 5924, Stop: 5619, Start Num: 14

Candidate Starts for Mysterious\_7:

(10, 5951), (Start: 14 @5924 has 4 MA's), (15, 5912), (16, 5906), (18, 5888), (23, 5840), (24, 5837), (25, 5825), (40, 5651),

Gene: Nanao\_5 Start: 4423, Stop: 4106, Start Num: 12

Candidate Starts for Nanao\_5:

(Start: 12 @4423 has 16 MA's), (17, 4384), (22, 4333), (23, 4327), (28, 4282), (32, 4231), (33, 4228), (37, 4210), (40, 4138), (41, 4135),

Gene: Nangang\_7 Start: 5640, Stop: 5335, Start Num: 13

Candidate Starts for Nangang\_7:

(Start: 13 @5640 has 5 MA's), (15, 5628), (23, 5556), (24, 5553), (29, 5508), (31, 5496), (32, 5460), (40, 5367),

Gene: Phelemich\_7 Start: 5927, Stop: 5622, Start Num: 14

Candidate Starts for Phelemich\_7:

(Start: 14 @5927 has 4 MA's), (15, 5915), (16, 5909), (18, 5891), (23, 5843), (24, 5840), (25, 5828), (40, 5654),

Gene: Poster\_5 Start: 4423, Stop: 4106, Start Num: 12

Candidate Starts for Poster\_5:

(Start: 12 @4423 has 16 MA's), (17, 4384), (22, 4333), (23, 4327), (28, 4282), (32, 4231), (33, 4228), (37, 4210), (40, 4138), (41, 4135),

Gene: Prince\_6 Start: 5481, Stop: 5188, Start Num: 17

Candidate Starts for Prince\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202), (44, 5193),

Gene: RawrgerThat\_6 Start: 5517, Stop: 5185, Start Num: 12

Candidate Starts for RawrgerThat\_6:

(Start: 12 @5517 has 16 MA's), (17, 5478), (22, 5427), (23, 5421), (28, 5376), (32, 5325), (33, 5322), (37, 5304), (40, 5232), (41, 5229), (43, 5199), (44, 5190),

Gene: Reprobate\_7 Start: 5924, Stop: 5619, Start Num: 14

Candidate Starts for Reprobate\_7:

(Start: 14 @5924 has 4 MA's), (15, 5912), (16, 5906), (18, 5888), (23, 5840), (24, 5837), (25, 5825), (40, 5651),

Gene: Rich\_7 Start: 5652, Stop: 5347, Start Num: 13

Candidate Starts for Rich\_7:

(4, 6561), (5, 6021), (6, 6018), (7, 5943), (8, 5931), (9, 5904), (Start: 13 @5652 has 5 MA's), (23, 5568), (25, 5553), (31, 5508), (40, 5379),

Gene: Serendipitous\_7 Start: 5706, Stop: 5401, Start Num: 13

Candidate Starts for Serendipitous\_7:

(Start: 13 @5706 has 5 MA's), (15, 5694), (16, 5688), (23, 5622), (24, 5619), (25, 5607), (31, 5562), (32, 5526), (34, 5514), (40, 5433), (42, 5427),

Gene: SirJeffery\_7 Start: 5649, Stop: 5344, Start Num: 14

Candidate Starts for SirJeffery\_7:

(Start: 14 @5649 has 4 MA's), (15, 5637), (23, 5565), (24, 5562), (25, 5550), (31, 5505), (40, 5376),

Gene: StinkyVeggy\_7 Start: 5637, Stop: 5332, Start Num: 13

Candidate Starts for StinkyVeggy\_7:

(Start: 13 @5637 has 5 MA's), (15, 5625), (18, 5601), (23, 5553), (24, 5550), (31, 5493), (32, 5457),

Gene: Suigeneris\_7 Start: 5649, Stop: 5344, Start Num: 14

Candidate Starts for Suigeneris\_7:

(Start: 14 @5649 has 4 MA's), (15, 5637), (23, 5565), (24, 5562), (25, 5550), (31, 5505), (40, 5376),

Gene: Vincenzo\_7 Start: 6363, Stop: 6037, Start Num: 11

Candidate Starts for Vincenzo\_7:

(Start: 11 @6363 has 2 MA's), (18, 6312), (21, 6297), (23, 6264), (25, 6249), (26, 6234), (34, 6156), (40, 6075), (41, 6072), (42, 6069),

Gene: VioletZ\_6 Start: 5520, Stop: 5188, Start Num: 12

Candidate Starts for VioletZ\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202), (44, 5193),

Gene: Waleliano\_6 Start: 5520, Stop: 5188, Start Num: 12

Candidate Starts for Waleliano\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202), (44, 5193),

Gene: Zemanar\_6 Start: 5520, Stop: 5188, Start Num: 12

Candidate Starts for Zemanar\_6:

(Start: 12 @5520 has 16 MA's), (17, 5481), (22, 5430), (23, 5424), (28, 5379), (32, 5328), (33, 5325), (37, 5307), (40, 5235), (41, 5232), (43, 5202), (44, 5193),