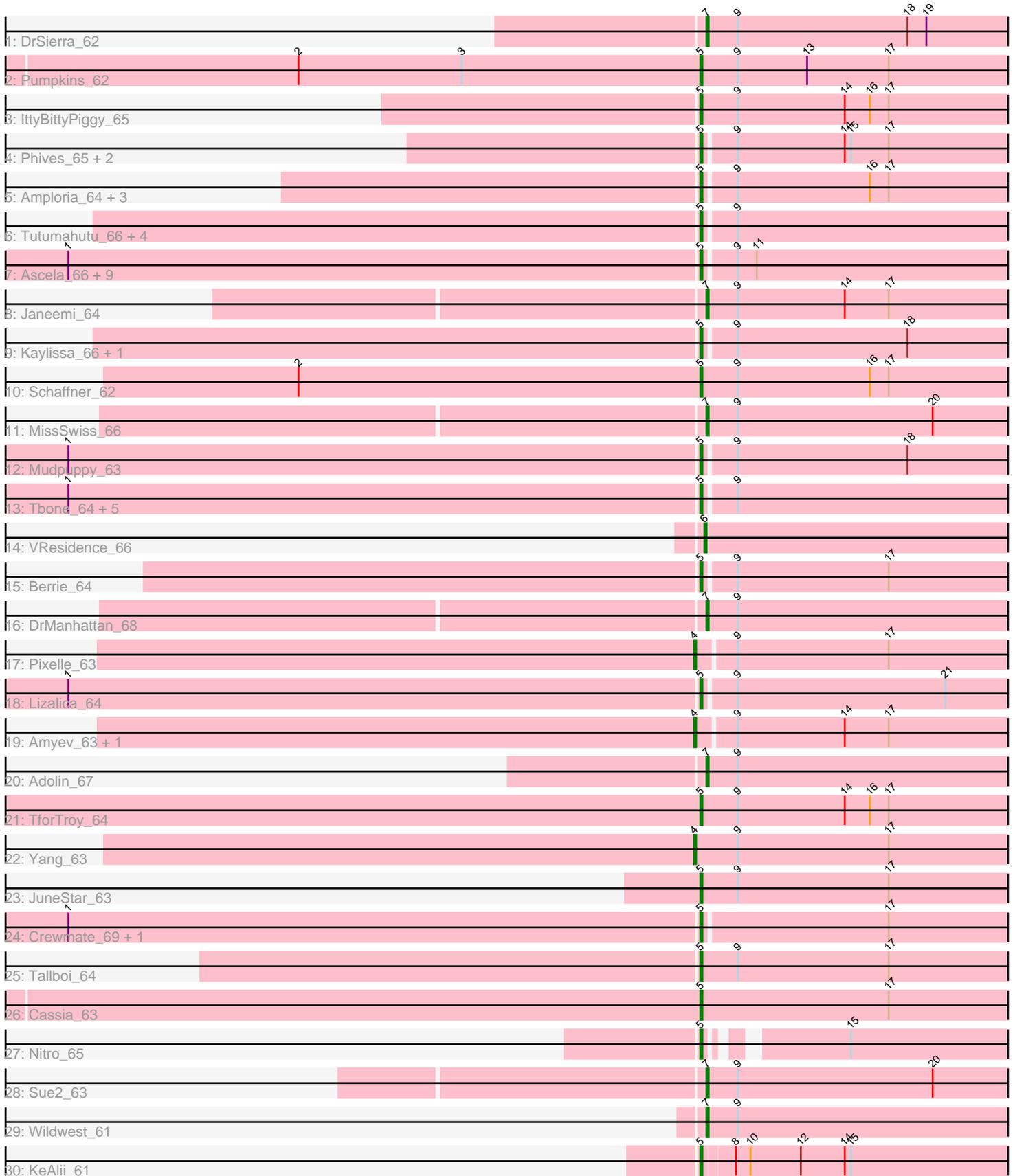


Pham 291212



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 291212 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291212 has 56 members, 11 are drafts.

Phages represented in each track:

- Track 1 : DrSierra\_62
- Track 2 : Pumpkins\_62
- Track 3 : IttyBittyPiggy\_65
- Track 4 : Phives\_65, Tuck\_64, Community\_64
- Track 5 : Amploria\_64, Adumb2043\_63, Turab\_63, AEgle\_62
- Track 6 : Tutumahutu\_66, Lego\_64, Flutur\_64, Cyan\_65, JohnDoe\_65
- Track 7 : Ascela\_66, Skelbel\_65, Eraser\_64, Asa16\_64, London\_64, Subaru\_64, Elezi\_63, Niobe\_64, Iter\_65, Jstan\_65
- Track 8 : Janeemi\_64
- Track 9 : Kaylissa\_66, Warda\_65
- Track 10 : Schaffner\_62
- Track 11 : MissSwiss\_66
- Track 12 : Mudpuppy\_63
- Track 13 : Tbone\_64, Powerpuff\_66, Joemato\_66, YesChef\_64, Simpson\_70, AGrandiflora\_66
- Track 14 : VResidence\_66
- Track 15 : Berrie\_64
- Track 16 : DrManhattan\_68
- Track 17 : Pixelle\_63
- Track 18 : Lizalica\_64
- Track 19 : Amyev\_63, Tian\_62
- Track 20 : Adolin\_67
- Track 21 : TforTroy\_64
- Track 22 : Yang\_63
- Track 23 : JuneStar\_63
- Track 24 : Crewmate\_69, ObiToo\_69
- Track 25 : Tallboi\_64
- Track 26 : Cassia\_63
- Track 27 : Nitro\_65
- Track 28 : Sue2\_63
- Track 29 : Wildwest\_61
- Track 30 : KeAlii\_61

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

Genes that call this "Most Annotated" start:

- AEgle\_62, AGrandiflora\_66, Adumb2043\_63, Amploria\_64, Asa16\_64, Ascela\_66, Berrie\_64, Cassia\_63, Community\_64, Crewmate\_69, Cyan\_65, Elezi\_63, Eraser\_64, Flutur\_64, Iter\_65, IttyBittyPiggy\_65, Joemato\_66, JohnDoe\_65, Jstan\_65, JuneStar\_63, Kaylissa\_66, KeAlii\_61, Lego\_64, Lizalica\_64, London\_64, Mudpuppy\_63, Niobe\_64, Nitro\_65, ObiToo\_69, Phives\_65, Powerpuff\_66, Pumpkins\_62, Schaffner\_62, Simpson\_70, Skelbel\_65, Subaru\_64, Tallboi\_64, Tbone\_64, TforTroy\_64, Tuck\_64, Turab\_63, Tutumahutu\_66, Warda\_65, YesChef\_64,

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

- 

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

- Adolin\_67, Amyev\_63, DrManhattan\_68, DrSierra\_62, Janeemi\_64, MissSwiss\_66, Pixelle\_63, Sue2\_63, Tian\_62, VResidence\_66, Wildwest\_61, Yang\_63,

### Summary by start number:

Start 4:

- Found in 4 of 56 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 3 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amyev\_63 (AZ1), Pixelle\_63 (AZ1), Tian\_62 (AZ1), Yang\_63 (AZ1),

Start 5:

- Found in 44 of 56 ( 78.6% ) of genes in pham
- Manual Annotations of this start: 34 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle\_62 (AZ1), AGrandiflora\_66 (AZ1), Adumb2043\_63 (AZ1), Amploria\_64 (AZ1), Asa16\_64 (AZ1), Ascela\_66 (AZ1), Berrie\_64 (AZ1), Cassia\_63 (AZ1), Community\_64 (AZ1), Crewmate\_69 (AZ1), Cyan\_65 (AZ1), Elezi\_63 (AZ1), Eraser\_64 (AZ1), Flutur\_64 (AZ), Iter\_65 (AZ1), IttyBittyPiggy\_65 (AZ1), Joemato\_66 (AZ1), JohnDoe\_65 (AZ1), Jstan\_65 (AZ1), JuneStar\_63 (AZ1), Kaylissa\_66 (AZ1), KeAlii\_61 (AZ1), Lego\_64 (AZ1), Lizalica\_64 (AZ1), London\_64 (AZ1), Mudpuppy\_63 (AZ1), Niobe\_64 (AZ1), Nitro\_65 (AZ1), ObiToo\_69 (AZ1), Phives\_65 (AZ1), Powerpuff\_66 (AZ1), Pumpkins\_62 (AZ1), Schaffner\_62 (AZ1), Simpson\_70 (AZ1), Skelbel\_65 (AZ1), Subaru\_64 (AZ1), Tallboi\_64 (AZ1), Tbone\_64 (AZ1), TforTroy\_64 (AZ1), Tuck\_64 (AZ1), Turab\_63 (AZ1), Tutumahutu\_66 (AZ1), Warda\_65 (AZ1), YesChef\_64 (AZ1),

Start 6:

- Found in 1 of 56 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: VResidence\_66 (AZ1),

Start 7:

- Found in 7 of 56 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 7 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adolin\_67 (AZ1), DrManhattan\_68 (AZ1), DrSierra\_62 (AZ1), Janeemi\_64 (AZ1), MissSwiss\_66 (AZ1), Sue2\_63 (AZ1), Wildwest\_61 (AZ1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: AZ1, AZ,

Info for manual annotations of cluster AZ1:

- Start number 4 was manually annotated 3 times for cluster AZ1.
- Start number 5 was manually annotated 34 times for cluster AZ1.
- Start number 6 was manually annotated 1 time for cluster AZ1.
- Start number 7 was manually annotated 7 times for cluster AZ1.

### **Gene Information:**

Gene: AEgle\_62 Start: 41494, Stop: 41667, Start Num: 5

Candidate Starts for AEgle\_62:

(Start: 5 @41494 has 34 MA's), (9, 41509), (16, 41572), (17, 41581),

Gene: AGrandiflora\_66 Start: 42390, Stop: 42566, Start Num: 5

Candidate Starts for AGrandiflora\_66:

(1, 42090), (Start: 5 @42390 has 34 MA's), (9, 42405),

Gene: Adolin\_67 Start: 41553, Stop: 41723, Start Num: 7

Candidate Starts for Adolin\_67:

(Start: 7 @41553 has 7 MA's), (9, 41568),

Gene: Adumb2043\_63 Start: 41518, Stop: 41691, Start Num: 5

Candidate Starts for Adumb2043\_63:

(Start: 5 @41518 has 34 MA's), (9, 41533), (16, 41596), (17, 41605),

Gene: Amploria\_64 Start: 41698, Stop: 41871, Start Num: 5

Candidate Starts for Amploria\_64:

(Start: 5 @41698 has 34 MA's), (9, 41713), (16, 41776), (17, 41785),

Gene: Amyev\_63 Start: 42719, Stop: 42895, Start Num: 4

Candidate Starts for Amyev\_63:

(Start: 4 @42719 has 3 MA's), (9, 42737), (14, 42788), (17, 42809),

Gene: Asa16\_64 Start: 42079, Stop: 42252, Start Num: 5

Candidate Starts for Asa16\_64:

(1, 41779), (Start: 5 @42079 has 34 MA's), (9, 42094), (11, 42103),

Gene: Ascela\_66 Start: 42570, Stop: 42743, Start Num: 5

Candidate Starts for Ascela\_66:

(1, 42270), (Start: 5 @42570 has 34 MA's), (9, 42585), (11, 42594),

Gene: Berrie\_64 Start: 42174, Stop: 42350, Start Num: 5

Candidate Starts for Berrie\_64:

(Start: 5 @42174 has 34 MA's), (9, 42189), (17, 42261),

Gene: Cassia\_63 Start: 41839, Stop: 42015, Start Num: 5

Candidate Starts for Cassia\_63:

(Start: 5 @41839 has 34 MA's), (17, 41929),

Gene: Community\_64 Start: 42450, Stop: 42623, Start Num: 5

Candidate Starts for Community\_64:

(Start: 5 @42450 has 34 MA's), (9, 42465), (14, 42516), (15, 42519), (17, 42537),

Gene: Crewmate\_69 Start: 42801, Stop: 42974, Start Num: 5

Candidate Starts for Crewmate\_69:

(1, 42501), (Start: 5 @42801 has 34 MA's), (17, 42888),

Gene: Cyan\_65 Start: 42134, Stop: 42310, Start Num: 5

Candidate Starts for Cyan\_65:

(Start: 5 @42134 has 34 MA's), (9, 42149),

Gene: DrManhattan\_68 Start: 41107, Stop: 41277, Start Num: 7

Candidate Starts for DrManhattan\_68:

(Start: 7 @41107 has 7 MA's), (9, 41122),

Gene: DrSierra\_62 Start: 41236, Stop: 41409, Start Num: 7

Candidate Starts for DrSierra\_62:

(Start: 7 @41236 has 7 MA's), (9, 41251), (18, 41332), (19, 41341),

Gene: Elezi\_63 Start: 41836, Stop: 42009, Start Num: 5

Candidate Starts for Elezi\_63:

(1, 41536), (Start: 5 @41836 has 34 MA's), (9, 41851), (11, 41860),

Gene: Eraser\_64 Start: 42086, Stop: 42259, Start Num: 5

Candidate Starts for Eraser\_64:

(1, 41786), (Start: 5 @42086 has 34 MA's), (9, 42101), (11, 42110),

Gene: Flutur\_64 Start: 42415, Stop: 42591, Start Num: 5

Candidate Starts for Flutur\_64:

(Start: 5 @42415 has 34 MA's), (9, 42430),

Gene: Iter\_65 Start: 42341, Stop: 42514, Start Num: 5

Candidate Starts for Iter\_65:

(1, 42041), (Start: 5 @42341 has 34 MA's), (9, 42356), (11, 42365),

Gene: IttyBittyPiggy\_65 Start: 40560, Stop: 40736, Start Num: 5

Candidate Starts for IttyBittyPiggy\_65:

(Start: 5 @40560 has 34 MA's), (9, 40578), (14, 40629), (16, 40641), (17, 40650),

Gene: Janeemi\_64 Start: 42220, Stop: 42393, Start Num: 7

Candidate Starts for Janeemi\_64:

(Start: 7 @42220 has 7 MA's), (9, 42235), (14, 42286), (17, 42307),

Gene: Joemato\_66 Start: 42311, Stop: 42487, Start Num: 5  
Candidate Starts for Joemato\_66:  
(1, 42011), (Start: 5 @42311 has 34 MA's), (9, 42326),

Gene: JohnDoe\_65 Start: 42228, Stop: 42404, Start Num: 5  
Candidate Starts for JohnDoe\_65:  
(Start: 5 @42228 has 34 MA's), (9, 42243),

Gene: Jstan\_65 Start: 41840, Stop: 42013, Start Num: 5  
Candidate Starts for Jstan\_65:  
(1, 41540), (Start: 5 @41840 has 34 MA's), (9, 41855), (11, 41864),

Gene: JuneStar\_63 Start: 42934, Stop: 43110, Start Num: 5  
Candidate Starts for JuneStar\_63:  
(Start: 5 @42934 has 34 MA's), (9, 42952), (17, 43024),

Gene: Kaylissa\_66 Start: 42590, Stop: 42763, Start Num: 5  
Candidate Starts for Kaylissa\_66:  
(Start: 5 @42590 has 34 MA's), (9, 42605), (18, 42686),

Gene: KeAlii\_61 Start: 40177, Stop: 40347, Start Num: 5  
Candidate Starts for KeAlii\_61:  
(Start: 5 @40177 has 34 MA's), (8, 40192), (10, 40198), (12, 40222), (14, 40243), (15, 40246),

Gene: Lego\_64 Start: 41909, Stop: 42085, Start Num: 5  
Candidate Starts for Lego\_64:  
(Start: 5 @41909 has 34 MA's), (9, 41924),

Gene: Lizalica\_64 Start: 41505, Stop: 41687, Start Num: 5  
Candidate Starts for Lizalica\_64:  
(1, 41205), (Start: 5 @41505 has 34 MA's), (9, 41520), (21, 41619),

Gene: London\_64 Start: 42077, Stop: 42250, Start Num: 5  
Candidate Starts for London\_64:  
(1, 41777), (Start: 5 @42077 has 34 MA's), (9, 42092), (11, 42101),

Gene: MissSwiss\_66 Start: 41111, Stop: 41281, Start Num: 7  
Candidate Starts for MissSwiss\_66:  
(Start: 7 @41111 has 7 MA's), (9, 41126), (20, 41219),

Gene: Mudpuppy\_63 Start: 42277, Stop: 42450, Start Num: 5  
Candidate Starts for Mudpuppy\_63:  
(1, 41977), (Start: 5 @42277 has 34 MA's), (9, 42292), (18, 42373),

Gene: Niobe\_64 Start: 42080, Stop: 42253, Start Num: 5  
Candidate Starts for Niobe\_64:  
(1, 41780), (Start: 5 @42080 has 34 MA's), (9, 42095), (11, 42104),

Gene: Nitro\_65 Start: 42777, Stop: 42935, Start Num: 5  
Candidate Starts for Nitro\_65:  
(Start: 5 @42777 has 34 MA's), (15, 42831),

Gene: ObiToo\_69 Start: 42417, Stop: 42590, Start Num: 5

Candidate Starts for ObiToo\_69:

(1, 42117), (Start: 5 @42417 has 34 MA's), (17, 42504),

Gene: Phives\_65 Start: 42565, Stop: 42738, Start Num: 5

Candidate Starts for Phives\_65:

(Start: 5 @42565 has 34 MA's), (9, 42580), (14, 42631), (15, 42634), (17, 42652),

Gene: Pixelle\_63 Start: 42820, Stop: 42996, Start Num: 4

Candidate Starts for Pixelle\_63:

(Start: 4 @42820 has 3 MA's), (9, 42838), (17, 42910),

Gene: Powerpuff\_66 Start: 43113, Stop: 43289, Start Num: 5

Candidate Starts for Powerpuff\_66:

(1, 42813), (Start: 5 @43113 has 34 MA's), (9, 43128),

Gene: Pumpkins\_62 Start: 42357, Stop: 42533, Start Num: 5

Candidate Starts for Pumpkins\_62:

(2, 42165), (3, 42243), (Start: 5 @42357 has 34 MA's), (9, 42375), (13, 42408), (17, 42447),

Gene: Schaffner\_62 Start: 42040, Stop: 42216, Start Num: 5

Candidate Starts for Schaffner\_62:

(2, 41848), (Start: 5 @42040 has 34 MA's), (9, 42058), (16, 42121), (17, 42130),

Gene: Simpson\_70 Start: 42315, Stop: 42491, Start Num: 5

Candidate Starts for Simpson\_70:

(1, 42015), (Start: 5 @42315 has 34 MA's), (9, 42330),

Gene: Skelbel\_65 Start: 42080, Stop: 42253, Start Num: 5

Candidate Starts for Skelbel\_65:

(1, 41780), (Start: 5 @42080 has 34 MA's), (9, 42095), (11, 42104),

Gene: Subaru\_64 Start: 41836, Stop: 42009, Start Num: 5

Candidate Starts for Subaru\_64:

(1, 41536), (Start: 5 @41836 has 34 MA's), (9, 41851), (11, 41860),

Gene: Sue2\_63 Start: 40808, Stop: 40984, Start Num: 7

Candidate Starts for Sue2\_63:

(Start: 7 @40808 has 7 MA's), (9, 40823), (20, 40916),

Gene: Tallboi\_64 Start: 42082, Stop: 42258, Start Num: 5

Candidate Starts for Tallboi\_64:

(Start: 5 @42082 has 34 MA's), (9, 42100), (17, 42172),

Gene: Tbone\_64 Start: 42564, Stop: 42737, Start Num: 5

Candidate Starts for Tbone\_64:

(1, 42264), (Start: 5 @42564 has 34 MA's), (9, 42579),

Gene: TforTroy\_64 Start: 42011, Stop: 42187, Start Num: 5

Candidate Starts for TforTroy\_64:

(Start: 5 @42011 has 34 MA's), (9, 42029), (14, 42080), (16, 42092), (17, 42101),

Gene: Tian\_62 Start: 42718, Stop: 42894, Start Num: 4

Candidate Starts for Tian\_62:

(Start: 4 @42718 has 3 MA's), (9, 42736), (14, 42787), (17, 42808),

Gene: Tuck\_64 Start: 42353, Stop: 42526, Start Num: 5

Candidate Starts for Tuck\_64:

(Start: 5 @42353 has 34 MA's), (9, 42368), (14, 42419), (15, 42422), (17, 42440),

Gene: Turab\_63 Start: 41538, Stop: 41711, Start Num: 5

Candidate Starts for Turab\_63:

(Start: 5 @41538 has 34 MA's), (9, 41553), (16, 41616), (17, 41625),

Gene: Tutumahutu\_66 Start: 42156, Stop: 42332, Start Num: 5

Candidate Starts for Tutumahutu\_66:

(Start: 5 @42156 has 34 MA's), (9, 42171),

Gene: VResidence\_66 Start: 40516, Stop: 40692, Start Num: 6

Candidate Starts for VResidence\_66:

(Start: 6 @40516 has 1 MA's),

Gene: Warda\_65 Start: 42290, Stop: 42463, Start Num: 5

Candidate Starts for Warda\_65:

(Start: 5 @42290 has 34 MA's), (9, 42305), (18, 42386),

Gene: Wildwest\_61 Start: 42225, Stop: 42398, Start Num: 7

Candidate Starts for Wildwest\_61:

(Start: 7 @42225 has 7 MA's), (9, 42240),

Gene: Yang\_63 Start: 41651, Stop: 41830, Start Num: 4

Candidate Starts for Yang\_63:

(Start: 4 @41651 has 3 MA's), (9, 41672), (17, 41744),

Gene: YesChef\_64 Start: 41972, Stop: 42148, Start Num: 5

Candidate Starts for YesChef\_64:

(1, 41672), (Start: 5 @41972 has 34 MA's), (9, 41987),