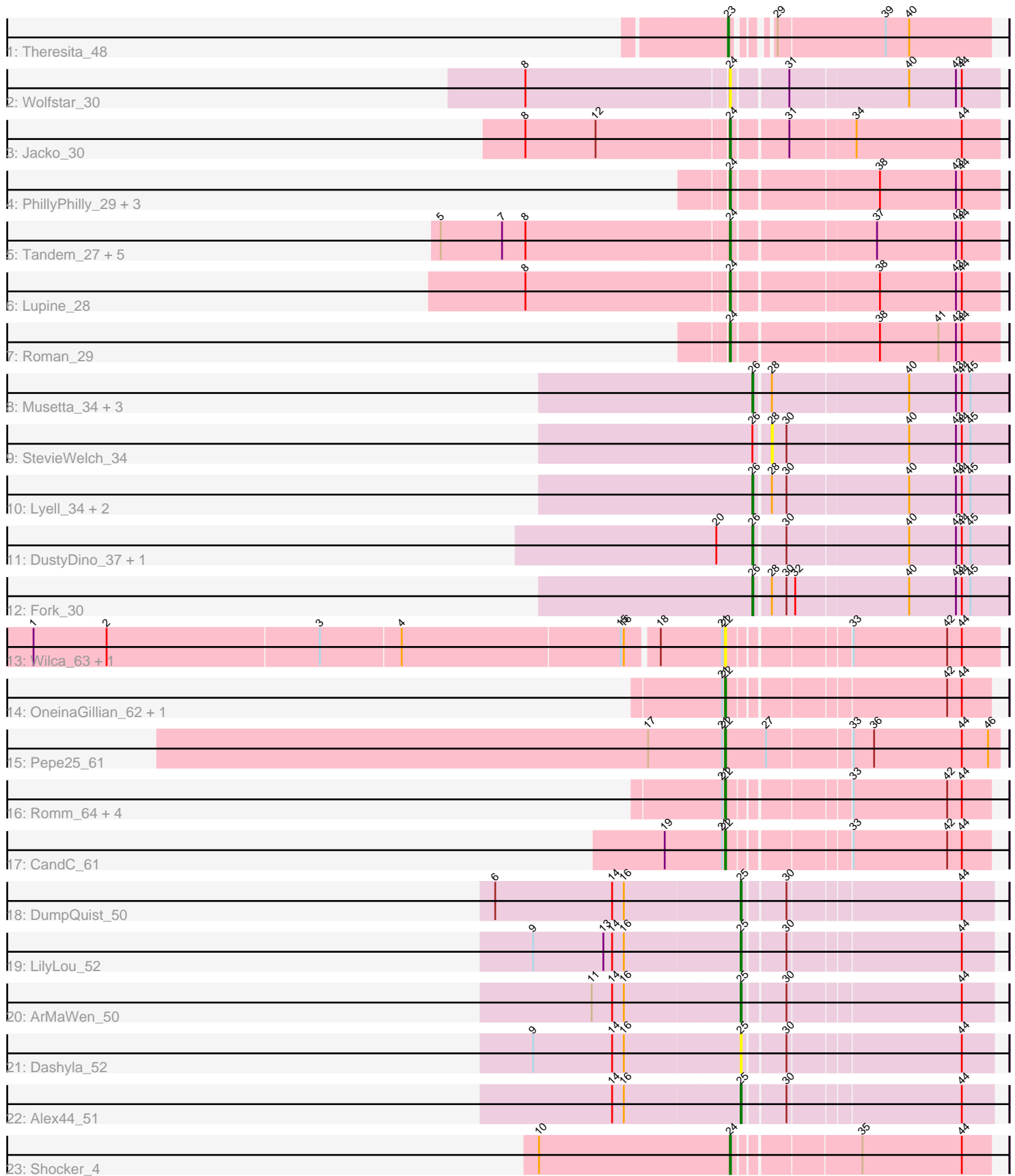


# Pham 163713



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 163713 Report

This analysis was run 05/04/24 on database version 560.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 163713 has 43 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Theresita\_48
- Track 2 : Wolfstar\_30
- Track 3 : Jacko\_30
- Track 4 : PhillyPhilly\_29, Pavlo\_28, Hubbs\_29, DejaVu\_30
- Track 5 : Tandem\_27, Platte\_27, Alleb\_28, Pioneer3\_27, OlinDD\_27, Hortus1\_27
- Track 6 : Lupine\_28
- Track 7 : Roman\_29
- Track 8 : Musetta\_34, Yuma\_33, Welcome\_35, ASegato\_33
- Track 9 : StevieWelch\_34
- Track 10 : Lyell\_34, Necrophoxinus\_36, Erenyeager\_34
- Track 11 : DustyDino\_37, RunningBrook\_36
- Track 12 : Fork\_30
- Track 13 : Wilca\_63, BirdInFrench\_63
- Track 14 : OneinaGillian\_62, Marcie\_67
- Track 15 : Pepe25\_61
- Track 16 : Romm\_64, Tempo\_62, Kelcole\_60, Fregley\_62, RobinRose\_64
- Track 17 : CandC\_61
- Track 18 : DumpQuist\_50
- Track 19 : LilyLou\_52
- Track 20 : ArMaWen\_50
- Track 21 : Dashyla\_52
- Track 22 : Alex44\_51
- Track 23 : Shocker\_4

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

The start number called the most often in the published annotations is 24, it was called in 14 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Alleb\_28, DejaVu\_30, Hortus1\_27, Hubbs\_29, Jacko\_30, Lupine\_28, OlinDD\_27, Pavlo\_28, PhillyPhilly\_29, Pioneer3\_27, Platte\_27, Roman\_29, Shocker\_4, Tandem\_27, Wolfstar\_30,

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

•

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

• ASegato\_33, Alex44\_51, ArMaWen\_50, BirdInFrench\_63, CandC\_61, Dashyla\_52, DumpQuist\_50, DustyDino\_37, Erenyeager\_34, Fork\_30, Fregley\_62, Kelcole\_60, LilyLou\_52, Lyell\_34, Marcie\_67, Musetta\_34, Necrophoxinus\_36, OneinaGillian\_62, Pepe25\_61, RobinRose\_64, Romm\_64, RunningBrook\_36, StevieWelch\_34, Tempo\_62, Theresita\_48, Welcome\_35, Wilca\_63, Yuma\_33,

### Summary by start number:

Start 22:

- Found in 11 of 43 ( 25.6% ) of genes in pham
- Manual Annotations of this start: 8 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirdInFrench\_63 (EG), CandC\_61 (EG), Fregley\_62 (EG), Kelcole\_60 (EG), Marcie\_67 (EG), OneinaGillian\_62 (EG), Pepe25\_61 (EG), RobinRose\_64 (EG), Romm\_64 (EG), Tempo\_62 (EG), Wilca\_63 (EG),

Start 23:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Theresita\_48 (EA7),

Start 24:

- Found in 15 of 43 ( 34.9% ) of genes in pham
- Manual Annotations of this start: 14 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alleb\_28 (ED1), DejaVu\_30 (ED1), Hortus1\_27 (ED1), Hubbs\_29 (ED1), Jacko\_30 (ED1), Lupine\_28 (ED1), OlinDD\_27 (ED1), Pavlo\_28 (ED1), PhillyPhilly\_29 (ED1), Pioneer3\_27 (ED1), Platte\_27 (ED1), Roman\_29 (ED1), Shocker\_4 (singleton), Tandem\_27 (ED1), Wolfstar\_30 (ED),

Start 25:

- Found in 5 of 43 ( 11.6% ) of genes in pham
- Manual Annotations of this start: 4 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alex44\_51 (EK1), ArMaWen\_50 (EK1), Dashyla\_52 (EK1), DumpQuist\_50 (EK1), LilyLou\_52 (EK1),

Start 26:

- Found in 11 of 43 ( 25.6% ) of genes in pham
- Manual Annotations of this start: 9 of 36
- Called 90.9% of time when present
- Phage (with cluster) where this start called: ASegato\_33 (ED2), DustyDino\_37 (ED2), Erenyeager\_34 (ED2), Fork\_30 (ED2), Lyell\_34 (ED2), Musetta\_34 (ED2),

Necrophoxinus\_36 (ED2), RunningBrook\_36 (ED2), Welcome\_35 (ED2), Yuma\_33 (ED2),

Start 28:

- Found in 9 of 43 ( 20.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: StevieWelch\_34 (ED2),

### **Summary by clusters:**

There are 7 clusters represented in this pham: singleton, ED, EG, ED2, ED1, EK1, EA7,

Info for manual annotations of cluster EA7:

- Start number 23 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster ED1:

- Start number 24 was manually annotated 13 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 26 was manually annotated 9 times for cluster ED2.

Info for manual annotations of cluster EG:

- Start number 22 was manually annotated 8 times for cluster EG.

Info for manual annotations of cluster EK1:

- Start number 25 was manually annotated 4 times for cluster EK1.

### **Gene Information:**

Gene: ASegato\_33 Start: 9624, Stop: 9875, Start Num: 26

Candidate Starts for ASegato\_33:

(Start: 26 @9624 has 9 MA's), (28, 9639), (40, 9774), (43, 9822), (44, 9828), (45, 9837),

Gene: Alex44\_51 Start: 51379, Stop: 51618, Start Num: 25

Candidate Starts for Alex44\_51:

(14, 51250), (16, 51262), (Start: 25 @51379 has 4 MA's), (30, 51418), (44, 51586),

Gene: Alleb\_28 Start: 8830, Stop: 9090, Start Num: 24

Candidate Starts for Alleb\_28:

(5, 8539), (7, 8602), (8, 8626), (Start: 24 @8830 has 14 MA's), (37, 8965), (43, 9046), (44, 9052),

Gene: ArMaWen\_50 Start: 50919, Stop: 51158, Start Num: 25

Candidate Starts for ArMaWen\_50:

(11, 50769), (14, 50790), (16, 50802), (Start: 25 @50919 has 4 MA's), (30, 50958), (44, 51126),

Gene: BirdInFrench\_63 Start: 42918, Stop: 42661, Start Num: 22

Candidate Starts for BirdInFrench\_63:

(1, 43611), (2, 43536), (3, 43320), (4, 43239), (15, 43017), (16, 43014), (18, 42984), (21, 42921),  
(Start: 22 @42918 has 8 MA's), (33, 42810), (42, 42714), (44, 42699),

Gene: CandC\_61 Start: 42136, Stop: 41888, Start Num: 22

Candidate Starts for CandC\_61:

(19, 42196), (21, 42139), (Start: 22 @42136 has 8 MA's), (33, 42028), (42, 41932), (44, 41917),

Gene: Dashyla\_52 Start: 51053, Stop: 51292, Start Num: 25

Candidate Starts for Dashyla\_52:

(9, 50843), (14, 50924), (16, 50936), (Start: 25 @51053 has 4 MA's), (30, 51092), (44, 51260),

Gene: DejaVu\_30 Start: 9028, Stop: 9288, Start Num: 24

Candidate Starts for DejaVu\_30:

(Start: 24 @9028 has 14 MA's), (38, 9166), (43, 9244), (44, 9250),

Gene: DumpQuist\_50 Start: 50907, Stop: 51146, Start Num: 25

Candidate Starts for DumpQuist\_50:

(6, 50658), (14, 50778), (16, 50790), (Start: 25 @50907 has 4 MA's), (30, 50946), (44, 51114),

Gene: DustyDino\_37 Start: 10571, Stop: 10822, Start Num: 26

Candidate Starts for DustyDino\_37:

(20, 10535), (Start: 26 @10571 has 9 MA's), (30, 10601), (40, 10721), (43, 10769), (44, 10775), (45, 10784),

Gene: Erenyeager\_34 Start: 9965, Stop: 10216, Start Num: 26

Candidate Starts for Erenyeager\_34:

(Start: 26 @9965 has 9 MA's), (28, 9980), (30, 9995), (40, 10115), (43, 10163), (44, 10169), (45, 10178),

Gene: Fork\_30 Start: 9281, Stop: 9532, Start Num: 26

Candidate Starts for Fork\_30:

(Start: 26 @9281 has 9 MA's), (28, 9296), (30, 9311), (32, 9320), (40, 9431), (43, 9479), (44, 9485), (45, 9494),

Gene: Fregley\_62 Start: 42305, Stop: 42057, Start Num: 22

Candidate Starts for Fregley\_62:

(21, 42308), (Start: 22 @42305 has 8 MA's), (33, 42197), (42, 42101), (44, 42086),

Gene: Hortus1\_27 Start: 8829, Stop: 9089, Start Num: 24

Candidate Starts for Hortus1\_27:

(5, 8538), (7, 8601), (8, 8625), (Start: 24 @8829 has 14 MA's), (37, 8964), (43, 9045), (44, 9051),

Gene: Hubbs\_29 Start: 9240, Stop: 9500, Start Num: 24

Candidate Starts for Hubbs\_29:

(Start: 24 @9240 has 14 MA's), (38, 9378), (43, 9456), (44, 9462),

Gene: Jacko\_30 Start: 9333, Stop: 9593, Start Num: 24

Candidate Starts for Jacko\_30:

(8, 9132), (12, 9204), (Start: 24 @9333 has 14 MA's), (31, 9384), (34, 9447), (44, 9555),

Gene: Kelcole\_60 Start: 42364, Stop: 42116, Start Num: 22

Candidate Starts for Kelcole\_60:

(21, 42367), (Start: 22 @42364 has 8 MA's), (33, 42256), (42, 42160), (44, 42145),

Gene: LilyLou\_52 Start: 51371, Stop: 51610, Start Num: 25

Candidate Starts for LilyLou\_52:

(9, 51161), (13, 51233), (14, 51242), (16, 51254), (Start: 25 @51371 has 4 MA's), (30, 51410), (44, 51578),

Gene: Lupine\_28 Start: 8912, Stop: 9172, Start Num: 24

Candidate Starts for Lupine\_28:

(8, 8711), (Start: 24 @8912 has 14 MA's), (38, 9050), (43, 9128), (44, 9134),

Gene: Lyell\_34 Start: 9883, Stop: 10134, Start Num: 26

Candidate Starts for Lyell\_34:

(Start: 26 @9883 has 9 MA's), (28, 9898), (30, 9913), (40, 10033), (43, 10081), (44, 10087), (45, 10096),

Gene: Marcie\_67 Start: 43263, Stop: 43015, Start Num: 22

Candidate Starts for Marcie\_67:

(21, 43266), (Start: 22 @43263 has 8 MA's), (42, 43059), (44, 43044),

Gene: Musetta\_34 Start: 9992, Stop: 10243, Start Num: 26

Candidate Starts for Musetta\_34:

(Start: 26 @9992 has 9 MA's), (28, 10007), (40, 10142), (43, 10190), (44, 10196), (45, 10205),

Gene: Necrophoxinus\_36 Start: 10579, Stop: 10830, Start Num: 26

Candidate Starts for Necrophoxinus\_36:

(Start: 26 @10579 has 9 MA's), (28, 10594), (30, 10609), (40, 10729), (43, 10777), (44, 10783), (45, 10792),

Gene: OlinDD\_27 Start: 8828, Stop: 9088, Start Num: 24

Candidate Starts for OlinDD\_27:

(5, 8537), (7, 8600), (8, 8624), (Start: 24 @8828 has 14 MA's), (37, 8963), (43, 9044), (44, 9050),

Gene: OneinaGillian\_62 Start: 42266, Stop: 42018, Start Num: 22

Candidate Starts for OneinaGillian\_62:

(21, 42269), (Start: 22 @42266 has 8 MA's), (42, 42062), (44, 42047),

Gene: Pavlo\_28 Start: 9187, Stop: 9447, Start Num: 24

Candidate Starts for Pavlo\_28:

(Start: 24 @9187 has 14 MA's), (38, 9325), (43, 9403), (44, 9409),

Gene: Pepe25\_61 Start: 41821, Stop: 41549, Start Num: 22

Candidate Starts for Pepe25\_61:

(17, 41899), (21, 41824), (Start: 22 @41821 has 8 MA's), (27, 41779), (33, 41698), (36, 41677), (44, 41587), (46, 41560),

Gene: PhillyPhilly\_29 Start: 9092, Stop: 9352, Start Num: 24

Candidate Starts for PhillyPhilly\_29:

(Start: 24 @9092 has 14 MA's), (38, 9230), (43, 9308), (44, 9314),

Gene: Pioneer3\_27 Start: 8827, Stop: 9087, Start Num: 24

Candidate Starts for Pioneer3\_27:

(5, 8536), (7, 8599), (8, 8623), (Start: 24 @8827 has 14 MA's), (37, 8962), (43, 9043), (44, 9049),

Gene: Platte\_27 Start: 8597, Stop: 8857, Start Num: 24

Candidate Starts for Platte\_27:

(5, 8306), (7, 8369), (8, 8393), (Start: 24 @8597 has 14 MA's), (37, 8732), (43, 8813), (44, 8819),

Gene: RobinRose\_64 Start: 42778, Stop: 42530, Start Num: 22

Candidate Starts for RobinRose\_64:

(21, 42781), (Start: 22 @42778 has 8 MA's), (33, 42670), (42, 42574), (44, 42559),

Gene: Roman\_29 Start: 9087, Stop: 9347, Start Num: 24

Candidate Starts for Roman\_29:

(Start: 24 @9087 has 14 MA's), (38, 9225), (41, 9285), (43, 9303), (44, 9309),

Gene: Romm\_64 Start: 42775, Stop: 42527, Start Num: 22

Candidate Starts for Romm\_64:

(21, 42778), (Start: 22 @42775 has 8 MA's), (33, 42667), (42, 42571), (44, 42556),

Gene: RunningBrook\_36 Start: 10571, Stop: 10822, Start Num: 26

Candidate Starts for RunningBrook\_36:

(20, 10535), (Start: 26 @10571 has 9 MA's), (30, 10601), (40, 10721), (43, 10769), (44, 10775), (45, 10784),

Gene: Shocker\_4 Start: 1170, Stop: 1418, Start Num: 24

Candidate Starts for Shocker\_4:

(10, 975), (Start: 24 @1170 has 14 MA's), (35, 1287), (44, 1389),

Gene: StevieWelch\_34 Start: 9986, Stop: 10222, Start Num: 28

Candidate Starts for StevieWelch\_34:

(Start: 26 @9971 has 9 MA's), (28, 9986), (30, 10001), (40, 10121), (43, 10169), (44, 10175), (45, 10184),

Gene: Tandem\_27 Start: 8766, Stop: 9026, Start Num: 24

Candidate Starts for Tandem\_27:

(5, 8475), (7, 8538), (8, 8562), (Start: 24 @8766 has 14 MA's), (37, 8901), (43, 8982), (44, 8988),

Gene: Tempo\_62 Start: 42643, Stop: 42395, Start Num: 22

Candidate Starts for Tempo\_62:

(21, 42646), (Start: 22 @42643 has 8 MA's), (33, 42535), (42, 42439), (44, 42424),

Gene: Theresita\_48 Start: 29943, Stop: 30182, Start Num: 23

Candidate Starts for Theresita\_48:

(Start: 23 @29943 has 1 MA's), (29, 29967), (39, 30075), (40, 30099),

Gene: Welcome\_35 Start: 9988, Stop: 10239, Start Num: 26

Candidate Starts for Welcome\_35:

(Start: 26 @9988 has 9 MA's), (28, 10003), (40, 10138), (43, 10186), (44, 10192), (45, 10201),

Gene: Wilca\_63 Start: 42918, Stop: 42661, Start Num: 22

Candidate Starts for Wilca\_63:

(1, 43611), (2, 43536), (3, 43320), (4, 43239), (15, 43017), (16, 43014), (18, 42984), (21, 42921),  
(Start: 22 @42918 has 8 MA's), (33, 42810), (42, 42714), (44, 42699),

Gene: Wolfstar\_30 Start: 9600, Stop: 9860, Start Num: 24

Candidate Starts for Wolfstar\_30:

(8, 9399), (Start: 24 @9600 has 14 MA's), (31, 9651), (40, 9768), (43, 9816), (44, 9822),

Gene: Yuma\_33 Start: 9891, Stop: 10142, Start Num: 26

Candidate Starts for Yuma\_33:

(Start: 26 @9891 has 9 MA's), (28, 9906), (40, 10041), (43, 10089), (44, 10095), (45, 10104),