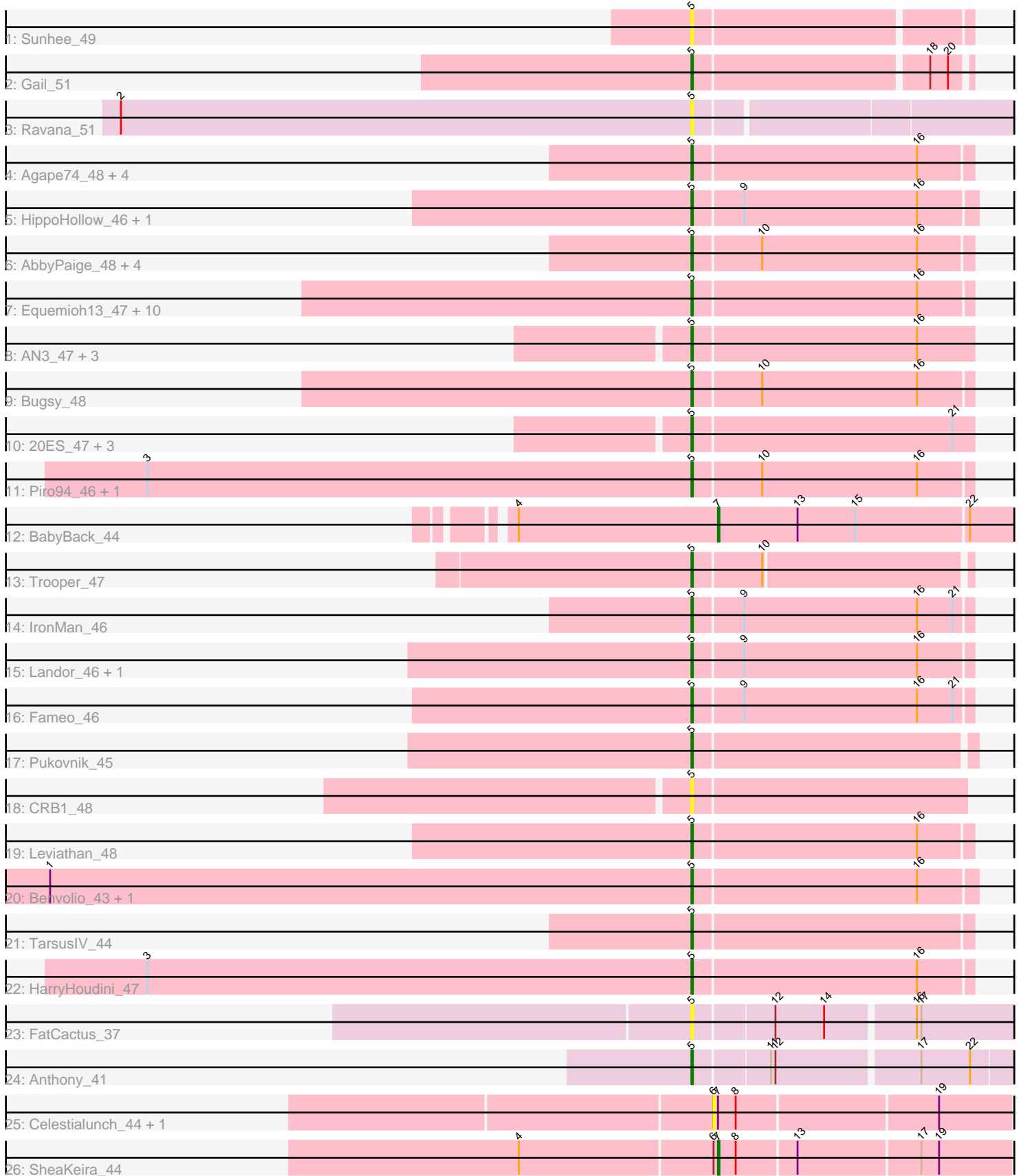


Pham 294783



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 294783 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294783 has 55 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Sunhee\_49
- Track 2 : Gail\_51
- Track 3 : Ravana\_51
- Track 4 : Agape74\_48, Turbido\_47, JoshKayV\_48, Jerm\_48, Iwokeuplikedis\_49
- Track 5 : HippoHollow\_46, Heffalump\_45
- Track 6 : AbbyPaige\_48, Whabigail7\_47, Smeagan\_49, LilTurb\_47, Dignity\_48
- Track 7 : Equemioh13\_47, Centaur\_47, WideWale\_47, MiculUcigas\_46, NaSiaTalie\_46, Baehexic\_45, Sknot\_46, Gratitude\_46, Terrific\_49, Updawg\_47, Flare16\_46
- Track 8 : AN3\_47, LadyBird\_49, DudeLittle\_45, VA6\_45
- Track 9 : Buggy\_48
- Track 10 : 20ES\_47, BengiVuitton\_46, Deloris\_45, First\_0046
- Track 11 : Piro94\_46, Drake55\_48
- Track 12 : BabyBack\_44
- Track 13 : Trooper\_47
- Track 14 : IronMan\_46
- Track 15 : Landor\_46, Bactobuster\_45
- Track 16 : Fameo\_46
- Track 17 : Pukovnik\_45
- Track 18 : CRB1\_48
- Track 19 : Leviathan\_48
- Track 20 : Benvolio\_43, Echild\_46
- Track 21 : TarsusIV\_44
- Track 22 : HarryHoudini\_47
- Track 23 : FatCactus\_37
- Track 24 : Anthony\_41
- Track 25 : Celestialunch\_44, MegTheThird\_44
- Track 26 : SheaKeira\_44

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

The start number called the most often in the published annotations is 5, it was called in 42 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 20ES\_47, AN3\_47, AbbyPaige\_48, Agape74\_48, Anthony\_41, Bactobuster\_45, Baehexic\_45, BengiVuitton\_46, Benvolio\_43, Buggy\_48, CRB1\_48, Centaur\_47, Deloris\_45, Dignity\_48, Drake55\_48, DudeLittle\_45, Echild\_46, Equemioh13\_47, Fameo\_46, FatCactus\_37, First\_0046, Flare16\_46, Gail\_51, Gratitude\_46, HarryHoudini\_47, Heffalump\_45, HippoHollow\_46, IronMan\_46, Iwokeuplikedis\_49, Jerm\_48, JoshKayV\_48, LadyBird\_49, Landor\_46, Leviathan\_48, LilTurb\_47, MiculUcigas\_46, NaSiaTalie\_46, Piro94\_46, Pukovnik\_45, Ravana\_51, Sknot\_46, Smeagan\_49, Sunhee\_49, TarsusIV\_44, Terrific\_49, Trooper\_47, Turbido\_47, Updawg\_47, VA6\_45, Whabigail7\_47, WideWale\_47,

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

- 

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

- BabyBack\_44, Celestialunch\_44, MegTheThird\_44, SheaKeira\_44,

### Summary by start number:

Start 5:

- Found in 51 of 55 ( 92.7% ) of genes in pham
- Manual Annotations of this start: 42 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 20ES\_47 (A2), AN3\_47 (A2), AbbyPaige\_48 (A2), Agape74\_48 (A2), Anthony\_41 (A20), Bactobuster\_45 (A2), Baehexic\_45 (A2), BengiVuitton\_46 (A2), Benvolio\_43 (A2), Buggy\_48 (A2), CRB1\_48 (A2), Centaur\_47 (A2), Deloris\_45 (A2), Dignity\_48 (A2), Drake55\_48 (A2), DudeLittle\_45 (A2), Echild\_46 (A2), Equemioh13\_47 (A2), Fameo\_46 (A2), FatCactus\_37 (A20), First\_0046 (A2), Flare16\_46 (A2), Gail\_51 (A14), Gratitude\_46 (A2), HarryHoudini\_47 (A2), Heffalump\_45 (A2), HippoHollow\_46 (A2), IronMan\_46 (A2), Iwokeuplikedis\_49 (A2), Jerm\_48 (A2), JoshKayV\_48 (A2), LadyBird\_49 (A2), Landor\_46 (A2), Leviathan\_48 (A2), LilTurb\_47 (A2), MiculUcigas\_46 (A2), NaSiaTalie\_46 (A2), Piro94\_46 (A2), Pukovnik\_45 (A2), Ravana\_51 (A15), Sknot\_46 (A2), Smeagan\_49 (A2), Sunhee\_49 (A14), TarsusIV\_44 (A2), Terrific\_49 (A2), Trooper\_47 (A2), Turbido\_47 (A2), Updawg\_47 (A2), VA6\_45 (A2), Whabigail7\_47 (A2), WideWale\_47 (A2),

Start 6:

- Found in 3 of 55 ( 5.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Celestialunch\_44 (A9), MegTheThird\_44 (A9),

Start 7:

- Found in 4 of 55 ( 7.3% ) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BabyBack\_44 (A2), SheaKeira\_44 (A9),

### Summary by clusters:

There are 5 clusters represented in this pham: A9, A20, A2, A15, A14,

Info for manual annotations of cluster A14:

- Start number 5 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A2:

- Start number 5 was manually annotated 40 times for cluster A2.
- Start number 7 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 5 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A9:

- Start number 7 was manually annotated 1 time for cluster A9.

### ***Gene Information:***

Gene: 20ES\_47 Start: 31813, Stop: 31625, Start Num: 5

Candidate Starts for 20ES\_47:

(Start: 5 @31813 has 42 MA's), (21, 31639),

Gene: AN3\_47 Start: 32193, Stop: 32005, Start Num: 5

Candidate Starts for AN3\_47:

(Start: 5 @32193 has 42 MA's), (16, 32043),

Gene: AbbyPaige\_48 Start: 32194, Stop: 32009, Start Num: 5

Candidate Starts for AbbyPaige\_48:

(Start: 5 @32194 has 42 MA's), (10, 32149), (16, 32044),

Gene: Agape74\_48 Start: 32179, Stop: 31994, Start Num: 5

Candidate Starts for Agape74\_48:

(Start: 5 @32179 has 42 MA's), (16, 32029),

Gene: Anthony\_41 Start: 29481, Stop: 29272, Start Num: 5

Candidate Starts for Anthony\_41:

(Start: 5 @29481 has 42 MA's), (11, 29433), (12, 29430), (17, 29337), (22, 29304),

Gene: BabyBack\_44 Start: 32081, Stop: 31851, Start Num: 7

Candidate Starts for BabyBack\_44:

(4, 32216), (Start: 7 @32081 has 2 MA's), (13, 32027), (15, 31988), (22, 31913),

Gene: Bactobuster\_45 Start: 32677, Stop: 32492, Start Num: 5

Candidate Starts for Bactobuster\_45:

(Start: 5 @32677 has 42 MA's), (9, 32644), (16, 32527),

Gene: Baehexic\_45 Start: 31869, Stop: 31684, Start Num: 5

Candidate Starts for Baehexic\_45:

(Start: 5 @31869 has 42 MA's), (16, 31719),

Gene: BengiVuitton\_46 Start: 31775, Stop: 31587, Start Num: 5

Candidate Starts for BengiVuitton\_46:

(Start: 5 @31775 has 42 MA's), (21, 31601),

Gene: Benvolio\_43 Start: 31141, Stop: 30953, Start Num: 5

Candidate Starts for Benvolio\_43:

(1, 31576), (Start: 5 @31141 has 42 MA's), (16, 30991),

Gene: Buggy\_48 Start: 32239, Stop: 32054, Start Num: 5

Candidate Starts for Buggy\_48:

(Start: 5 @32239 has 42 MA's), (10, 32194), (16, 32089),

Gene: CRB1\_48 Start: 32159, Stop: 31977, Start Num: 5

Candidate Starts for CRB1\_48:

(Start: 5 @32159 has 42 MA's),

Gene: Celestiallunch\_44 Start: 31007, Stop: 30789, Start Num: 6

Candidate Starts for Celestiallunch\_44:

(6, 31007), (Start: 7 @31004 has 2 MA's), (8, 30992), (19, 30860),

Gene: Centaur\_47 Start: 32086, Stop: 31901, Start Num: 5

Candidate Starts for Centaur\_47:

(Start: 5 @32086 has 42 MA's), (16, 31936),

Gene: Deloris\_45 Start: 31444, Stop: 31256, Start Num: 5

Candidate Starts for Deloris\_45:

(Start: 5 @31444 has 42 MA's), (21, 31270),

Gene: Dignity\_48 Start: 32259, Stop: 32074, Start Num: 5

Candidate Starts for Dignity\_48:

(Start: 5 @32259 has 42 MA's), (10, 32214), (16, 32109),

Gene: Drake55\_48 Start: 32183, Stop: 31998, Start Num: 5

Candidate Starts for Drake55\_48:

(3, 32552), (Start: 5 @32183 has 42 MA's), (10, 32138), (16, 32033),

Gene: DudeLittle\_45 Start: 31828, Stop: 31643, Start Num: 5

Candidate Starts for DudeLittle\_45:

(Start: 5 @31828 has 42 MA's), (16, 31678),

Gene: Echild\_46 Start: 31165, Stop: 30977, Start Num: 5

Candidate Starts for Echild\_46:

(1, 31600), (Start: 5 @31165 has 42 MA's), (16, 31015),

Gene: Equemioh13\_47 Start: 31988, Stop: 31803, Start Num: 5

Candidate Starts for Equemioh13\_47:

(Start: 5 @31988 has 42 MA's), (16, 31838),

Gene: Fameo\_46 Start: 32004, Stop: 31819, Start Num: 5

Candidate Starts for Fameo\_46:

(Start: 5 @32004 has 42 MA's), (9, 31971), (16, 31854), (21, 31830),

Gene: FatCactus\_37 Start: 28563, Stop: 28351, Start Num: 5

Candidate Starts for FatCactus\_37:

(Start: 5 @28563 has 42 MA's), (12, 28512), (14, 28479), (16, 28422), (17, 28419),

Gene: First\_0046 Start: 31689, Stop: 31501, Start Num: 5  
Candidate Starts for First\_0046:  
(Start: 5 @31689 has 42 MA's), (21, 31515),

Gene: Flare16\_46 Start: 31747, Stop: 31562, Start Num: 5  
Candidate Starts for Flare16\_46:  
(Start: 5 @31747 has 42 MA's), (16, 31597),

Gene: Gail\_51 Start: 33528, Stop: 33352, Start Num: 5  
Candidate Starts for Gail\_51:  
(Start: 5 @33528 has 42 MA's), (18, 33375), (20, 33363),

Gene: Gratitude\_46 Start: 31988, Stop: 31803, Start Num: 5  
Candidate Starts for Gratitude\_46:  
(Start: 5 @31988 has 42 MA's), (16, 31838),

Gene: HarryHoudini\_47 Start: 32192, Stop: 32007, Start Num: 5  
Candidate Starts for HarryHoudini\_47:  
(3, 32561), (Start: 5 @32192 has 42 MA's), (16, 32042),

Gene: Heffalump\_45 Start: 32472, Stop: 32287, Start Num: 5  
Candidate Starts for Heffalump\_45:  
(Start: 5 @32472 has 42 MA's), (9, 32439), (16, 32322),

Gene: HippoHollow\_46 Start: 33225, Stop: 33037, Start Num: 5  
Candidate Starts for HippoHollow\_46:  
(Start: 5 @33225 has 42 MA's), (9, 33192), (16, 33075),

Gene: IronMan\_46 Start: 32860, Stop: 32675, Start Num: 5  
Candidate Starts for IronMan\_46:  
(Start: 5 @32860 has 42 MA's), (9, 32827), (16, 32710), (21, 32686),

Gene: Iwokeuplikedis\_49 Start: 31788, Stop: 31606, Start Num: 5  
Candidate Starts for Iwokeuplikedis\_49:  
(Start: 5 @31788 has 42 MA's), (16, 31638),

Gene: Jerm\_48 Start: 32252, Stop: 32067, Start Num: 5  
Candidate Starts for Jerm\_48:  
(Start: 5 @32252 has 42 MA's), (16, 32102),

Gene: JoshKayV\_48 Start: 32333, Stop: 32151, Start Num: 5  
Candidate Starts for JoshKayV\_48:  
(Start: 5 @32333 has 42 MA's), (16, 32183),

Gene: LadyBird\_49 Start: 32124, Stop: 31936, Start Num: 5  
Candidate Starts for LadyBird\_49:  
(Start: 5 @32124 has 42 MA's), (16, 31974),

Gene: Landor\_46 Start: 32938, Stop: 32753, Start Num: 5  
Candidate Starts for Landor\_46:  
(Start: 5 @32938 has 42 MA's), (9, 32905), (16, 32788),

Gene: Leviathan\_48 Start: 32308, Stop: 32123, Start Num: 5  
Candidate Starts for Leviathan\_48:  
(Start: 5 @32308 has 42 MA's), (16, 32158),

Gene: LilTurb\_47 Start: 32141, Stop: 31956, Start Num: 5  
Candidate Starts for LilTurb\_47:  
(Start: 5 @32141 has 42 MA's), (10, 32096), (16, 31991),

Gene: MegTheThird\_44 Start: 31006, Stop: 30788, Start Num: 6  
Candidate Starts for MegTheThird\_44:  
(6, 31006), (Start: 7 @31003 has 2 MA's), (8, 30991), (19, 30859),

Gene: MiculUcigas\_46 Start: 31647, Stop: 31462, Start Num: 5  
Candidate Starts for MiculUcigas\_46:  
(Start: 5 @31647 has 42 MA's), (16, 31497),

Gene: NaSiaTalie\_46 Start: 31744, Stop: 31559, Start Num: 5  
Candidate Starts for NaSiaTalie\_46:  
(Start: 5 @31744 has 42 MA's), (16, 31594),

Gene: Piro94\_46 Start: 32109, Stop: 31924, Start Num: 5  
Candidate Starts for Piro94\_46:  
(3, 32478), (Start: 5 @32109 has 42 MA's), (10, 32064), (16, 31959),

Gene: Pukovnik\_45 Start: 32528, Stop: 32343, Start Num: 5  
Candidate Starts for Pukovnik\_45:  
(Start: 5 @32528 has 42 MA's),

Gene: Ravana\_51 Start: 30946, Stop: 30728, Start Num: 5  
Candidate Starts for Ravana\_51:  
(2, 31333), (Start: 5 @30946 has 42 MA's),

Gene: SheaKeira\_44 Start: 31011, Stop: 30799, Start Num: 7  
Candidate Starts for SheaKeira\_44:  
(4, 31143), (6, 31014), (Start: 7 @31011 has 2 MA's), (8, 30999), (13, 30960), (17, 30879), (19, 30867),

Gene: Sknot\_46 Start: 31747, Stop: 31562, Start Num: 5  
Candidate Starts for Sknot\_46:  
(Start: 5 @31747 has 42 MA's), (16, 31597),

Gene: Smeagan\_49 Start: 32395, Stop: 32210, Start Num: 5  
Candidate Starts for Smeagan\_49:  
(Start: 5 @32395 has 42 MA's), (10, 32350), (16, 32245),

Gene: Sunhee\_49 Start: 31730, Stop: 31551, Start Num: 5  
Candidate Starts for Sunhee\_49:  
(Start: 5 @31730 has 42 MA's),

Gene: TarsusIV\_44 Start: 31542, Stop: 31357, Start Num: 5  
Candidate Starts for TarsusIV\_44:  
(Start: 5 @31542 has 42 MA's),

Gene: Terrific\_49 Start: 32101, Stop: 31916, Start Num: 5

Candidate Starts for Terrific\_49:  
(Start: 5 @32101 has 42 MA's), (16, 31951),

Gene: Trooper\_47 Start: 32104, Stop: 31925, Start Num: 5  
Candidate Starts for Trooper\_47:  
(Start: 5 @32104 has 42 MA's), (10, 32059),

Gene: Turbido\_47 Start: 32138, Stop: 31950, Start Num: 5  
Candidate Starts for Turbido\_47:  
(Start: 5 @32138 has 42 MA's), (16, 31988),

Gene: Updawg\_47 Start: 31988, Stop: 31803, Start Num: 5  
Candidate Starts for Updawg\_47:  
(Start: 5 @31988 has 42 MA's), (16, 31838),

Gene: VA6\_45 Start: 31667, Stop: 31479, Start Num: 5  
Candidate Starts for VA6\_45:  
(Start: 5 @31667 has 42 MA's), (16, 31517),

Gene: Whabigail7\_47 Start: 32123, Stop: 31938, Start Num: 5  
Candidate Starts for Whabigail7\_47:  
(Start: 5 @32123 has 42 MA's), (10, 32078), (16, 31973),

Gene: WideWale\_47 Start: 31988, Stop: 31803, Start Num: 5  
Candidate Starts for WideWale\_47:  
(Start: 5 @31988 has 42 MA's), (16, 31838),