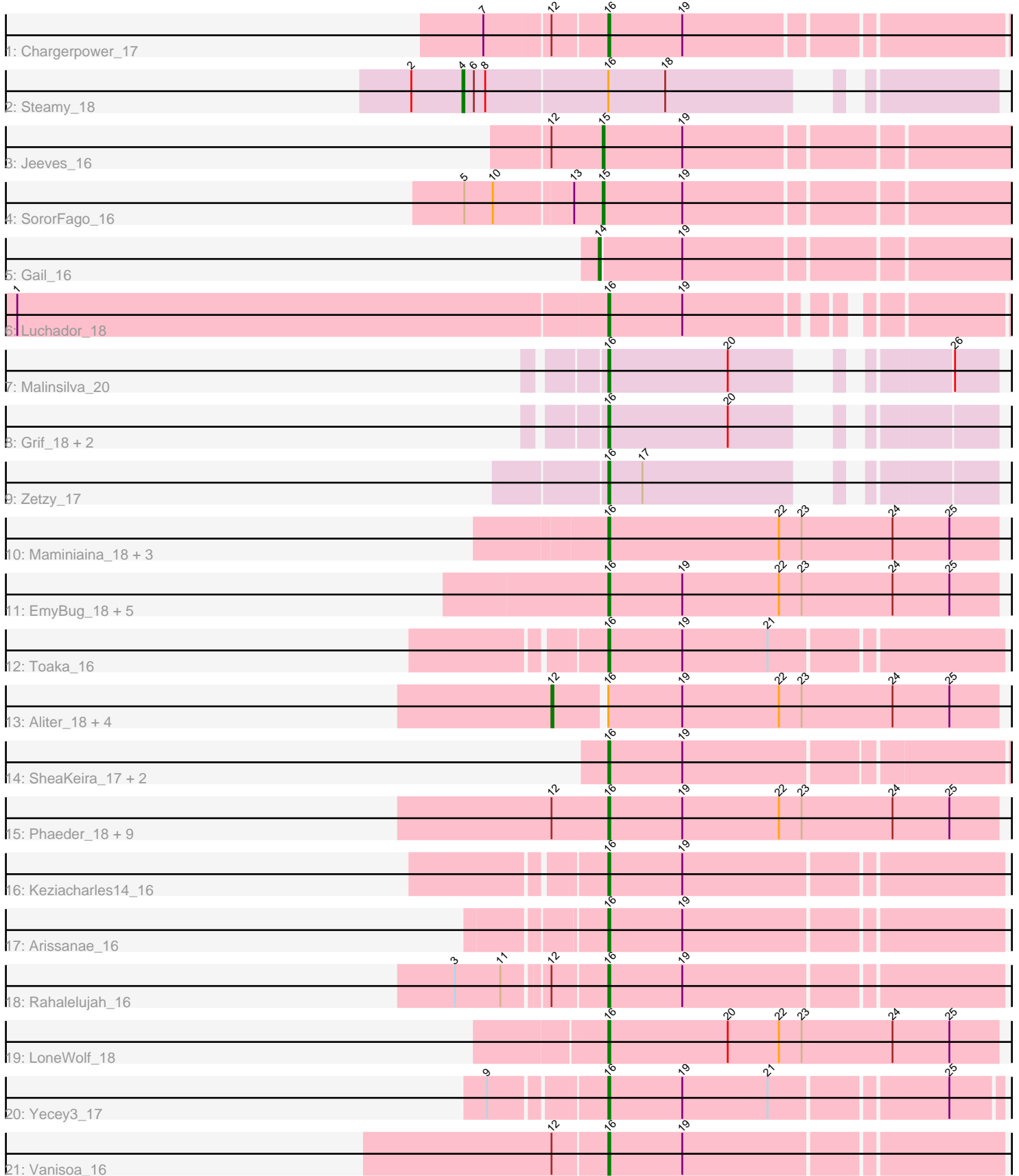


Pham 171564



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 171564 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171564 has 46 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower\_17
- Track 2 : Steamy\_18
- Track 3 : Jeeves\_16
- Track 4 : SororFago\_16
- Track 5 : Gail\_16
- Track 6 : Luchador\_18
- Track 7 : Malinsilva\_20
- Track 8 : Grif\_18, GingkoMaracino\_18, Ollie\_18
- Track 9 : Zetzy\_17
- Track 10 : Maminiaina\_18, BogosyJay\_18, Elephantoon\_18, Darrell\_19
- Track 11 : EmyBug\_18, Alma\_18, Conquerage\_18, Eidsmoe\_18, Spouty\_17, Priya\_18
- Track 12 : Toaka\_16
- Track 13 : Aliter\_18, Myxus\_18, Catalina\_18, HortumSL17\_18, PackMan\_18
- Track 14 : SheaKeira\_17, DreamTeam1\_17, Charm\_17
- Track 15 : Phaeder\_18, Ugenie5\_15, Fayely\_18, Pioneer\_18, Phonnegut\_18, Beemo\_18, ExplosioNervosa\_18, Tubs\_18, Scherzo\_18, Qobbit\_18
- Track 16 : Keziacharles14\_16
- Track 17 : Arissanae\_16
- Track 18 : Rahalelujah\_16
- Track 19 : LoneWolf\_18
- Track 20 : Yecey3\_17
- Track 21 : Vanisoa\_16

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

The start number called the most often in the published annotations is 16, it was called in 35 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alma\_18, Arissanae\_16, Beemo\_18, BogosyJay\_18, Chargerpower\_17, Charm\_17, Conquerage\_18, Darrell\_19, DreamTeam1\_17, Eidsmoe\_18, Elephantoon\_18, EmyBug\_18, ExplosioNervosa\_18, Fayely\_18, GingkoMaracino\_18, Grif\_18, Keziacharles14\_16, LoneWolf\_18, Luchador\_18, Malinsilva\_20, Maminiaina\_18,

Ollie\_18, Phaeder\_18, Phonnegut\_18, Pioneer\_18, Priya\_18, Qobbit\_18, Rahalelujah\_16, Scherzo\_18, SheaKeira\_17, Spouty\_17, Toaka\_16, Tubs\_18, Ugenie5\_15, Vanisoa\_16, Yecey3\_17, Zetzy\_17,

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

- Aliter\_18, Catalina\_18, HortumSL17\_18, Myxus\_18, PackMan\_18, Steamy\_18,

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

- Gail\_16, Jeeves\_16, SororFago\_16,

### Summary by start number:

Start 4:

- Found in 1 of 46 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Steamy\_18 (A12),

Start 12:

- Found in 19 of 46 ( 41.3% ) of genes in pham
- Manual Annotations of this start: 5 of 44
- Called 26.3% of time when present
- Phage (with cluster) where this start called: Aliter\_18 (A9), Catalina\_18 (A9), HortumSL17\_18 (A9), Myxus\_18 (A9), PackMan\_18 (A9),

Start 14:

- Found in 1 of 46 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gail\_16 (A14),

Start 15:

- Found in 2 of 46 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jeeves\_16 (A14), SororFago\_16 (A14),

Start 16:

- Found in 43 of 46 ( 93.5% ) of genes in pham
- Manual Annotations of this start: 35 of 44
- Called 86.0% of time when present
- Phage (with cluster) where this start called: Alma\_18 (A9), Arissanae\_16 (A9), Beemo\_18 (A9), BogosyJay\_18 (A9), Chargerpower\_17 (A), Charm\_17 (A9), Conquerage\_18 (A9), Darrell\_19 (A9), DreamTeam1\_17 (A9), Eidsmoe\_18 (A9), Elephantoon\_18 (A9), EmyBug\_18 (A9), ExplosioNervosa\_18 (A9), Fayely\_18 (A9), GingkoMaracino\_18 (A3), Grif\_18 (A3), Keziacharles14\_16 (A9), LoneWolf\_18 (A9), Luchador\_18 (A14), Malinsilva\_20 (A3), Maminiaina\_18 (A9), Ollie\_18 (A3), Phaeder\_18 (A9), Phonnegut\_18 (A9), Pioneer\_18 (A9), Priya\_18 (A9), Qobbit\_18 (A9), Rahalelujah\_16 (A9), Scherzo\_18 (A9), SheaKeira\_17 (A9), Spouty\_17 (A9), Toaka\_16 (A9), Tubs\_18 (A9), Ugenie5\_15 (A9), Vanisoa\_16 (A9), Yecey3\_17 (A9), Zetzy\_17 (A3),

### Summary by clusters:

There are 5 clusters represented in this pham: A9, A14, A3, A, A12,

Info for manual annotations of cluster A:

- Start number 16 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A12:

- Start number 4 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A14:

- Start number 14 was manually annotated 1 time for cluster A14.
- Start number 15 was manually annotated 2 times for cluster A14.
- Start number 16 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A3:

- Start number 16 was manually annotated 5 times for cluster A3.

Info for manual annotations of cluster A9:

- Start number 12 was manually annotated 5 times for cluster A9.
- Start number 16 was manually annotated 28 times for cluster A9.

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

Gene: Aliter\_18 Start: 13817, Stop: 14065, Start Num: 12

Candidate Starts for Aliter\_18:

(Start: 12 @13817 has 5 MA's), (Start: 16 @13841 has 35 MA's), (19, 13880), (22, 13931), (23, 13943), (24, 13991), (25, 14021),

Gene: Alma\_18 Start: 13920, Stop: 14144, Start Num: 16

Candidate Starts for Alma\_18:

(Start: 16 @13920 has 35 MA's), (19, 13959), (22, 14010), (23, 14022), (24, 14070), (25, 14100),

Gene: Arissanae\_16 Start: 12012, Stop: 12230, Start Num: 16

Candidate Starts for Arissanae\_16:

(Start: 16 @12012 has 35 MA's), (19, 12051),

Gene: Beemo\_18 Start: 13947, Stop: 14171, Start Num: 16

Candidate Starts for Beemo\_18:

(Start: 12 @13923 has 5 MA's), (Start: 16 @13947 has 35 MA's), (19, 13986), (22, 14037), (23, 14049), (24, 14097), (25, 14127),

Gene: BogosyJay\_18 Start: 13667, Stop: 13891, Start Num: 16

Candidate Starts for BogosyJay\_18:

(Start: 16 @13667 has 35 MA's), (22, 13757), (23, 13769), (24, 13817), (25, 13847),

Gene: Catalina\_18 Start: 13890, Stop: 14138, Start Num: 12

Candidate Starts for Catalina\_18:

(Start: 12 @13890 has 5 MA's), (Start: 16 @13914 has 35 MA's), (19, 13953), (22, 14004), (23, 14016), (24, 14064), (25, 14094),

Gene: Chargerpower\_17 Start: 12361, Stop: 12588, Start Num: 16

Candidate Starts for Chargerpower\_17:

(7, 12304), (Start: 12 @12337 has 5 MA's), (Start: 16 @12361 has 35 MA's), (19, 12400),

Gene: Charm\_17 Start: 12095, Stop: 12319, Start Num: 16

Candidate Starts for Charm\_17:

(Start: 16 @12095 has 35 MA's), (19, 12134),

Gene: Conquerage\_18 Start: 13943, Stop: 14167, Start Num: 16

Candidate Starts for Conquerage\_18:

(Start: 16 @13943 has 35 MA's), (19, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: Darrell\_19 Start: 14104, Stop: 14328, Start Num: 16

Candidate Starts for Darrell\_19:

(Start: 16 @14104 has 35 MA's), (22, 14194), (23, 14206), (24, 14254), (25, 14284),

Gene: DreamTeam1\_17 Start: 12095, Stop: 12319, Start Num: 16

Candidate Starts for DreamTeam1\_17:

(Start: 16 @12095 has 35 MA's), (19, 12134),

Gene: Eidsmoe\_18 Start: 13943, Stop: 14167, Start Num: 16

Candidate Starts for Eidsmoe\_18:

(Start: 16 @13943 has 35 MA's), (19, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: Elephantoon\_18 Start: 13530, Stop: 13757, Start Num: 16

Candidate Starts for Elephantoon\_18:

(Start: 16 @13530 has 35 MA's), (22, 13620), (23, 13632), (24, 13680), (25, 13710),

Gene: EmyBug\_18 Start: 13943, Stop: 14167, Start Num: 16

Candidate Starts for EmyBug\_18:

(Start: 16 @13943 has 35 MA's), (19, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: ExplosioNervosa\_18 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for ExplosioNervosa\_18:

(Start: 12 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (19, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Fayely\_18 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Fayely\_18:

(Start: 12 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (19, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Gail\_16 Start: 12246, Stop: 12479, Start Num: 14

Candidate Starts for Gail\_16:

(Start: 14 @12246 has 1 MA's), (19, 12288),

Gene: GingkoMaracino\_18 Start: 12488, Stop: 12673, Start Num: 16

Candidate Starts for GingkoMaracino\_18:

(Start: 16 @12488 has 35 MA's), (20, 12551),

Gene: Grif\_18 Start: 12685, Stop: 12870, Start Num: 16

Candidate Starts for Grif\_18:

(Start: 16 @12685 has 35 MA's), (20, 12748),

Gene: HortumSL17\_18 Start: 13889, Stop: 14137, Start Num: 12  
Candidate Starts for HortumSL17\_18:  
(Start: 12 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (19, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Jeeves\_16 Start: 12289, Stop: 12522, Start Num: 15  
Candidate Starts for Jeeves\_16:  
(Start: 12 @12262 has 5 MA's), (Start: 15 @12289 has 2 MA's), (19, 12331),

Gene: Keziacharles14\_16 Start: 12056, Stop: 12274, Start Num: 16  
Candidate Starts for Keziacharles14\_16:  
(Start: 16 @12056 has 35 MA's), (19, 12095),

Gene: LoneWolf\_18 Start: 13722, Stop: 13946, Start Num: 16  
Candidate Starts for LoneWolf\_18:  
(Start: 16 @13722 has 35 MA's), (20, 13785), (22, 13812), (23, 13824), (24, 13872), (25, 13902),

Gene: Luchador\_18 Start: 13500, Stop: 13706, Start Num: 16  
Candidate Starts for Luchador\_18:  
(1, 13191), (Start: 16 @13500 has 35 MA's), (19, 13539),

Gene: Malinsilva\_20 Start: 12594, Stop: 12779, Start Num: 16  
Candidate Starts for Malinsilva\_20:  
(Start: 16 @12594 has 35 MA's), (20, 12657), (26, 12738),

Gene: Maminiaina\_18 Start: 13646, Stop: 13870, Start Num: 16  
Candidate Starts for Maminiaina\_18:  
(Start: 16 @13646 has 35 MA's), (22, 13736), (23, 13748), (24, 13796), (25, 13826),

Gene: Myxus\_18 Start: 13889, Stop: 14137, Start Num: 12  
Candidate Starts for Myxus\_18:  
(Start: 12 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (19, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Ollie\_18 Start: 12473, Stop: 12658, Start Num: 16  
Candidate Starts for Ollie\_18:  
(Start: 16 @12473 has 35 MA's), (20, 12536),

Gene: PackMan\_18 Start: 13889, Stop: 14137, Start Num: 12  
Candidate Starts for PackMan\_18:  
(Start: 12 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (19, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Phaeder\_18 Start: 13913, Stop: 14137, Start Num: 16  
Candidate Starts for Phaeder\_18:  
(Start: 12 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (19, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Phonnegut\_18 Start: 13946, Stop: 14170, Start Num: 16  
Candidate Starts for Phonnegut\_18:  
(Start: 12 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (19, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Pioneer\_18 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Pioneer\_18:

(Start: 12 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (19, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Priya\_18 Start: 13944, Stop: 14168, Start Num: 16

Candidate Starts for Priya\_18:

(Start: 16 @13944 has 35 MA's), (19, 13983), (22, 14034), (23, 14046), (24, 14094), (25, 14124),

Gene: Qobbit\_18 Start: 13943, Stop: 14167, Start Num: 16

Candidate Starts for Qobbit\_18:

(Start: 12 @13919 has 5 MA's), (Start: 16 @13943 has 35 MA's), (19, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: Rahalelujah\_16 Start: 11982, Stop: 12200, Start Num: 16

Candidate Starts for Rahalelujah\_16:

(3, 11913), (11, 11937), (Start: 12 @11958 has 5 MA's), (Start: 16 @11982 has 35 MA's), (19, 12021),

Gene: Scherzo\_18 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Scherzo\_18:

(Start: 12 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (19, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: SheaKeira\_17 Start: 12121, Stop: 12345, Start Num: 16

Candidate Starts for SheaKeira\_17:

(Start: 16 @12121 has 35 MA's), (19, 12160),

Gene: SororFago\_16 Start: 12265, Stop: 12498, Start Num: 15

Candidate Starts for SororFago\_16:

(5, 12196), (10, 12211), (13, 12250), (Start: 15 @12265 has 2 MA's), (19, 12307),

Gene: Spouty\_17 Start: 13943, Stop: 14167, Start Num: 16

Candidate Starts for Spouty\_17:

(Start: 16 @13943 has 35 MA's), (19, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: Steamy\_18 Start: 13652, Stop: 13915, Start Num: 4

Candidate Starts for Steamy\_18:

(2, 13625), (Start: 4 @13652 has 1 MA's), (6, 13658), (8, 13664), (Start: 16 @13727 has 35 MA's), (18, 13757),

Gene: Toaka\_16 Start: 12274, Stop: 12492, Start Num: 16

Candidate Starts for Toaka\_16:

(Start: 16 @12274 has 35 MA's), (19, 12313), (21, 12358),

Gene: Tubs\_18 Start: 13913, Stop: 14137, Start Num: 16

Candidate Starts for Tubs\_18:

(Start: 12 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (19, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Ugenie5\_15 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Ugenie5\_15:

(Start: 12 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (19, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Vanisoa\_16 Start: 12000, Stop: 12218, Start Num: 16

Candidate Starts for Vanisoa\_16:

(Start: 12 @11976 has 5 MA's), (Start: 16 @12000 has 35 MA's), (19, 12039),

Gene: Yecey3\_17 Start: 12045, Stop: 12260, Start Num: 16

Candidate Starts for Yecey3\_17:

(9, 11994), (Start: 16 @12045 has 35 MA's), (19, 12084), (21, 12129), (25, 12216),

Gene: Zetzy\_17 Start: 12134, Stop: 12319, Start Num: 16

Candidate Starts for Zetzy\_17:

(Start: 16 @12134 has 35 MA's), (17, 12152),