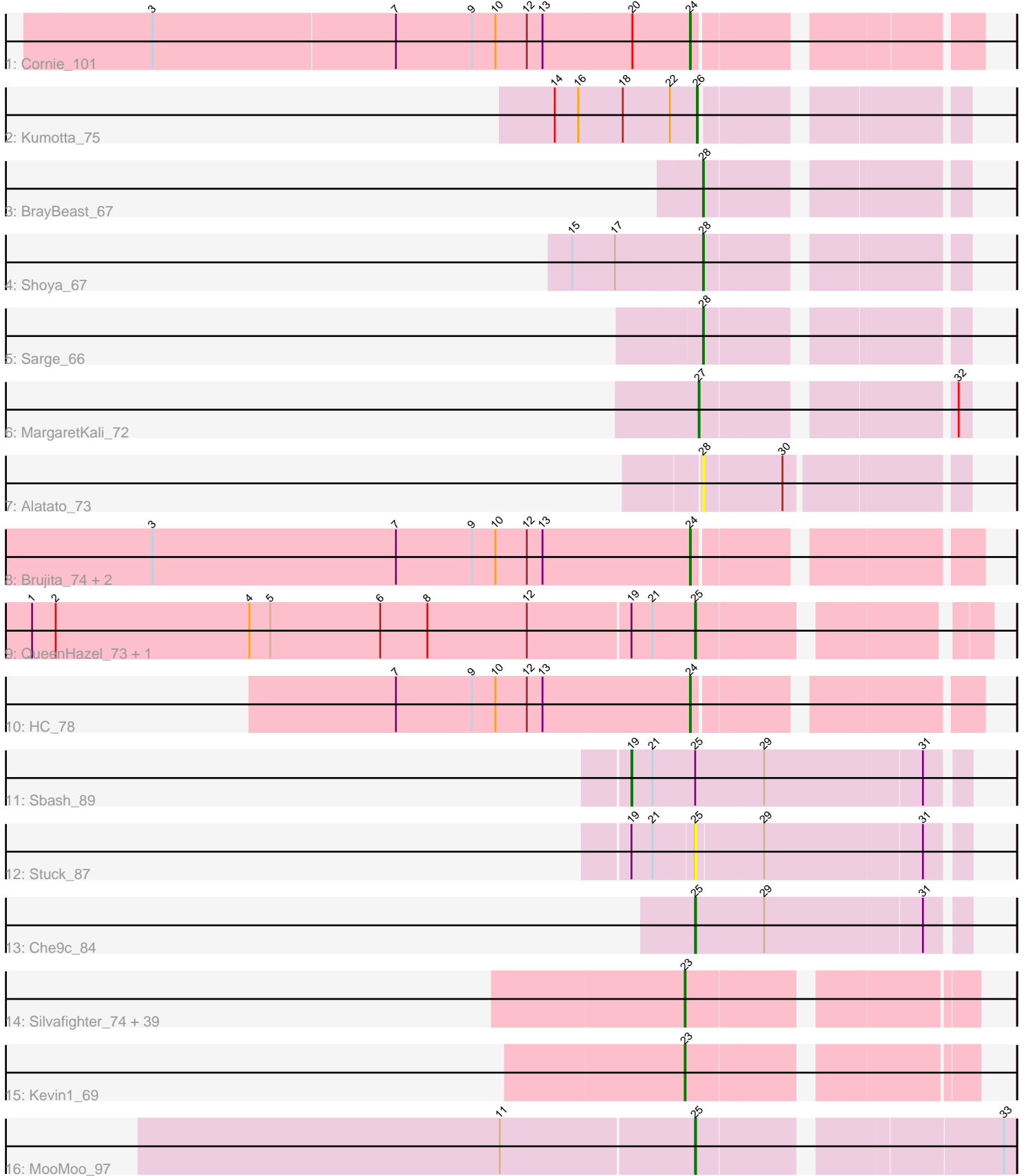


Pham 216199



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 216199 Report

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

Pham number 216199 has 58 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Cornie\_101
- Track 2 : Kumotta\_75
- Track 3 : BrayBeast\_67
- Track 4 : Shoya\_67
- Track 5 : Sarge\_66
- Track 6 : MargaretKali\_72
- Track 7 : Alatato\_73
- Track 8 : Brujita\_74, Babsiella\_78, Island3\_76
- Track 9 : QueenHazel\_73, Xula\_74
- Track 10 : HC\_78
- Track 11 : Sbash\_89
- Track 12 : Stuck\_87
- Track 13 : Che9c\_84
- Track 14 : Silvafighter\_74, Rebel\_66, Fulbright\_70, EGUnicorn\_70, Tapioca\_70, Duplicity\_70, Aggie\_67, Xeno\_69, Chewbacca\_74, ShrimpFriedEgg\_70, Raymond7\_63, Bosection6\_70, Scitech\_67, Hanako\_69, Rubeelu\_66, Gex\_71, SpongeBob\_65, Pipsqueaks\_73, Carcharodon\_71, Purgamenstris\_70, Panchino\_66, Charlie\_69, Redi\_70, Nenae\_70, Xerxes\_72, Magsby\_71, Tortoise12\_70, BabeRuth\_70, Jamie19\_65, Phrann\_67, Phloss\_70, Shweta\_66, Schnauzer\_74, Butters\_66, Andies\_65, PhancyPhin\_69, Silvy\_68, Parmesanjohn\_72, MichelleMyBell\_70, Smurph\_72
- Track 15 : Kevin1\_69
- Track 16 : MooMoo\_97

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

The start number called the most often in the published annotations is 23, it was called in 37 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aggie\_67, Andies\_65, BabeRuth\_70, Bosection6\_70, Butters\_66, Carcharodon\_71, Charlie\_69, Chewbacca\_74, Duplicity\_70, EGUnicorn\_70, Fulbright\_70, Gex\_71, Hanako\_69, Jamie19\_65, Kevin1\_69, Magsby\_71, MichelleMyBell\_70, Nenae\_70, Panchino\_66, Parmesanjohn\_72, PhancyPhin\_69, Phloss\_70, Phrann\_67,

Pipsqueaks\_73, Purgamenstris\_70, Raymond7\_63, Rebel\_66, Redi\_70, Rubeelu\_66, Schnauzer\_74, Scitech\_67, ShrimpFriedEgg\_70, Shweta\_66, Silvafighter\_74, Silvy\_68, Smurph\_72, SpongeBob\_65, Tapioca\_70, Tortoise12\_70, Xeno\_69, Xerxes\_72,

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

- 

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

- Alatato\_73, Babsiella\_78, BrayBeast\_67, Brujita\_74, Che9c\_84, Cornie\_101, HC\_78, Island3\_76, Kumotta\_75, MargaretKali\_72, MooMoo\_97, QueenHazel\_73, Sarge\_66, Sbash\_89, Shoya\_67, Stuck\_87, Xula\_74,

### Summary by start number:

Start 19:

- Found in 4 of 58 ( 6.9% ) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Sbash\_89 (I2),

Start 23:

- Found in 41 of 58 ( 70.7% ) of genes in pham
- Manual Annotations of this start: 37 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aggie\_67 (N), Andies\_65 (N), BabeRuth\_70 (N), Bosection6\_70 (N), Butters\_66 (N), Carcharodon\_71 (N), Charlie\_69 (N), Chewbacca\_74 (N), Duplicity\_70 (N), EGUnicorn\_70 (N), Fulbright\_70 (N), Gex\_71 (N), Hanako\_69 (N), Jamie19\_65 (N), Kevin1\_69 (N), Magsby\_71 (N), MichelleMyBell\_70 (N), Nenae\_70 (N), Panchino\_66 (N), Parmesanjohn\_72 (N), PhancyPhin\_69 (N), Phloss\_70 (N), Phrann\_67 (N), Pipsqueaks\_73 (N), Purgamenstris\_70 (N), Raymond7\_63 (N), Rebel\_66 (N), Redi\_70 (N), Rubeelu\_66 (N), Schnauzer\_74 (N), Scitech\_67 (N), ShrimpFriedEgg\_70 (N), Shweta\_66 (N), Silvafighter\_74 (N), Silvy\_68 (N), Smurph\_72 (N), SpongeBob\_65 (N), Tapioca\_70 (N), Tortoise12\_70 (N), Xeno\_69 (N), Xerxes\_72 (N),

Start 24:

- Found in 5 of 58 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 5 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Babsiella\_78 (I1), Brujita\_74 (I1), Cornie\_101 (F5), HC\_78 (I1), Island3\_76 (I1),

Start 25:

- Found in 6 of 58 ( 10.3% ) of genes in pham
- Manual Annotations of this start: 4 of 52
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Che9c\_84 (I2), MooMoo\_97 (singleton), QueenHazel\_73 (I1), Stuck\_87 (I2), Xula\_74 (I1),

Start 26:

- Found in 1 of 58 ( 1.7% ) of genes in pham

- Manual Annotations of this start: 1 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumotta\_75 (FB),

Start 27:

- Found in 1 of 58 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MargaretKali\_72 (FB),

Start 28:

- Found in 4 of 58 ( 6.9% ) of genes in pham
- Manual Annotations of this start: 3 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alatato\_73 (FB), BrayBeast\_67 (FB), Sarge\_66 (FB), Shoya\_67 (FB),

### **Summary by clusters:**

There are 6 clusters represented in this pham: singleton, F5, I1, I2, N, FB,

Info for manual annotations of cluster F5:

- Start number 24 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster FB:

- Start number 26 was manually annotated 1 time for cluster FB.
- Start number 27 was manually annotated 1 time for cluster FB.
- Start number 28 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster I1:

- Start number 24 was manually annotated 4 times for cluster I1.
- Start number 25 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 19 was manually annotated 1 time for cluster I2.
- Start number 25 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

- Start number 23 was manually annotated 37 times for cluster N.

### **Gene Information:**

Gene: Aggie\_67 Start: 43847, Stop: 44146, Start Num: 23

Candidate Starts for Aggie\_67:

(Start: 23 @43847 has 37 MA's),

Gene: Alatato\_73 Start: 39249, Stop: 39527, Start Num: 28

Candidate Starts for Alatato\_73:

(Start: 28 @39249 has 3 MA's), (30, 39336),

Gene: Andies\_65 Start: 43293, Stop: 43592, Start Num: 23

Candidate Starts for Andies\_65:  
(Start: 23 @43293 has 37 MA's),

Gene: BabeRuth\_70 Start: 42101, Stop: 42409, Start Num: 23  
Candidate Starts for BabeRuth\_70:  
(Start: 23 @42101 has 37 MA's),

Gene: Babsiella\_78 Start: 47992, Stop: 48282, Start Num: 24  
Candidate Starts for Babsiella\_78:  
(3, 47377), (7, 47656), (9, 47743), (10, 47770), (12, 47806), (13, 47824), (Start: 24 @47992 has 5 MA's),

Gene: Bosection6\_70 Start: 42917, Stop: 43225, Start Num: 23  
Candidate Starts for Bosection6\_70:  
(Start: 23 @42917 has 37 MA's),

Gene: BrayBeast\_67 Start: 37446, Stop: 37709, Start Num: 28  
Candidate Starts for BrayBeast\_67:  
(Start: 28 @37446 has 3 MA's),

Gene: Brujita\_74 Start: 46629, Stop: 46919, Start Num: 24  
Candidate Starts for Brujita\_74:  
(3, 46014), (7, 46293), (9, 46380), (10, 46407), (12, 46443), (13, 46461), (Start: 24 @46629 has 5 MA's),

Gene: Butters\_66 Start: 41009, Stop: 41308, Start Num: 23  
Candidate Starts for Butters\_66:  
(Start: 23 @41009 has 37 MA's),

Gene: Carcharodon\_71 Start: 43194, Stop: 43493, Start Num: 23  
Candidate Starts for Carcharodon\_71:  
(Start: 23 @43194 has 37 MA's),

Gene: Charlie\_69 Start: 42541, Stop: 42849, Start Num: 23  
Candidate Starts for Charlie\_69:  
(Start: 23 @42541 has 37 MA's),

Gene: Che9c\_84 Start: 56646, Stop: 56942, Start Num: 25  
Candidate Starts for Che9c\_84:  
(Start: 25 @56646 has 4 MA's), (29, 56724), (31, 56901),

Gene: Chewbacca\_74 Start: 43089, Stop: 43388, Start Num: 23  
Candidate Starts for Chewbacca\_74:  
(Start: 23 @43089 has 37 MA's),

Gene: Cornie\_101 Start: 56005, Stop: 56292, Start Num: 24  
Candidate Starts for Cornie\_101:  
(3, 55393), (7, 55669), (9, 55756), (10, 55783), (12, 55819), (13, 55837), (20, 55939), (Start: 24 @56005 has 5 MA's),

Gene: Duplicity\_70 Start: 42451, Stop: 42750, Start Num: 23  
Candidate Starts for Duplicity\_70:  
(Start: 23 @42451 has 37 MA's),

Gene: EGUicorn\_70 Start: 41517, Stop: 41816, Start Num: 23  
Candidate Starts for EGUicorn\_70:  
(Start: 23 @41517 has 37 MA's),

Gene: Fulbright\_70 Start: 41910, Stop: 42209, Start Num: 23  
Candidate Starts for Fulbright\_70:  
(Start: 23 @41910 has 37 MA's),

Gene: Gex\_71 Start: 43210, Stop: 43509, Start Num: 23  
Candidate Starts for Gex\_71:  
(Start: 23 @43210 has 37 MA's),

Gene: HC\_78 Start: 45878, Stop: 46168, Start Num: 24  
Candidate Starts for HC\_78:  
(7, 45542), (9, 45629), (10, 45656), (12, 45692), (13, 45710), (Start: 24 @45878 has 5 MA's),

Gene: Hanako\_69 Start: 42101, Stop: 42409, Start Num: 23  
Candidate Starts for Hanako\_69:  
(Start: 23 @42101 has 37 MA's),

Gene: Island3\_76 Start: 46859, Stop: 47149, Start Num: 24  
Candidate Starts for Island3\_76:  
(3, 46244), (7, 46523), (9, 46610), (10, 46637), (12, 46673), (13, 46691), (Start: 24 @46859 has 5 MA's),

Gene: Jamie19\_65 Start: 40783, Stop: 41091, Start Num: 23  
Candidate Starts for Jamie19\_65:  
(Start: 23 @40783 has 37 MA's),

Gene: Kevin1\_69 Start: 41506, Stop: 41805, Start Num: 23  
Candidate Starts for Kevin1\_69:  
(Start: 23 @41506 has 37 MA's),

Gene: Kumotta\_75 Start: 39866, Stop: 40129, Start Num: 26  
Candidate Starts for Kumotta\_75:  
(14, 39707), (16, 39734), (18, 39785), (22, 39836), (Start: 26 @39866 has 1 MA's),

Gene: Magsby\_71 Start: 43156, Stop: 43455, Start Num: 23  
Candidate Starts for Magsby\_71:  
(Start: 23 @43156 has 37 MA's),

Gene: MargaretKali\_72 Start: 38623, Stop: 38889, Start Num: 27  
Candidate Starts for MargaretKali\_72:  
(Start: 27 @38623 has 1 MA's), (32, 38875),

Gene: MichelleMyBell\_70 Start: 41746, Stop: 42054, Start Num: 23  
Candidate Starts for MichelleMyBell\_70:  
(Start: 23 @41746 has 37 MA's),

Gene: MooMoo\_97 Start: 54747, Stop: 55079, Start Num: 25  
Candidate Starts for MooMoo\_97:  
(11, 54531), (Start: 25 @54747 has 4 MA's), (33, 55065),

Gene: Nенаe\_70 Start: 42103, Stop: 42411, Start Num: 23

Candidate Starts for Nенаe\_70:

(Start: 23 @42103 has 37 MA's),

Gene: Panchino\_66 Start: 43021, Stop: 43329, Start Num: 23

Candidate Starts for Panchino\_66:

(Start: 23 @43021 has 37 MA's),

Gene: Parmesanjohn\_72 Start: 43214, Stop: 43513, Start Num: 23

Candidate Starts for Parmesanjohn\_72:

(Start: 23 @43214 has 37 MA's),

Gene: PhancyPhin\_69 Start: 41960, Stop: 42268, Start Num: 23

Candidate Starts for PhancyPhin\_69:

(Start: 23 @41960 has 37 MA's),

Gene: Phloss\_70 Start: 42621, Stop: 42920, Start Num: 23

Candidate Starts for Phloss\_70:

(Start: 23 @42621 has 37 MA's),

Gene: Phrann\_67 Start: 44377, Stop: 44685, Start Num: 23

Candidate Starts for Phrann\_67:

(Start: 23 @44377 has 37 MA's),

Gene: Pipsqueaks\_73 Start: 43192, Stop: 43491, Start Num: 23

Candidate Starts for Pipsqueaks\_73:

(Start: 23 @43192 has 37 MA's),

Gene: Purgamenstris\_70 Start: 42101, Stop: 42409, Start Num: 23

Candidate Starts for Purgamenstris\_70:

(Start: 23 @42101 has 37 MA's),

Gene: QueenHazel\_73 Start: 47625, Stop: 47915, Start Num: 25

Candidate Starts for QueenHazel\_73:

(1, 46872), (2, 46899), (4, 47121), (5, 47145), (6, 47271), (8, 47325), (12, 47439), (Start: 19 @47553 has 1 MA's), (21, 47577), (Start: 25 @47625 has 4 MA's),

Gene: Raymond7\_63 Start: 41889, Stop: 42197, Start Num: 23

Candidate Starts for Raymond7\_63:

(Start: 23 @41889 has 37 MA's),

Gene: Rebel\_66 Start: 40085, Stop: 40393, Start Num: 23

Candidate Starts for Rebel\_66:

(Start: 23 @40085 has 37 MA's),

Gene: Redi\_70 Start: 42100, Stop: 42408, Start Num: 23

Candidate Starts for Redi\_70:

(Start: 23 @42100 has 37 MA's),

Gene: Rubeelu\_66 Start: 41009, Stop: 41308, Start Num: 23

Candidate Starts for Rubeelu\_66:

(Start: 23 @41009 has 37 MA's),

Gene: Sarge\_66 Start: 35891, Stop: 36154, Start Num: 28

Candidate Starts for Sarge\_66:

(Start: 28 @35891 has 3 MA's),

Gene: Sbash\_89 Start: 55345, Stop: 55713, Start Num: 19

Candidate Starts for Sbash\_89:

(Start: 19 @55345 has 1 MA's), (21, 55369), (Start: 25 @55417 has 4 MA's), (29, 55495), (31, 55672),

Gene: Schnauzer\_74 Start: 43214, Stop: 43513, Start Num: 23

Candidate Starts for Schnauzer\_74:

(Start: 23 @43214 has 37 MA's),

Gene: Scitech\_67 Start: 42617, Stop: 42916, Start Num: 23

Candidate Starts for Scitech\_67:

(Start: 23 @42617 has 37 MA's),

Gene: Shoya\_67 Start: 37457, Stop: 37720, Start Num: 28

Candidate Starts for Shoya\_67:

(15, 37322), (17, 37370), (Start: 28 @37457 has 3 MA's),

Gene: ShrimpFriedEgg\_70 Start: 42100, Stop: 42408, Start Num: 23

Candidate Starts for ShrimpFriedEgg\_70:

(Start: 23 @42100 has 37 MA's),

Gene: Shweta\_66 Start: 42196, Stop: 42504, Start Num: 23

Candidate Starts for Shweta\_66:

(Start: 23 @42196 has 37 MA's),

Gene: Silvafighter\_74 Start: 42757, Stop: 43056, Start Num: 23

Candidate Starts for Silvafighter\_74:

(Start: 23 @42757 has 37 MA's),

Gene: Silvy\_68 Start: 43847, Stop: 44146, Start Num: 23

Candidate Starts for Silvy\_68:

(Start: 23 @43847 has 37 MA's),

Gene: Smurph\_72 Start: 43214, Stop: 43513, Start Num: 23

Candidate Starts for Smurph\_72:

(Start: 23 @43214 has 37 MA's),

Gene: SpongeBob\_65 Start: 40783, Stop: 41091, Start Num: 23

Candidate Starts for SpongeBob\_65:

(Start: 23 @40783 has 37 MA's),

Gene: Stuck\_87 Start: 54724, Stop: 55017, Start Num: 25

Candidate Starts for Stuck\_87:

(Start: 19 @54655 has 1 MA's), (21, 54679), (Start: 25 @54724 has 4 MA's), (29, 54799), (31, 54976),

Gene: Tapioca\_70 Start: 43719, Stop: 44018, Start Num: 23

Candidate Starts for Tapioca\_70:

(Start: 23 @43719 has 37 MA's),



Gene: Tortoise12\_70 Start: 42203, Stop: 42502, Start Num: 23  
Candidate Starts for Tortoise12\_70:  
(Start: 23 @42203 has 37 MA's),

Gene: Xeno\_69 Start: 41900, Stop: 42208, Start Num: 23  
Candidate Starts for Xeno\_69:  
(Start: 23 @41900 has 37 MA's),

Gene: Xerxes\_72 Start: 43211, Stop: 43510, Start Num: 23  
Candidate Starts for Xerxes\_72:  
(Start: 23 @43211 has 37 MA's),

Gene: Xula\_74 Start: 48112, Stop: 48402, Start Num: 25  
Candidate Starts for Xula\_74:  
(1, 47359), (2, 47386), (4, 47608), (5, 47632), (6, 47758), (8, 47812), (12, 47926), (Start: 19 @48040  
has 1 MA's), (21, 48064), (Start: 25 @48112 has 4 MA's),