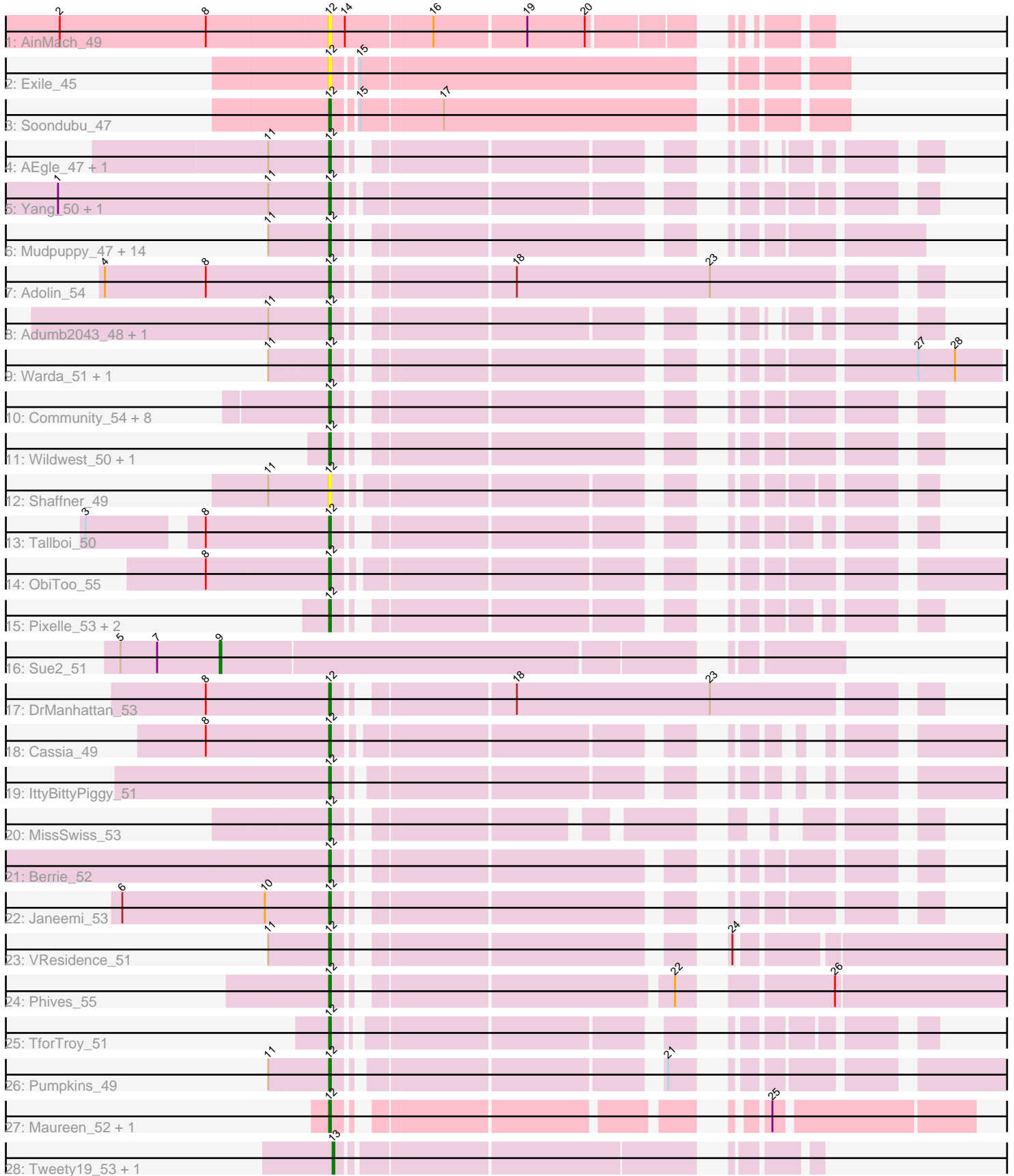


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 216190 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216190 has 59 members, 11 are drafts.

Phages represented in each track:

- Track 1 : AinMach\_49
- Track 2 : Exile\_45
- Track 3 : Soondubu\_47
- Track 4 : AEgle\_47, Nitro\_52
- Track 5 : Yang\_50, JuneStar\_52
- Track 6 : Mudpuppy\_47, Lego\_50, AGrandiflora\_53, Joemato\_51, Iter\_52, Lizalica\_50, YesChef\_51, Cyan\_51, Simpson\_53, Tutumahutu\_52, Reedo\_50, Kaylissa\_52, Ascela\_52, Powerpuff\_53, JohnDoe\_51
- Track 7 : Adolin\_54
- Track 8 : Adumb2043\_48, Turab\_48
- Track 9 : Warda\_51, Tbone\_51
- Track 10 : Community\_54, Niobe\_49, Eraser\_49, Jstan\_51, London\_49, Tuck\_54, Asa16\_49, Subaru\_50, Elezi\_49
- Track 11 : Wildwest\_50, DrSierra\_49
- Track 12 : Shaffner\_49
- Track 13 : Tallboi\_50
- Track 14 : ObiToo\_55
- Track 15 : Pixelle\_53, Tian\_51, Amyev\_52
- Track 16 : Sue2\_51
- Track 17 : DrManhattan\_53
- Track 18 : Cassia\_49
- Track 19 : IttyBittyPiggy\_51
- Track 20 : MissSwiss\_53
- Track 21 : Berrie\_52
- Track 22 : Janeemi\_53
- Track 23 : VResidence\_51
- Track 24 : Phives\_55
- Track 25 : TforTroy\_51
- Track 26 : Pumpkins\_49
- Track 27 : Maureen\_52, Liebe\_52
- Track 28 : Tweety19\_53, Snek\_52

***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 45 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle\_47, AGrandiflora\_53, Adolin\_54, Adumb2043\_48, AinMach\_49, Amyev\_52, Asa16\_49, Ascela\_52, Berrie\_52, Cassia\_49, Community\_54, Cyan\_51, DrManhattan\_53, DrSierra\_49, Elezi\_49, Eraser\_49, Exile\_45, Iter\_52, IttyBittyPiggy\_51, Janeemi\_53, Joemato\_51, JohnDoe\_51, Jstan\_51, JuneStar\_52, Kaylissa\_52, Lego\_50, Liebe\_52, Lizalica\_50, London\_49, Maureen\_52, MissSwiss\_53, Mudpuppy\_47, Niobe\_49, Nitro\_52, ObiToo\_55, Phives\_55, Pixelle\_53, Powerpuff\_53, Pumpkins\_49, Reedo\_50, Shaffner\_49, Simpson\_53, Soondubu\_47, Subaru\_50, Tallboi\_50, Tbone\_51, TforTroy\_51, Tian\_51, Tuck\_54, Turab\_48, Tutumahutu\_52, VResidence\_51, Warda\_51, Wildwest\_50, Yang\_50, YesChef\_51,

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

- 

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

- Snek\_52, Sue2\_51, Tweety19\_53,

### Summary by start number:

Start 9:

- Found in 1 of 59 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sue2\_51 (AZ1),

Start 12:

- Found in 56 of 59 ( 94.9% ) of genes in pham
- Manual Annotations of this start: 45 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle\_47 (AZ1), AGrandiflora\_53 (AZ1), Adolin\_54 (AZ1), Adumb2043\_48 (AZ1), AinMach\_49 (AZ), Amyev\_52 (AZ1), Asa16\_49 (AZ1), Ascela\_52 (AZ1), Berrie\_52 (AZ1), Cassia\_49 (AZ1), Community\_54 (AZ1), Cyan\_51 (AZ1), DrManhattan\_53 (AZ1), DrSierra\_49 (AZ1), Elezi\_49 (AZ1), Eraser\_49 (AZ1), Exile\_45 (AZ), Iter\_52 (AZ1), IttyBittyPiggy\_51 (AZ1), Janeemi\_53 (AZ1), Joemato\_51 (AZ1), JohnDoe\_51 (AZ1), Jstan\_51 (AZ1), JuneStar\_52 (AZ1), Kaylissa\_52 (AZ1), Lego\_50 (AZ1), Liebe\_52 (AZ2), Lizalica\_50 (AZ1), London\_49 (AZ1), Maureen\_52 (AZ2), MissSwiss\_53 (AZ1), Mudpuppy\_47 (AZ1), Niobe\_49 (AZ1), Nitro\_52 (AZ1), ObiToo\_55 (AZ1), Phives\_55 (AZ1), Pixelle\_53 (AZ1), Powerpuff\_53 (AZ1), Pumpkins\_49 (AZ1), Reedo\_50 (AZ1), Shaffner\_49 (AZ1), Simpson\_53 (AZ1), Soondubu\_47 (AZ), Subaru\_50 (AZ), Tallboi\_50 (AZ1), Tbone\_51 (AZ1), TforTroy\_51 (AZ1), Tian\_51 (AZ1), Tuck\_54 (AZ1), Turab\_48 (AZ1), Tutumahutu\_52 (AZ1), VResidence\_51 (AZ1), Warda\_51 (AZ1), Wildwest\_50 (AZ1), Yang\_50 (AZ1), YesChef\_51 (AZ1),

Start 13:

- Found in 2 of 59 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 2 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Snek\_52 (AZ3), Tweety19\_53 (AZ3),

## Summary by clusters:

There are 4 clusters represented in this pham: AZ1, AZ2, AZ3, AZ,

Info for manual annotations of cluster AZ:

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

Info for manual annotations of cluster AZ1:

- Start number 9 was manually annotated 1 time for cluster AZ1.
- Start number 12 was manually annotated 42 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 12 was manually annotated 2 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 13 was manually annotated 2 times for cluster AZ3.

## Gene Information:

Gene: AEgle\_47 Start: 36062, Stop: 36316, Start Num: 12

Candidate Starts for AEgle\_47:

(11, 36029), (Start: 12 @36062 has 45 MA's),

Gene: AGrandiflora\_53 Start: 37369, Stop: 37653, Start Num: 12

Candidate Starts for AGrandiflora\_53:

(11, 37336), (Start: 12 @37369 has 45 MA's),

Gene: Adolin\_54 Start: 36438, Stop: 36752, Start Num: 12

Candidate Starts for Adolin\_54:

(4, 36312), (8, 36369), (Start: 12 @36438 has 45 MA's), (18, 36525), (23, 36636),

Gene: Adumb2043\_48 Start: 36083, Stop: 36337, Start Num: 12

Candidate Starts for Adumb2043\_48:

(11, 36050), (Start: 12 @36083 has 45 MA's),

Gene: AinMach\_49 Start: 36352, Stop: 36591, Start Num: 12

Candidate Starts for AinMach\_49:

(2, 36199), (8, 36283), (Start: 12 @36352 has 45 MA's), (14, 36361), (16, 36409), (19, 36460), (20, 36493),

Gene: Amyev\_52 Start: 39535, Stop: 39798, Start Num: 12

Candidate Starts for Amyev\_52:

(Start: 12 @39535 has 45 MA's),

Gene: Asa16\_49 Start: 37619, Stop: 37879, Start Num: 12

Candidate Starts for Asa16\_49:

(Start: 12 @37619 has 45 MA's),

Gene: Ascela\_52 Start: 37685, Stop: 37954, Start Num: 12

Candidate Starts for Ascela\_52:

(11, 37652), (Start: 12 @37685 has 45 MA's),

Gene: Berrie\_52 Start: 37779, Stop: 38051, Start Num: 12  
Candidate Starts for Berrie\_52:  
(Start: 12 @37779 has 45 MA's),

Gene: Cassia\_49 Start: 36777, Stop: 37070, Start Num: 12  
Candidate Starts for Cassia\_49:  
(8, 36708), (Start: 12 @36777 has 45 MA's),

Gene: Community\_54 Start: 39171, Stop: 39443, Start Num: 12  
Candidate Starts for Community\_54:  
(Start: 12 @39171 has 45 MA's),

Gene: Cyan\_51 Start: 36938, Stop: 37210, Start Num: 12  
Candidate Starts for Cyan\_51:  
(11, 36905), (Start: 12 @36938 has 45 MA's),

Gene: DrManhattan\_53 Start: 36006, Stop: 36320, Start Num: 12  
Candidate Starts for DrManhattan\_53:  
(8, 35937), (Start: 12 @36006 has 45 MA's), (18, 36093), (23, 36204),

Gene: DrSierra\_49 Start: 35765, Stop: 36037, Start Num: 12  
Candidate Starts for DrSierra\_49:  
(Start: 12 @35765 has 45 MA's),

Gene: Elezi\_49 Start: 37617, Stop: 37877, Start Num: 12  
Candidate Starts for Elezi\_49:  
(Start: 12 @37617 has 45 MA's),

Gene: Eraser\_49 Start: 37626, Stop: 37886, Start Num: 12  
Candidate Starts for Eraser\_49:  
(Start: 12 @37626 has 45 MA's),

Gene: Exile\_45 Start: 38999, Stop: 39256, Start Num: 12  
Candidate Starts for Exile\_45:  
(Start: 12 @38999 has 45 MA's), (15, 39011),

Gene: Iter\_52 Start: 37677, Stop: 37946, Start Num: 12  
Candidate Starts for Iter\_52:  
(11, 37644), (Start: 12 @37677 has 45 MA's),

Gene: IttyBittyPiggy\_51 Start: 36368, Stop: 36658, Start Num: 12  
Candidate Starts for IttyBittyPiggy\_51:  
(Start: 12 @36368 has 45 MA's),

Gene: Janeemi\_53 Start: 38635, Stop: 38907, Start Num: 12  
Candidate Starts for Janeemi\_53:  
(6, 38518), (10, 38599), (Start: 12 @38635 has 45 MA's),

Gene: Joemato\_51 Start: 37006, Stop: 37290, Start Num: 12  
Candidate Starts for Joemato\_51:  
(11, 36973), (Start: 12 @37006 has 45 MA's),

Gene: JohnDoe\_51 Start: 37002, Stop: 37274, Start Num: 12  
Candidate Starts for JohnDoe\_51:  
(11, 36969), (Start: 12 @37002 has 45 MA's),

Gene: Jstan\_51 Start: 37621, Stop: 37881, Start Num: 12  
Candidate Starts for Jstan\_51:  
(Start: 12 @37621 has 45 MA's),

Gene: JuneStar\_52 Start: 39731, Stop: 40000, Start Num: 12  
Candidate Starts for JuneStar\_52:  
(1, 39578), (11, 39698), (Start: 12 @39731 has 45 MA's),

Gene: Kaylissa\_52 Start: 37385, Stop: 37669, Start Num: 12  
Candidate Starts for Kaylissa\_52:  
(11, 37352), (Start: 12 @37385 has 45 MA's),

Gene: Lego\_50 Start: 36705, Stop: 36989, Start Num: 12  
Candidate Starts for Lego\_50:  
(11, 36672), (Start: 12 @36705 has 45 MA's),

Gene: Liebe\_52 Start: 39105, Stop: 39404, Start Num: 12  
Candidate Starts for Liebe\_52:  
(Start: 12 @39105 has 45 MA's), (25, 39297),

Gene: Lizalica\_50 Start: 36462, Stop: 36734, Start Num: 12  
Candidate Starts for Lizalica\_50:  
(11, 36429), (Start: 12 @36462 has 45 MA's),

Gene: London\_49 Start: 37617, Stop: 37877, Start Num: 12  
Candidate Starts for London\_49:  
(Start: 12 @37617 has 45 MA's),

Gene: Maureen\_52 Start: 39104, Stop: 39403, Start Num: 12  
Candidate Starts for Maureen\_52:  
(Start: 12 @39104 has 45 MA's), (25, 39296),

Gene: MissSwiss\_53 Start: 36235, Stop: 36483, Start Num: 12  
Candidate Starts for MissSwiss\_53:  
(Start: 12 @36235 has 45 MA's),

Gene: Mudpuppy\_47 Start: 36646, Stop: 36918, Start Num: 12  
Candidate Starts for Mudpuppy\_47:  
(11, 36613), (Start: 12 @36646 has 45 MA's),

Gene: Niobe\_49 Start: 37620, Stop: 37880, Start Num: 12  
Candidate Starts for Niobe\_49:  
(Start: 12 @37620 has 45 MA's),

Gene: Nitro\_52 Start: 38740, Stop: 38985, Start Num: 12  
Candidate Starts for Nitro\_52:  
(11, 38707), (Start: 12 @38740 has 45 MA's),

Gene: ObiToo\_55 Start: 37917, Stop: 38228, Start Num: 12  
Candidate Starts for ObiToo\_55:  
(8, 37848), (Start: 12 @37917 has 45 MA's),

Gene: Phives\_55 Start: 39196, Stop: 39561, Start Num: 12  
Candidate Starts for Phives\_55:  
(Start: 12 @39196 has 45 MA's), (22, 39367), (26, 39436),

Gene: Pixelle\_53 Start: 39880, Stop: 40143, Start Num: 12  
Candidate Starts for Pixelle\_53:  
(Start: 12 @39880 has 45 MA's),

Gene: Powerpuff\_53 Start: 38092, Stop: 38376, Start Num: 12  
Candidate Starts for Powerpuff\_53:  
(11, 38059), (Start: 12 @38092 has 45 MA's),

Gene: Pumpkins\_49 Start: 37435, Stop: 37743, Start Num: 12  
Candidate Starts for Pumpkins\_49:  
(11, 37402), (Start: 12 @37435 has 45 MA's), (21, 37597),

Gene: Reedo\_50 Start: 35488, Stop: 35727, Start Num: 12  
Candidate Starts for Reedo\_50:  
(11, 35455), (Start: 12 @35488 has 45 MA's),

Gene: Shaffner\_49 Start: 37408, Stop: 37677, Start Num: 12  
Candidate Starts for Shaffner\_49:  
(11, 37375), (Start: 12 @37408 has 45 MA's),

Gene: Simpson\_53 Start: 37010, Stop: 37294, Start Num: 12  
Candidate Starts for Simpson\_53:  
(11, 36977), (Start: 12 @37010 has 45 MA's),

Gene: Snek\_52 Start: 36382, Stop: 36615, Start Num: 13  
Candidate Starts for Snek\_52:  
(Start: 13 @36382 has 2 MA's),

Gene: Soondubu\_47 Start: 39482, Stop: 39739, Start Num: 12  
Candidate Starts for Soondubu\_47:  
(Start: 12 @39482 has 45 MA's), (15, 39494), (17, 39539),

Gene: Subaru\_50 Start: 37617, Stop: 37877, Start Num: 12  
Candidate Starts for Subaru\_50:  
(Start: 12 @37617 has 45 MA's),

Gene: Sue2\_51 Start: 36740, Stop: 37063, Start Num: 9  
Candidate Starts for Sue2\_51:  
(5, 36683), (7, 36704), (Start: 9 @36740 has 1 MA's),

Gene: Tallboi\_50 Start: 37975, Stop: 38235, Start Num: 12  
Candidate Starts for Tallboi\_50:  
(3, 37849), (8, 37906), (Start: 12 @37975 has 45 MA's),

Gene: Tbone\_51 Start: 37543, Stop: 37860, Start Num: 12

Candidate Starts for Tbone\_51:  
(11, 37510), (Start: 12 @37543 has 45 MA's), (27, 37813), (28, 37834),

Gene: TforTroy\_51 Start: 37334, Stop: 37600, Start Num: 12  
Candidate Starts for TforTroy\_51:  
(Start: 12 @37334 has 45 MA's),

Gene: Tian\_51 Start: 39535, Stop: 39798, Start Num: 12  
Candidate Starts for Tian\_51:  
(Start: 12 @39535 has 45 MA's),

Gene: Tuck\_54 Start: 39079, Stop: 39351, Start Num: 12  
Candidate Starts for Tuck\_54:  
(Start: 12 @39079 has 45 MA's),

Gene: Turab\_48 Start: 36106, Stop: 36360, Start Num: 12  
Candidate Starts for Turab\_48:  
(11, 36073), (Start: 12 @36106 has 45 MA's),

Gene: Tutumahutu\_52 Start: 36975, Stop: 37247, Start Num: 12  
Candidate Starts for Tutumahutu\_52:  
(11, 36942), (Start: 12 @36975 has 45 MA's),

Gene: Tweety19\_53 Start: 36382, Stop: 36615, Start Num: 13  
Candidate Starts for Tweety19\_53:  
(Start: 13 @36382 has 2 MA's),

Gene: VResidence\_51 Start: 36422, Stop: 36793, Start Num: 12  
Candidate Starts for VResidence\_51:  
(11, 36389), (Start: 12 @36422 has 45 MA's), (24, 36602),

Gene: Warda\_51 Start: 37041, Stop: 37358, Start Num: 12  
Candidate Starts for Warda\_51:  
(11, 37008), (Start: 12 @37041 has 45 MA's), (27, 37311), (28, 37332),

Gene: Wildwest\_50 Start: 37020, Stop: 37292, Start Num: 12  
Candidate Starts for Wildwest\_50:  
(Start: 12 @37020 has 45 MA's),

Gene: Yang\_50 Start: 37140, Stop: 37409, Start Num: 12  
Candidate Starts for Yang\_50:  
(1, 36987), (11, 37107), (Start: 12 @37140 has 45 MA's),

Gene: YesChef\_51 Start: 36951, Stop: 37235, Start Num: 12  
Candidate Starts for YesChef\_51:  
(11, 36918), (Start: 12 @36951 has 45 MA's),