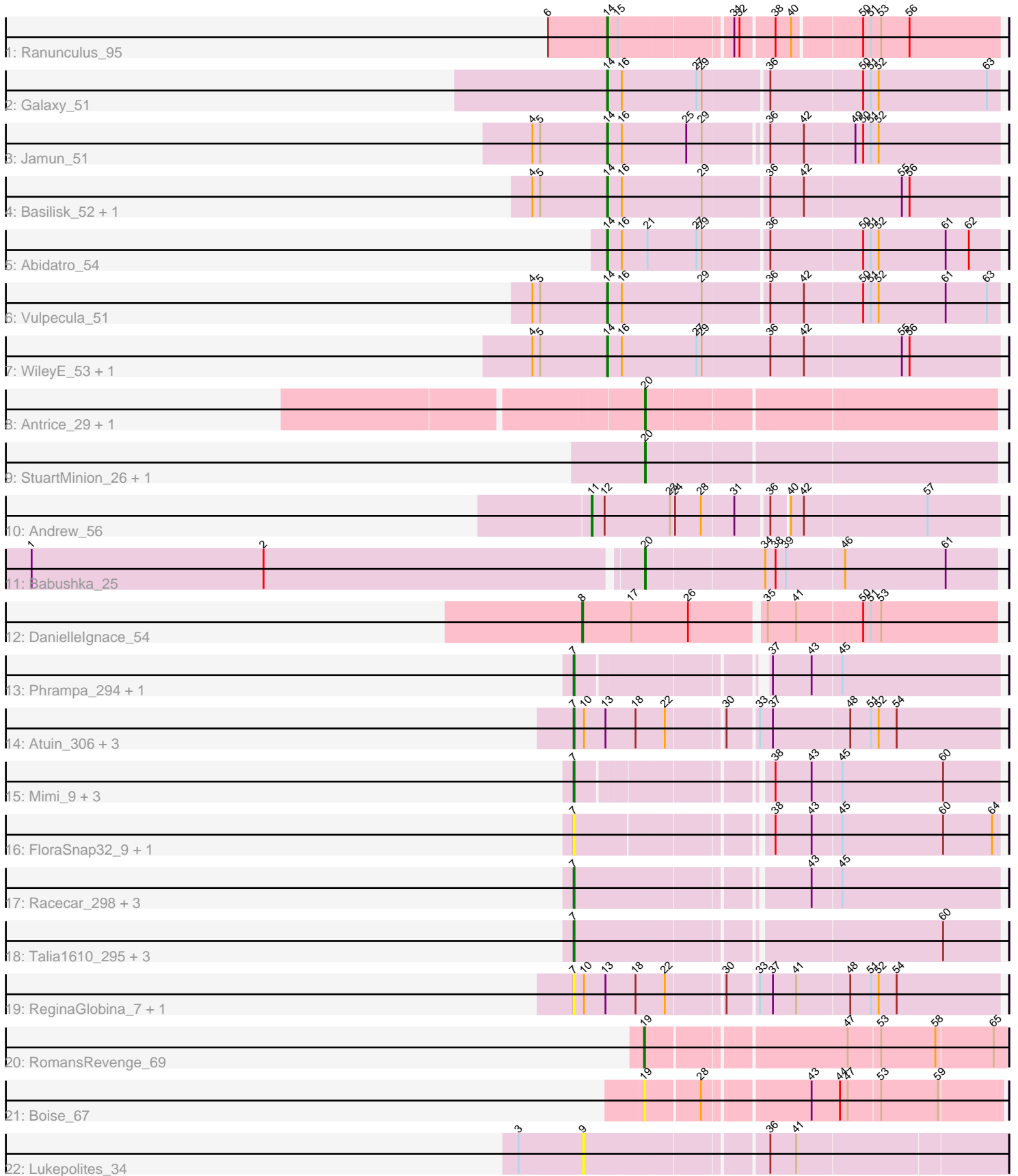


# Pham 311773



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 311773 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311773 has 41 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus\_95
- Track 2 : Galaxy\_51
- Track 3 : Jamun\_51
- Track 4 : Basilisk\_52, Ruchi\_51
- Track 5 : Abidatro\_54
- Track 6 : Vulpecula\_51
- Track 7 : WileyE\_53, Chickaboom\_53
- Track 8 : Antrice\_29, Cygnet\_28
- Track 9 : StuartMinion\_26, AlexMinion\_28
- Track 10 : Andrew\_56
- Track 11 : Babushka\_25
- Track 12 : DanielleIgnace\_54
- Track 13 : Phrampa\_294, Phrampa\_10
- Track 14 : Atuin\_306, Atuin\_6, LeoJr\_322, LeoJr\_9
- Track 15 : Mimi\_9, Mimi\_294, Patbob\_9, Patbob\_295
- Track 16 : FloraSnap32\_9, FloraSnap32\_294
- Track 17 : Racecar\_298, Bloom\_296, Bloom\_9, Racecar\_9
- Track 18 : Talia1610\_295, Talia1610\_9, FrostedClock\_9, FrostedClock\_294
- Track 19 : ReginaGlobina\_7, ReginaGlobina\_318
- Track 20 : RomansRevenge\_69
- Track 21 : Boise\_67
- Track 22 : Lukepolites\_34

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

The start number called the most often in the published annotations is 7, it was called in 12 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atuin\_306, Atuin\_6, Bloom\_296, Bloom\_9, FloraSnap32\_294, FloraSnap32\_9, FrostedClock\_294, FrostedClock\_9, LeoJr\_322, LeoJr\_9, Mimi\_294, Mimi\_9, Patbob\_295, Patbob\_9, Phrampa\_10, Phrampa\_294, Racecar\_298, Racecar\_9, ReginaGlobina\_318, ReginaGlobina\_7, Talia1610\_295, Talia1610\_9,

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

- 

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

- Abidatro\_54, AlexMinion\_28, Andrew\_56, Antrice\_29, Babushka\_25, Basilisk\_52, Boise\_67, Chickaboom\_53, Cygnet\_28, DanielleIgnace\_54, Galaxy\_51, Jamun\_51, Lukepolites\_34, Ranunculus\_95, RomansRevenge\_69, Ruchi\_51, StuartMinion\_26, Vulpecula\_51, WileyE\_53,

### Summary by start number:

Start 7:

- Found in 22 of 41 ( 53.7% ) of genes in pham
- Manual Annotations of this start: 12 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin\_306 (FC), Atuin\_6 (FC), Bloom\_296 (FC), Bloom\_9 (FC), FloraSnap32\_294 (FC), FloraSnap32\_9 (FC), FrostedClock\_294 (FC), FrostedClock\_9 (FC), LeoJr\_322 (FC), LeoJr\_9 (FC), Mimi\_294 (FC), Mimi\_9 (FC), Patbob\_295 (FC), Patbob\_9 (FC), Phrampa\_10 (FC), Phrampa\_294 (FC), Racecar\_298 (FC), Racecar\_9 (FC), ReginaGlobina\_318 (FC), ReginaGlobina\_7 (FC), Talia1610\_295 (FC), Talia1610\_9 (FC),

Start 8:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DanielleIgnace\_54 (AT),

Start 9:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lukepolites\_34 (singleton),

Start 11:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andrew\_56 (AS3),

Start 14:

- Found in 9 of 41 ( 22.0% ) of genes in pham
- Manual Annotations of this start: 9 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro\_54 (AS1), Basilisk\_52 (AS1), Chickaboom\_53 (AS1), Galaxy\_51 (AS1), Jamun\_51 (AS1), Ranunculus\_95 (AP), Ruchi\_51 (AS1), Vulpecula\_51 (AS1), WileyE\_53 (AS1),

Start 19:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Boise\_67 (FT), RomansRevenge\_69 (FT),

Start 20:

- Found in 5 of 41 ( 12.2% ) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlexMinion\_28 (AS3), Antrice\_29 (AS2), Babushka\_25 (AS3), Cygnet\_28 (AS2), StuartMinion\_26 (AS3),

### **Summary by clusters:**

There are 8 clusters represented in this pham: AS3, AS2, AS1, FT, singleton, AP, FC, AT,

Info for manual annotations of cluster AP:

- Start number 14 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AS1:

- Start number 14 was manually annotated 8 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 20 was manually annotated 2 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 11 was manually annotated 1 time for cluster AS3.
- Start number 20 was manually annotated 2 times for cluster AS3.

Info for manual annotations of cluster AT:

- Start number 8 was manually annotated 1 time for cluster AT.

Info for manual annotations of cluster FC:

- Start number 7 was manually annotated 12 times for cluster FC.

Info for manual annotations of cluster FT:

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

### **Gene Information:**

Gene: Abidatro\_54 Start: 34175, Stop: 34618, Start Num: 14

Candidate Starts for Abidatro\_54:

(Start: 14 @34175 has 9 MA's), (16, 34190), (21, 34220), (27, 34277), (29, 34283), (36, 34355), (50, 34460), (51, 34469), (52, 34478), (61, 34556), (62, 34583),

Gene: AlexMinion\_28 Start: 18898, Stop: 18506, Start Num: 20

Candidate Starts for AlexMinion\_28:

(Start: 20 @18898 has 4 MA's),

Gene: Andrew\_56 Start: 33399, Stop: 33848, Start Num: 11

Candidate Starts for Andrew\_56:

(Start: 11 @33399 has 1 MA's), (12, 33414), (23, 33486), (24, 33489), (28, 33519), (31, 33555), (36, 33591), (40, 33609), (42, 33624), (57, 33765),

Gene: Antrice\_29 Start: 20135, Stop: 19743, Start Num: 20  
Candidate Starts for Antrice\_29:  
(Start: 20 @20135 has 4 MA's),

Gene: Atuin\_306 Start: 181029, Stop: 181493, Start Num: 7  
Candidate Starts for Atuin\_306:  
(Start: 7 @181029 has 12 MA's), (10, 181041), (13, 181065), (18, 181098), (22, 181128), (30, 181185), (33, 181218), (37, 181233), (48, 181320), (51, 181344), (52, 181353), (54, 181374),

Gene: Atuin\_6 Start: 4141, Stop: 4605, Start Num: 7  
Candidate Starts for Atuin\_6:  
(Start: 7 @4141 has 12 MA's), (10, 4153), (13, 4177), (18, 4210), (22, 4240), (30, 4297), (33, 4330), (37, 4345), (48, 4432), (51, 4456), (52, 4465), (54, 4486),

Gene: Babushka\_25 Start: 18964, Stop: 18566, Start Num: 20  
Candidate Starts for Babushka\_25:  
(1, 19663), (2, 19393), (Start: 20 @18964 has 4 MA's), (34, 18832), (38, 18820), (39, 18808), (46, 18742), (61, 18625),

Gene: Basilisk\_52 Start: 33395, Stop: 33838, Start Num: 14  
Candidate Starts for Basilisk\_52:  
(4, 33308), (5, 33317), (Start: 14 @33395 has 9 MA's), (16, 33410), (29, 33503), (36, 33575), (42, 33614), (55, 33725), (56, 33734),

Gene: Bloom\_296 Start: 178410, Stop: 178865, Start Num: 7  
Candidate Starts for Bloom\_296:  
(Start: 7 @178410 has 12 MA's), (43, 178650), (45, 178683),

Gene: Bloom\_9 Start: 4935, Stop: 5390, Start Num: 7  
Candidate Starts for Bloom\_9:  
(Start: 7 @4935 has 12 MA's), (43, 5175), (45, 5208),

Gene: Boise\_67 Start: 46994, Stop: 46617, Start Num: 19  
Candidate Starts for Boise\_67:  
(Start: 19 @46994 has 1 MA's), (28, 46937), (43, 46829), (44, 46796), (47, 46787), (53, 46751), (59, 46685),

Gene: Chickaboom\_53 Start: 33728, Stop: 34177, Start Num: 14  
Candidate Starts for Chickaboom\_53:  
(4, 33641), (5, 33650), (Start: 14 @33728 has 9 MA's), (16, 33743), (27, 33830), (29, 33836), (36, 33914), (42, 33953), (55, 34064), (56, 34073),

Gene: Cygnet\_28 Start: 20124, Stop: 19732, Start Num: 20  
Candidate Starts for Cygnet\_28:  
(Start: 20 @20124 has 4 MA's),

Gene: DanielleIgnace\_54 Start: 37055, Stop: 37522, Start Num: 8  
Candidate Starts for DanielleIgnace\_54:  
(Start: 8 @37055 has 1 MA's), (17, 37112), (26, 37178), (35, 37259), (41, 37292), (50, 37367), (51, 37376), (53, 37388),

Gene: FloraSnap32\_9 Start: 5080, Stop: 5532, Start Num: 7

Candidate Starts for FloraSnap32\_9:

(Start: 7 @5080 has 12 MA's), (38, 5275), (43, 5317), (45, 5350), (60, 5467), (64, 5524),

Gene: FloraSnap32\_294 Start: 179218, Stop: 179670, Start Num: 7

Candidate Starts for FloraSnap32\_294:

(Start: 7 @179218 has 12 MA's), (38, 179413), (43, 179455), (45, 179488), (60, 179605), (64, 179662),

Gene: FrostedClock\_9 Start: 4874, Stop: 5320, Start Num: 7

Candidate Starts for FrostedClock\_9:

(Start: 7 @4874 has 12 MA's), (60, 5255),

Gene: FrostedClock\_294 Start: 178674, Stop: 179120, Start Num: 7

Candidate Starts for FrostedClock\_294:

(Start: 7 @178674 has 12 MA's), (60, 179055),

Gene: Galaxy\_51 Start: 32590, Stop: 33033, Start Num: 14

Candidate Starts for Galaxy\_51:

(Start: 14 @32590 has 9 MA's), (16, 32605), (27, 32692), (29, 32698), (36, 32770), (50, 32875), (51, 32884), (52, 32893), (63, 33019),

Gene: Jamun\_51 Start: 33828, Stop: 34265, Start Num: 14

Candidate Starts for Jamun\_51:

(4, 33741), (5, 33750), (Start: 14 @33828 has 9 MA's), (16, 33843), (25, 33918), (29, 33936), (36, 34002), (42, 34041), (49, 34098), (50, 34107), (51, 34116), (52, 34125),

Gene: LeoJr\_322 Start: 181598, Stop: 182062, Start Num: 7

Candidate Starts for LeoJr\_322:

(Start: 7 @181598 has 12 MA's), (10, 181610), (13, 181634), (18, 181667), (22, 181697), (30, 181754), (33, 181787), (37, 181802), (48, 181889), (51, 181913), (52, 181922), (54, 181943),

Gene: LeoJr\_9 Start: 4295, Stop: 4759, Start Num: 7

Candidate Starts for LeoJr\_9:

(Start: 7 @4295 has 12 MA's), (10, 4307), (13, 4331), (18, 4364), (22, 4394), (30, 4451), (33, 4484), (37, 4499), (48, 4586), (51, 4610), (52, 4619), (54, 4640),

Gene: Lukepolites\_34 Start: 27524, Stop: 27979, Start Num: 9

Candidate Starts for Lukepolites\_34:

(3, 27449), (9, 27524), (36, 27716), (41, 27746),

Gene: Mimi\_9 Start: 4877, Stop: 5323, Start Num: 7

Candidate Starts for Mimi\_9:

(Start: 7 @4877 has 12 MA's), (38, 5066), (43, 5108), (45, 5141), (60, 5258),

Gene: Mimi\_294 Start: 177537, Stop: 177983, Start Num: 7

Candidate Starts for Mimi\_294:

(Start: 7 @177537 has 12 MA's), (38, 177726), (43, 177768), (45, 177801), (60, 177918),

Gene: Patbob\_9 Start: 5127, Stop: 5579, Start Num: 7

Candidate Starts for Patbob\_9:

(Start: 7 @5127 has 12 MA's), (38, 5322), (43, 5364), (45, 5397), (60, 5514),

Gene: Patbob\_295 Start: 180586, Stop: 181038, Start Num: 7  
Candidate Starts for Patbob\_295:  
(Start: 7 @180586 has 12 MA's), (38, 180781), (43, 180823), (45, 180856), (60, 180973),

Gene: Phrampa\_294 Start: 181581, Stop: 182024, Start Num: 7  
Candidate Starts for Phrampa\_294:  
(Start: 7 @181581 has 12 MA's), (37, 181764), (43, 181809), (45, 181842),

Gene: Phrampa\_10 Start: 5210, Stop: 5653, Start Num: 7  
Candidate Starts for Phrampa\_10:  
(Start: 7 @5210 has 12 MA's), (37, 5393), (43, 5438), (45, 5471),

Gene: Racecar\_298 Start: 178644, Stop: 179099, Start Num: 7  
Candidate Starts for Racecar\_298:  
(Start: 7 @178644 has 12 MA's), (43, 178884), (45, 178917),

Gene: Racecar\_9 Start: 4935, Stop: 5390, Start Num: 7  
Candidate Starts for Racecar\_9:  
(Start: 7 @4935 has 12 MA's), (43, 5175), (45, 5208),

Gene: Ranunculus\_95 Start: 63522, Stop: 63097, Start Num: 14  
Candidate Starts for Ranunculus\_95:  
(6, 63591), (Start: 14 @63522 has 9 MA's), (15, 63510), (31, 63390), (32, 63384), (38, 63348), (40, 63330), (50, 63255), (51, 63246), (53, 63234), (56, 63201),

Gene: ReginaGlobina\_7 Start: 4147, Stop: 4611, Start Num: 7  
Candidate Starts for ReginaGlobina\_7:  
(Start: 7 @4147 has 12 MA's), (10, 4159), (13, 4183), (18, 4216), (22, 4246), (30, 4303), (33, 4336), (37, 4351), (41, 4378), (48, 4438), (51, 4462), (52, 4471), (54, 4492),

Gene: ReginaGlobina\_318 Start: 181594, Stop: 182058, Start Num: 7  
Candidate Starts for ReginaGlobina\_318:  
(Start: 7 @181594 has 12 MA's), (10, 181606), (13, 181630), (18, 181663), (22, 181693), (30, 181750), (33, 181783), (37, 181798), (41, 181825), (48, 181885), (51, 181909), (52, 181918), (54, 181939),

Gene: RomansRevenge\_69 Start: 47203, Stop: 46820, Start Num: 19  
Candidate Starts for RomansRevenge\_69:  
(Start: 19 @47203 has 1 MA's), (47, 46996), (53, 46960), (58, 46897), (65, 46834),

Gene: Ruchi\_51 Start: 33317, Stop: 33760, Start Num: 14  
Candidate Starts for Ruchi\_51:  
(4, 33230), (5, 33239), (Start: 14 @33317 has 9 MA's), (16, 33332), (29, 33425), (36, 33497), (42, 33536), (55, 33647), (56, 33656),

Gene: StuartMinion\_26 Start: 18898, Stop: 18506, Start Num: 20  
Candidate Starts for StuartMinion\_26:  
(Start: 20 @18898 has 4 MA's),

Gene: Talia1610\_295 Start: 179358, Stop: 179813, Start Num: 7  
Candidate Starts for Talia1610\_295:  
(Start: 7 @179358 has 12 MA's), (60, 179748),

Gene: Talia1610\_9 Start: 4886, Stop: 5341, Start Num: 7

Candidate Starts for Talia1610\_9:  
(Start: 7 @4886 has 12 MA's), (60, 5276),

Gene: Vulpecula\_51 Start: 32977, Stop: 33420, Start Num: 14

Candidate Starts for Vulpecula\_51:

(4, 32890), (5, 32899), (Start: 14 @32977 has 9 MA's), (16, 32992), (29, 33085), (36, 33157), (42, 33196), (50, 33262), (51, 33271), (52, 33280), (61, 33358), (63, 33406),

Gene: WileyE\_53 Start: 33728, Stop: 34177, Start Num: 14

Candidate Starts for WileyE\_53:

(4, 33641), (5, 33650), (Start: 14 @33728 has 9 MA's), (16, 33743), (27, 33830), (29, 33836), (36, 33914), (42, 33953), (55, 34064), (56, 34073),