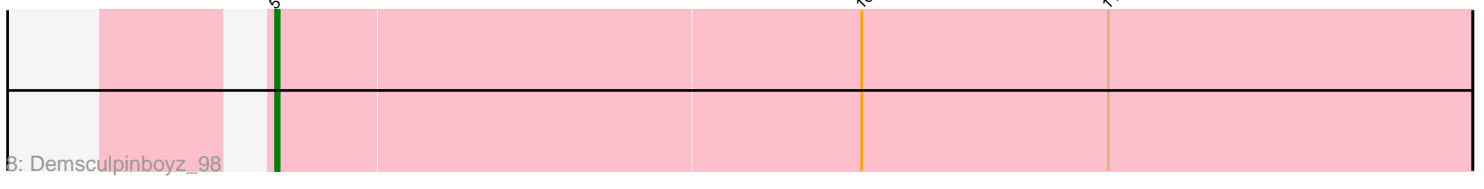
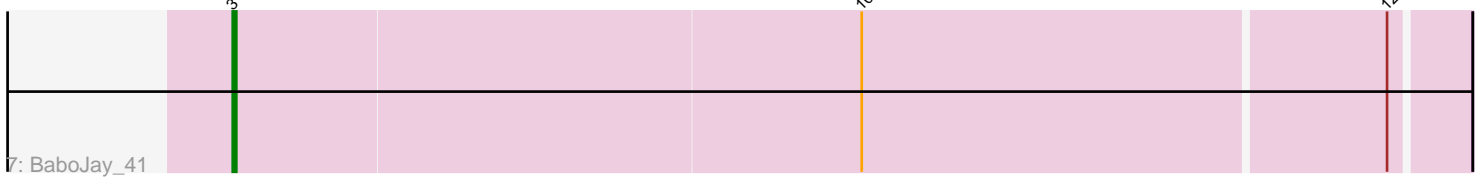
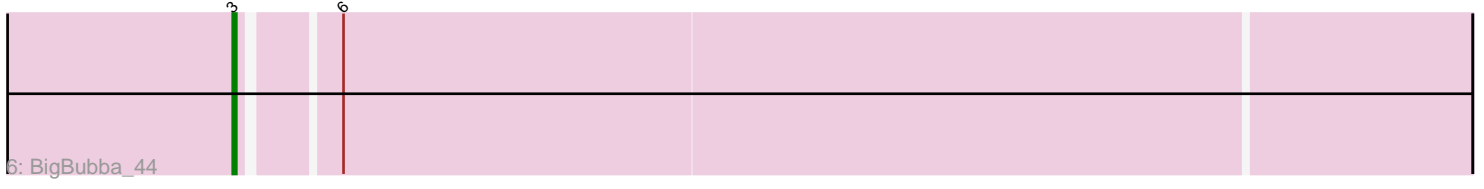
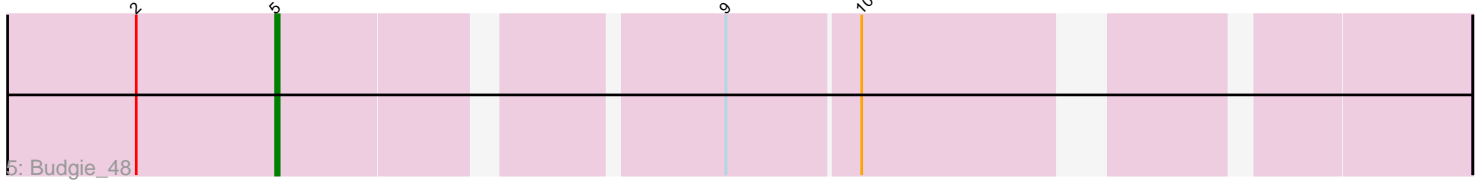
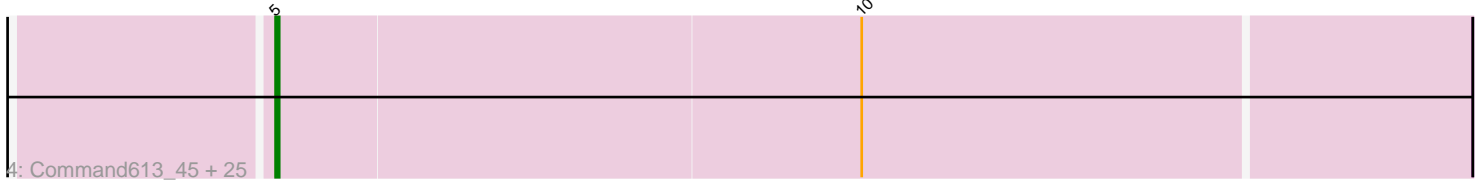
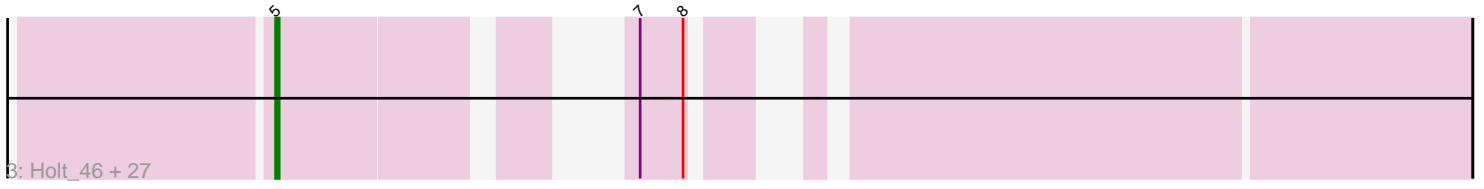
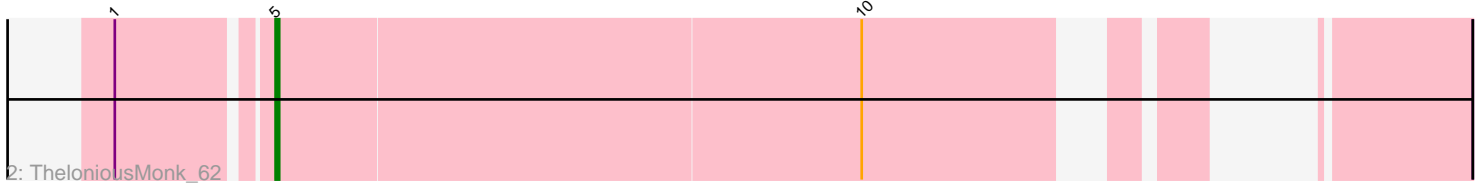
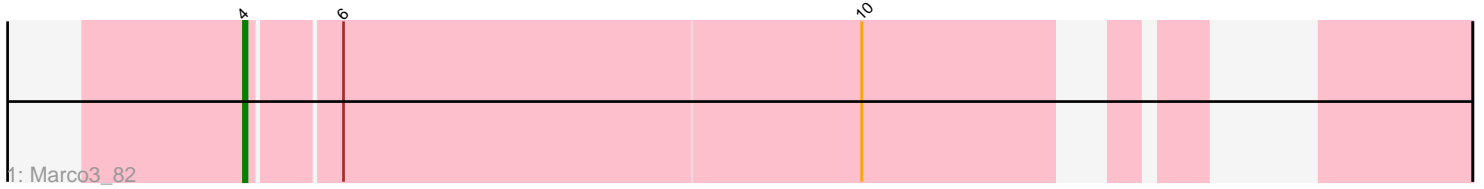


Pham 301399



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 301399 Report

This analysis was run 06/08/26 on database version 649.

Pham number 301399 has 60 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Marco3\_82
- Track 2 : TheloniousMonk\_62
- Track 3 : Holt\_46, Becksu\_44, MISSy\_43, Palpatine\_46, Phaux\_45, MPhalcon\_43, Buck\_44, Murica\_45, Petra64142\_48, Kostya\_44, Liveloughbron\_47, Nala\_44, HufflyPuff\_45, Terminus\_45, TeamEdward\_45, Rimmer\_44, Quallification\_44, StormChicken\_45, Greep\_47, Policronamos\_46, xkcd\_47, FireRed\_46, FairyPath\_43, PhatBacter\_46, Youngblood\_45, BugsBunny\_44, Nimrod\_46, Misfit\_45
- Track 4 : Command613\_45, Icee\_43, Goldilocks\_45, AmericanBeauty\_47, Sotrice96\_44, Moldemort\_46, Gage\_46, Hoonter\_46, StolenFromERC\_46, Thimble\_45, Highbury\_44, Rakim\_45, Stank\_47, Cactus\_45, Kimchi\_46, Asriel\_43, Adnama\_47, Barbarian\_43, Saints25\_44, Gemini\_47, Argent26\_46, Wiggin\_45, Bask21\_44, GooberAzure\_46, TBrady12\_46, GoldenSpark\_46
- Track 5 : Budgie\_48
- Track 6 : BigBubba\_44
- Track 7 : BaboJay\_41
- Track 8 : Demsculpinboyz\_98

### ***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 50 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adnama\_47, AmericanBeauty\_47, Argent26\_46, Asriel\_43, Barbarian\_43, Bask21\_44, Becksu\_44, Buck\_44, Budgie\_48, BugsBunny\_44, Cactus\_45, Command613\_45, Demsculpinboyz\_98, FairyPath\_43, FireRed\_46, Gage\_46, Gemini\_47, GoldenSpark\_46, Goldilocks\_45, GooberAzure\_46, Greep\_47, Highbury\_44, Holt\_46, Hoonter\_46, HufflyPuff\_45, Icee\_43, Kimchi\_46, Kostya\_44, Liveloughbron\_47, MISSy\_43, MPhalcon\_43, Misfit\_45, Moldemort\_46, Murica\_45, Nala\_44, Nimrod\_46, Palpatine\_46, Petra64142\_48, PhatBacter\_46, Phaux\_45, Policronamos\_46, Quallification\_44, Rakim\_45, Rimmer\_44, Saints25\_44, Sotrice96\_44, Stank\_47, StolenFromERC\_46, StormChicken\_45, TBrady12\_46, TeamEdward\_45, Terminus\_45, TheloniousMonk\_62, Thimble\_45, Wiggin\_45, Youngblood\_45, xkcd\_47,

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

- 

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

- BaboJay\_41, BigBubba\_44, Marco3\_82,

### Summary by start number:

Start 3:

- Found in 2 of 60 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaboJay\_41 (E), BigBubba\_44 (E),

Start 4:

- Found in 1 of 60 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marco3\_82 (A1),

Start 5:

- Found in 57 of 60 ( 95.0% ) of genes in pham
- Manual Annotations of this start: 50 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adnama\_47 (E), AmericanBeauty\_47 (E), Argent26\_46 (E), Asriel\_43 (E), Barbarian\_43 (E), Bask21\_44 (E), Becksu\_44 (E), Buck\_44 (E), Budgie\_48 (E), BugsBunny\_44 (E), Cactus\_45 (E), Command613\_45 (E), Demsculpinboyz\_98 (F2), FairyPath\_43 (E), FireRed\_46 (E), Gage\_46 (E), Gemini\_47 (E), GoldenSpark\_46 (E), Goldilocks\_45 (E), GooberAzure\_46 (E), Greep\_47 (E), Highbury\_44 (E), Holt\_46 (E), Hoonter\_46 (E), HufflyPuff\_45 (E), Icee\_43 (E), Kimchi\_46 (E), Kostya\_44 (E), Liveloughbron\_47 (E), MISSy\_43 (E), MPhalcon\_43 (E), Misfit\_45 (E), Moldemort\_46 (E), Murica\_45 (E), Nala\_44 (E), Nimrod\_46 (E), Palpatine\_46 (E), Petra64142\_48 (E), PhatBacter\_46 (E), Phaux\_45 (E), Policronamos\_46 (E), Quallification\_44 (E), Rakim\_45 (E), Rimmer\_44 (E), Saints25\_44 (E), Sotrice96\_44 (E), Stank\_47 (E), StolenFromERC\_46 (E), StormChicken\_45 (E), TBrady12\_46 (E), TeamEdward\_45 (E), Terminus\_45 (E), TheloniousMonk\_62 (A1), Thimble\_45 (E), Wiggin\_45 (E), Youngblood\_45 (E), xkcd\_47 (E),

### Summary by clusters:

There are 3 clusters represented in this pham: A1, F2, E,

Info for manual annotations of cluster A1:

- Start number 4 was manually annotated 1 time for cluster A1.
- Start number 5 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster E:

- Start number 3 was manually annotated 2 times for cluster E.
- Start number 5 was manually annotated 48 times for cluster E.

Info for manual annotations of cluster F2:

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

**Gene Information:**

Gene: Adnama\_47 Start: 36141, Stop: 35812, Start Num: 5

Candidate Starts for Adnama\_47:

(Start: 5 @36141 has 50 MA's), (10, 35979),

Gene: AmericanBeauty\_47 Start: 35986, Stop: 35657, Start Num: 5

Candidate Starts for AmericanBeauty\_47:

(Start: 5 @35986 has 50 MA's), (10, 35824),

Gene: Argent26\_46 Start: 35624, Stop: 35295, Start Num: 5

Candidate Starts for Argent26\_46:

(Start: 5 @35624 has 50 MA's), (10, 35462),

Gene: Asriel\_43 Start: 34478, Stop: 34149, Start Num: 5

Candidate Starts for Asriel\_43:

(Start: 5 @34478 has 50 MA's), (10, 34316),

Gene: BaboJay\_41 Start: 35075, Stop: 34737, Start Num: 3

Candidate Starts for BaboJay\_41:

(Start: 3 @35075 has 2 MA's), (10, 34901), (12, 34757),

Gene: Barbarian\_43 Start: 34478, Stop: 34149, Start Num: 5

Candidate Starts for Barbarian\_43:

(Start: 5 @34478 has 50 MA's), (10, 34316),

Gene: Bask21\_44 Start: 34812, Stop: 34483, Start Num: 5

Candidate Starts for Bask21\_44:

(Start: 5 @34812 has 50 MA's), (10, 34650),

Gene: Becksu\_44 Start: 35976, Stop: 35701, Start Num: 5

Candidate Starts for Becksu\_44:

(Start: 5 @35976 has 50 MA's), (7, 35904), (8, 35892),

Gene: BigBubba\_44 Start: 35433, Stop: 35098, Start Num: 3

Candidate Starts for BigBubba\_44:

(Start: 3 @35433 has 2 MA's), (6, 35409),

Gene: Buck\_44 Start: 36027, Stop: 35752, Start Num: 5

Candidate Starts for Buck\_44:

(Start: 5 @36027 has 50 MA's), (7, 35955), (8, 35943),

Gene: Budgie\_48 Start: 35683, Stop: 35390, Start Num: 5

Candidate Starts for Budgie\_48:

(2, 35722), (Start: 5 @35683 has 50 MA's), (9, 35572), (10, 35536),

Gene: BugsBunny\_44 Start: 35858, Stop: 35583, Start Num: 5

Candidate Starts for BugsBunny\_44:

(Start: 5 @35858 has 50 MA's), (7, 35786), (8, 35774),

Gene: Cactus\_45 Start: 34845, Stop: 34516, Start Num: 5  
Candidate Starts for Cactus\_45:  
(Start: 5 @34845 has 50 MA's), (10, 34683),

Gene: Command613\_45 Start: 35884, Stop: 35555, Start Num: 5  
Candidate Starts for Command613\_45:  
(Start: 5 @35884 has 50 MA's), (10, 35722),

Gene: Demsculpinboyz\_98 Start: 49573, Stop: 49905, Start Num: 5  
Candidate Starts for Demsculpinboyz\_98:  
(Start: 5 @49573 has 50 MA's), (10, 49735), (11, 49804),

Gene: FairyPath\_43 Start: 35922, Stop: 35647, Start Num: 5  
Candidate Starts for FairyPath\_43:  
(Start: 5 @35922 has 50 MA's), (7, 35850), (8, 35838),

Gene: FireRed\_46 Start: 36297, Stop: 36022, Start Num: 5  
Candidate Starts for FireRed\_46:  
(Start: 5 @36297 has 50 MA's), (7, 36225), (8, 36213),

Gene: Gage\_46 Start: 35624, Stop: 35295, Start Num: 5  
Candidate Starts for Gage\_46:  
(Start: 5 @35624 has 50 MA's), (10, 35462),

Gene: Gemini\_47 Start: 36141, Stop: 35812, Start Num: 5  
Candidate Starts for Gemini\_47:  
(Start: 5 @36141 has 50 MA's), (10, 35979),

Gene: GoldenSpark\_46 Start: 35624, Stop: 35295, Start Num: 5  
Candidate Starts for GoldenSpark\_46:  
(Start: 5 @35624 has 50 MA's), (10, 35462),

Gene: Goldilocks\_45 Start: 35126, Stop: 34797, Start Num: 5  
Candidate Starts for Goldilocks\_45:  
(Start: 5 @35126 has 50 MA's), (10, 34964),

Gene: GooberAzure\_46 Start: 35624, Stop: 35295, Start Num: 5  
Candidate Starts for GooberAzure\_46:  
(Start: 5 @35624 has 50 MA's), (10, 35462),

Gene: Greep\_47 Start: 36589, Stop: 36314, Start Num: 5  
Candidate Starts for Greep\_47:  
(Start: 5 @36589 has 50 MA's), (7, 36517), (8, 36505),

Gene: Highbury\_44 Start: 35223, Stop: 34894, Start Num: 5  
Candidate Starts for Highbury\_44:  
(Start: 5 @35223 has 50 MA's), (10, 35061),

Gene: Holt\_46 Start: 35597, Stop: 35322, Start Num: 5  
Candidate Starts for Holt\_46:  
(Start: 5 @35597 has 50 MA's), (7, 35525), (8, 35513),

Gene: Hoonter\_46 Start: 35624, Stop: 35295, Start Num: 5  
Candidate Starts for Hoonter\_46:  
(Start: 5 @35624 has 50 MA's), (10, 35462),

Gene: HufflyPuff\_45 Start: 36253, Stop: 35978, Start Num: 5  
Candidate Starts for HufflyPuff\_45:  
(Start: 5 @36253 has 50 MA's), (7, 36181), (8, 36169),

Gene: Icee\_43 Start: 35292, Stop: 34963, Start Num: 5  
Candidate Starts for Icee\_43:  
(Start: 5 @35292 has 50 MA's), (10, 35130),

Gene: Kimchi\_46 Start: 35627, Stop: 35298, Start Num: 5  
Candidate Starts for Kimchi\_46:  
(Start: 5 @35627 has 50 MA's), (10, 35465),

Gene: Kostya\_44 Start: 35744, Stop: 35469, Start Num: 5  
Candidate Starts for Kostya\_44:  
(Start: 5 @35744 has 50 MA's), (7, 35672), (8, 35660),

Gene: Liveloughbron\_47 Start: 36383, Stop: 36108, Start Num: 5  
Candidate Starts for Liveloughbron\_47:  
(Start: 5 @36383 has 50 MA's), (7, 36311), (8, 36299),

Gene: MISSy\_43 Start: 35306, Stop: 35031, Start Num: 5  
Candidate Starts for MISSy\_43:  
(Start: 5 @35306 has 50 MA's), (7, 35234), (8, 35222),

Gene: MPhalcon\_43 Start: 35299, Stop: 35024, Start Num: 5  
Candidate Starts for MPhalcon\_43:  
(Start: 5 @35299 has 50 MA's), (7, 35227), (8, 35215),

Gene: Marco3\_82 Start: 49254, Stop: 48967, Start Num: 4  
Candidate Starts for Marco3\_82:  
(Start: 4 @49254 has 1 MA's), (6, 49230), (10, 49086),

Gene: Misfit\_45 Start: 36318, Stop: 36043, Start Num: 5  
Candidate Starts for Misfit\_45:  
(Start: 5 @36318 has 50 MA's), (7, 36246), (8, 36234),

Gene: Moldemort\_46 Start: 35741, Stop: 35412, Start Num: 5  
Candidate Starts for Moldemort\_46:  
(Start: 5 @35741 has 50 MA's), (10, 35579),

Gene: Murica\_45 Start: 36253, Stop: 35978, Start Num: 5  
Candidate Starts for Murica\_45:  
(Start: 5 @36253 has 50 MA's), (7, 36181), (8, 36169),

Gene: Nala\_44 Start: 35811, Stop: 35536, Start Num: 5  
Candidate Starts for Nala\_44:  
(Start: 5 @35811 has 50 MA's), (7, 35739), (8, 35727),

Gene: Nimrod\_46 Start: 36511, Stop: 36236, Start Num: 5

Candidate Starts for Nimrod\_46:  
(Start: 5 @36511 has 50 MA's), (7, 36439), (8, 36427),

Gene: Palpatine\_46 Start: 36283, Stop: 36008, Start Num: 5  
Candidate Starts for Palpatine\_46:  
(Start: 5 @36283 has 50 MA's), (7, 36211), (8, 36199),

Gene: Petra64142\_48 Start: 36747, Stop: 36472, Start Num: 5  
Candidate Starts for Petra64142\_48:  
(Start: 5 @36747 has 50 MA's), (7, 36675), (8, 36663),

Gene: PhatBacter\_46 Start: 36297, Stop: 36022, Start Num: 5  
Candidate Starts for PhatBacter\_46:  
(Start: 5 @36297 has 50 MA's), (7, 36225), (8, 36213),

Gene: Phaux\_45 Start: 36295, Stop: 36020, Start Num: 5  
Candidate Starts for Phaux\_45:  
(Start: 5 @36295 has 50 MA's), (7, 36223), (8, 36211),

Gene: Policronamos\_46 Start: 36295, Stop: 36020, Start Num: 5  
Candidate Starts for Policronamos\_46:  
(Start: 5 @36295 has 50 MA's), (7, 36223), (8, 36211),

Gene: Quallification\_44 Start: 35933, Stop: 35658, Start Num: 5  
Candidate Starts for Quallification\_44:  
(Start: 5 @35933 has 50 MA's), (7, 35861), (8, 35849),

Gene: Rakim\_45 Start: 35740, Stop: 35411, Start Num: 5  
Candidate Starts for Rakim\_45:  
(Start: 5 @35740 has 50 MA's), (10, 35578),

Gene: Rimmer\_44 Start: 35637, Stop: 35362, Start Num: 5  
Candidate Starts for Rimmer\_44:  
(Start: 5 @35637 has 50 MA's), (7, 35565), (8, 35553),

Gene: Saints25\_44 Start: 35223, Stop: 34894, Start Num: 5  
Candidate Starts for Saints25\_44:  
(Start: 5 @35223 has 50 MA's), (10, 35061),

Gene: Sotrice96\_44 Start: 35588, Stop: 35259, Start Num: 5  
Candidate Starts for Sotrice96\_44:  
(Start: 5 @35588 has 50 MA's), (10, 35426),

Gene: Stank\_47 Start: 36140, Stop: 35811, Start Num: 5  
Candidate Starts for Stank\_47:  
(Start: 5 @36140 has 50 MA's), (10, 35978),

Gene: StolenFromERC\_46 Start: 35624, Stop: 35295, Start Num: 5  
Candidate Starts for StolenFromERC\_46:  
(Start: 5 @35624 has 50 MA's), (10, 35462),

Gene: StormChicken\_45 Start: 36245, Stop: 35970, Start Num: 5  
Candidate Starts for StormChicken\_45:

(Start: 5 @36245 has 50 MA's), (7, 36173), (8, 36161),

Gene: TBrady12\_46 Start: 35624, Stop: 35295, Start Num: 5

Candidate Starts for TBrady12\_46:

(Start: 5 @35624 has 50 MA's), (10, 35462),

Gene: TeamEdward\_45 Start: 36242, Stop: 35967, Start Num: 5

Candidate Starts for TeamEdward\_45:

(Start: 5 @36242 has 50 MA's), (7, 36170), (8, 36158),

Gene: Terminus\_45 Start: 36318, Stop: 36043, Start Num: 5

Candidate Starts for Terminus\_45:

(Start: 5 @36318 has 50 MA's), (7, 36246), (8, 36234),

Gene: TheloniousMonk\_62 Start: 42583, Stop: 42305, Start Num: 5

Candidate Starts for TheloniousMonk\_62:

(1, 42622), (Start: 5 @42583 has 50 MA's), (10, 42421),

Gene: Thimble\_45 Start: 34806, Stop: 34477, Start Num: 5

Candidate Starts for Thimble\_45:

(Start: 5 @34806 has 50 MA's), (10, 34644),

Gene: Wiggin\_45 Start: 35708, Stop: 35379, Start Num: 5

Candidate Starts for Wiggin\_45:

(Start: 5 @35708 has 50 MA's), (10, 35546),

Gene: Youngblood\_45 Start: 36248, Stop: 35973, Start Num: 5

Candidate Starts for Youngblood\_45:

(Start: 5 @36248 has 50 MA's), (7, 36176), (8, 36164),

Gene: xkcd\_47 Start: 36438, Stop: 36163, Start Num: 5

Candidate Starts for xkcd\_47:

(Start: 5 @36438 has 50 MA's), (7, 36366), (8, 36354),