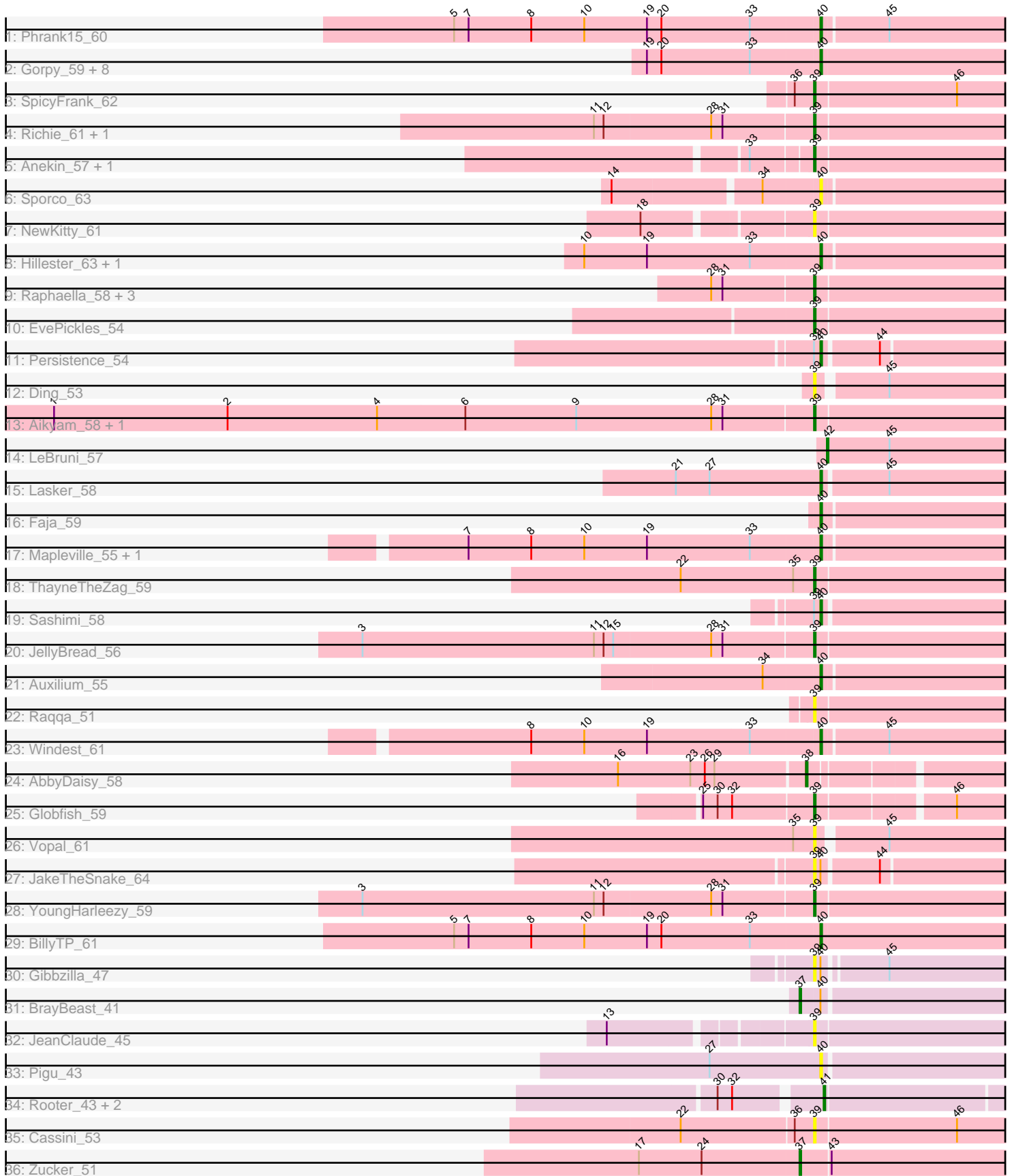


Pham 311658



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 311658 Report

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

Pham number 311658 has 54 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Phrank15\_60
- Track 2 : Gorpy\_59, AdaS\_55, Lawnathon\_60, BasketStar\_61, Isolde\_58, CookieBear\_59, Sakai\_58, SonDevVon\_63, BlueShadow\_59
- Track 3 : SpicyFrank\_62
- Track 4 : Richie\_61, GumGum\_58
- Track 5 : Anekin\_57, BenchScraper\_58
- Track 6 : Sporco\_63
- Track 7 : NewKitty\_61
- Track 8 : Hillester\_63, RadFad\_63
- Track 9 : Raphaella\_58, Bhageatrice\_60, MUWow\_59, Kabloowy\_59
- Track 10 : EvePickles\_54
- Track 11 : Persistence\_54
- Track 12 : Ding\_53
- Track 13 : Aikyam\_58, MaterMagnus\_60
- Track 14 : LeBruni\_57
- Track 15 : Lasker\_58
- Track 16 : Faja\_59
- Track 17 : Mapleville\_55, MidnightRain\_63
- Track 18 : ThayneTheZag\_59
- Track 19 : Sashimi\_58
- Track 20 : JellyBread\_56
- Track 21 : Auxilium\_55
- Track 22 : Raqqa\_51
- Track 23 : Windest\_61
- Track 24 : AbbyDaisy\_58
- Track 25 : Globfish\_59
- Track 26 : Vopal\_61
- Track 27 : JakeTheSnake\_64
- Track 28 : YoungHarleezy\_59
- Track 29 : BillyTP\_61
- Track 30 : Gibbzilla\_47
- Track 31 : BrayBeast\_41
- Track 32 : JeanClaude\_45
- Track 33 : Pigu\_43
- Track 34 : Rooter\_43, Shoya\_46, Sarge\_40
- Track 35 : Cassini\_53
- Track 36 : Zucker\_51

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

The start number called the most often in the published annotations is 40, it was called in 19 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS\_55, Auxilium\_55, BasketStar\_61, BillyTP\_61, BlueShadow\_59, CookieBear\_59, Faja\_59, Gorpy\_59, Hillester\_63, Isolde\_58, Lasker\_58, Lawnathon\_60, Mapleville\_55, MidnightRain\_63, Persistence\_54, Phrank15\_60, Pigu\_43, RadFad\_63, Sakai\_58, Sashimi\_58, SonDevVon\_63, Sporco\_63, Windest\_61,

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

- BrayBeast\_41, Gibbzilla\_47, JakeTheSnake\_64,

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

- AbbyDaisy\_58, Aikyam\_58, Anekin\_57, BenchScraper\_58, Bhageatrice\_60, Cassini\_53, Ding\_53, EvePickles\_54, Globfish\_59, GumGum\_58, JeanClaude\_45, JellyBread\_56, Kabloowy\_59, LeBruni\_57, MUWow\_59, MaterMagnus\_60, NewKitty\_61, Raphaella\_58, Raqqa\_51, Richie\_61, Rooter\_43, Sarge\_40, Shoya\_46, SpicyFrank\_62, ThayneTheZag\_59, Vopal\_61, YoungHarleezy\_59, Zucker\_51,

### **Summary by start number:**

Start 37:

- Found in 2 of 54 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrayBeast\_41 (FB), Zucker\_51 (FN),

Start 38:

- Found in 1 of 54 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_58 (AY),

Start 39:

- Found in 26 of 54 ( 48.1% ) of genes in pham
- Manual Annotations of this start: 13 of 38
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Aikyam\_58 (AY), Anekin\_57 (AY), BenchScraper\_58 (AY), Bhageatrice\_60 (AY), Cassini\_53 (FN), Ding\_53 (AY), EvePickles\_54 (AY), Gibbzilla\_47 (FB), Globfish\_59 (AY), GumGum\_58 (AY), JakeTheSnake\_64 (AY), JeanClaude\_45 (FB), JellyBread\_56 (AY), Kabloowy\_59 (AY), MUWow\_59 (AY), MaterMagnus\_60 (AY), NewKitty\_61 (AY), Raphaella\_58 (AY), Raqqa\_51 (AY), Richie\_61 (AY), SpicyFrank\_62 (AY), ThayneTheZag\_59 (AY), Vopal\_61 (AY), YoungHarleezy\_59 (AY),

Start 40:

- Found in 26 of 54 ( 48.1% ) of genes in pham
- Manual Annotations of this start: 19 of 38
- Called 88.5% of time when present
- Phage (with cluster) where this start called: AdaS\_55 (AY), Auxilium\_55 (AY), BasketStar\_61 (AY), BillyTP\_61 (AY), BlueShadow\_59 (AY), CookieBear\_59 (AY), Faja\_59 (AY), Gorpy\_59 (AY), Hillester\_63 (AY), Isolde\_58 (AY), Lasker\_58 (AY), Lawnathon\_60 (AY), Mapleville\_55 (AY), MidnightRain\_63 (AY), Persistence\_54 (AY), Phrank15\_60 (AY), Pigu\_43 (FB), RadFad\_63 (AY), Sakai\_58 (AY), Sashimi\_58 (AY), SonDevVon\_63 (AY), Sporco\_63 (AY), Windest\_61 (AY),

Start 41:

- Found in 3 of 54 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rooter\_43 (FB), Sarge\_40 (FB), Shoya\_46 (FB),

Start 42:

- Found in 1 of 54 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LeBruni\_57 (AY),

### **Summary by clusters:**

There are 3 clusters represented in this pham: AY, FB, FN,

Info for manual annotations of cluster AY:

- Start number 38 was manually annotated 1 time for cluster AY.
- Start number 39 was manually annotated 13 times for cluster AY.
- Start number 40 was manually annotated 19 times for cluster AY.
- Start number 42 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FB:

- Start number 37 was manually annotated 1 time for cluster FB.
- Start number 41 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 37 was manually annotated 1 time for cluster FN.

### **Gene Information:**

Gene: AbbyDaisy\_58 Start: 34196, Stop: 34399, Start Num: 38

Candidate Starts for AbbyDaisy\_58:

(16, 34085), (23, 34130), (26, 34139), (29, 34145), (Start: 38 @34196 has 1 MA's),

Gene: AdaS\_55 Start: 32061, Stop: 32216, Start Num: 40

Candidate Starts for AdaS\_55:

(19, 31956), (20, 31965), (33, 32019), (Start: 40 @32061 has 19 MA's),

Gene: Aikyam\_58 Start: 32377, Stop: 32535, Start Num: 39

Candidate Starts for Aikyam\_58:

(1, 31909), (2, 32017), (4, 32110), (6, 32164), (9, 32233), (28, 32317), (31, 32323), (Start: 39 @32377 has 13 MA's),

Gene: Anekin\_57 Start: 33919, Stop: 34074, Start Num: 39

Candidate Starts for Anekin\_57:

(33, 33886), (Start: 39 @33919 has 13 MA's),

Gene: Auxilium\_55 Start: 31537, Stop: 31689, Start Num: 40

Candidate Starts for Auxilium\_55:

(34, 31504), (Start: 40 @31537 has 19 MA's),

Gene: BasketStar\_61 Start: 34731, Stop: 34886, Start Num: 40

Candidate Starts for BasketStar\_61:

(19, 34626), (20, 34635), (33, 34689), (Start: 40 @34731 has 19 MA's),

Gene: BenchScraper\_58 Start: 33569, Stop: 33727, Start Num: 39

Candidate Starts for BenchScraper\_58:

(33, 33536), (Start: 39 @33569 has 13 MA's),

Gene: Bhageatrice\_60 Start: 36081, Stop: 36239, Start Num: 39

Candidate Starts for Bhageatrice\_60:

(28, 36021), (31, 36027), (Start: 39 @36081 has 13 MA's),

Gene: BillyTP\_61 Start: 35427, Stop: 35582, Start Num: 40

Candidate Starts for BillyTP\_61:

(5, 35202), (7, 35211), (8, 35250), (10, 35283), (19, 35322), (20, 35331), (33, 35385), (Start: 40 @35427 has 19 MA's),

Gene: BlueShadow\_59 Start: 34217, Stop: 34372, Start Num: 40

Candidate Starts for BlueShadow\_59:

(19, 34112), (20, 34121), (33, 34175), (Start: 40 @34217 has 19 MA's),

Gene: BrayBeast\_41 Start: 27369, Stop: 27533, Start Num: 37

Candidate Starts for BrayBeast\_41:

(Start: 37 @27369 has 2 MA's), (Start: 40 @27381 has 19 MA's),

Gene: Cassini\_53 Start: 32701, Stop: 32931, Start Num: 39

Candidate Starts for Cassini\_53:

(22, 32620), (36, 32689), (Start: 39 @32701 has 13 MA's), (46, 32788),

Gene: CookieBear\_59 Start: 33811, Stop: 33966, Start Num: 40

Candidate Starts for CookieBear\_59:

(19, 33706), (20, 33715), (33, 33769), (Start: 40 @33811 has 19 MA's),

Gene: Ding\_53 Start: 31946, Stop: 32098, Start Num: 39

Candidate Starts for Ding\_53:

(Start: 39 @31946 has 13 MA's), (45, 31985),

Gene: EvePickles\_54 Start: 33798, Stop: 33956, Start Num: 39

Candidate Starts for EvePickles\_54:

(Start: 39 @33798 has 13 MA's),

Gene: Faja\_59 Start: 35189, Stop: 35341, Start Num: 40  
Candidate Starts for Faja\_59:  
(Start: 40 @35189 has 19 MA's),

Gene: Gibbzilla\_47 Start: 27946, Stop: 28098, Start Num: 39  
Candidate Starts for Gibbzilla\_47:  
(Start: 39 @27946 has 13 MA's), (Start: 40 @27949 has 19 MA's), (45, 27985),

Gene: Globfish\_59 Start: 34198, Stop: 34398, Start Num: 39  
Candidate Starts for Globfish\_59:  
(25, 34132), (30, 34141), (32, 34150), (Start: 39 @34198 has 13 MA's), (46, 34276),

Gene: Gorpy\_59 Start: 34803, Stop: 34958, Start Num: 40  
Candidate Starts for Gorpy\_59:  
(19, 34698), (20, 34707), (33, 34761), (Start: 40 @34803 has 19 MA's),

Gene: GumGum\_58 Start: 33167, Stop: 33325, Start Num: 39  
Candidate Starts for GumGum\_58:  
(11, 33035), (12, 33041), (28, 33107), (31, 33113), (Start: 39 @33167 has 13 MA's),

Gene: Hillester\_63 Start: 35153, Stop: 35305, Start Num: 40  
Candidate Starts for Hillester\_63:  
(10, 35009), (19, 35048), (33, 35111), (Start: 40 @35153 has 19 MA's),

Gene: Isolde\_58 Start: 33480, Stop: 33635, Start Num: 40  
Candidate Starts for Isolde\_58:  
(19, 33375), (20, 33384), (33, 33438), (Start: 40 @33480 has 19 MA's),

Gene: JakeTheSnake\_64 Start: 36063, Stop: 36218, Start Num: 39  
Candidate Starts for JakeTheSnake\_64:  
(Start: 39 @36063 has 13 MA's), (Start: 40 @36066 has 19 MA's), (44, 36099),

Gene: JeanClaude\_45 Start: 26926, Stop: 27084, Start Num: 39  
Candidate Starts for JeanClaude\_45:  
(13, 26815), (Start: 39 @26926 has 13 MA's),

Gene: JellyBread\_56 Start: 32829, Stop: 32987, Start Num: 39  
Candidate Starts for JellyBread\_56:  
(3, 32553), (11, 32697), (12, 32703), (15, 32709), (28, 32769), (31, 32775), (Start: 39 @32829 has 13 MA's),

Gene: Kabloowy\_59 Start: 34749, Stop: 34907, Start Num: 39  
Candidate Starts for Kabloowy\_59:  
(28, 34689), (31, 34695), (Start: 39 @34749 has 13 MA's),

Gene: Lasker\_58 Start: 34246, Stop: 34470, Start Num: 40  
Candidate Starts for Lasker\_58:  
(21, 34156), (27, 34177), (Start: 40 @34246 has 19 MA's), (45, 34285),

Gene: Lawnathon\_60 Start: 33972, Stop: 34127, Start Num: 40  
Candidate Starts for Lawnathon\_60:  
(19, 33867), (20, 33876), (33, 33930), (Start: 40 @33972 has 19 MA's),

Gene: LeBruni\_57 Start: 32964, Stop: 33116, Start Num: 42

Candidate Starts for LeBruni\_57:

(Start: 42 @32964 has 1 MA's), (45, 33003),

Gene: MUWow\_59 Start: 34144, Stop: 34302, Start Num: 39

Candidate Starts for MUWow\_59:

(28, 34084), (31, 34090), (Start: 39 @34144 has 13 MA's),

Gene: Mapleville\_55 Start: 33294, Stop: 33446, Start Num: 40

Candidate Starts for Mapleville\_55:

(7, 33078), (8, 33117), (10, 33150), (19, 33189), (33, 33252), (Start: 40 @33294 has 19 MA's),

Gene: MaterMagnus\_60 Start: 34549, Stop: 34707, Start Num: 39

Candidate Starts for MaterMagnus\_60:

(1, 34081), (2, 34189), (4, 34282), (6, 34336), (9, 34405), (28, 34489), (31, 34495), (Start: 39 @34549 has 13 MA's),

Gene: MidnightRain\_63 Start: 35324, Stop: 35476, Start Num: 40

Candidate Starts for MidnightRain\_63:

(7, 35108), (8, 35147), (10, 35180), (19, 35219), (33, 35282), (Start: 40 @35324 has 19 MA's),

Gene: NewKitty\_61 Start: 33682, Stop: 33837, Start Num: 39

Candidate Starts for NewKitty\_61:

(18, 33589), (Start: 39 @33682 has 13 MA's),

Gene: Persistence\_54 Start: 32763, Stop: 32915, Start Num: 40

Candidate Starts for Persistence\_54:

(Start: 39 @32760 has 13 MA's), (Start: 40 @32763 has 19 MA's), (44, 32796),

Gene: Phrank15\_60 Start: 34109, Stop: 34261, Start Num: 40

Candidate Starts for Phrank15\_60:

(5, 33884), (7, 33893), (8, 33932), (10, 33965), (19, 34004), (20, 34013), (33, 34067), (Start: 40 @34109 has 19 MA's), (45, 34148),

Gene: Pigu\_43 Start: 26743, Stop: 26892, Start Num: 40

Candidate Starts for Pigu\_43:

(27, 26674), (Start: 40 @26743 has 19 MA's),

Gene: RadFad\_63 Start: 35153, Stop: 35305, Start Num: 40

Candidate Starts for RadFad\_63:

(10, 35009), (19, 35048), (33, 35111), (Start: 40 @35153 has 19 MA's),

Gene: Raphaella\_58 Start: 33667, Stop: 33825, Start Num: 39

Candidate Starts for Raphaella\_58:

(28, 33607), (31, 33613), (Start: 39 @33667 has 13 MA's),

Gene: Raqqa\_51 Start: 31407, Stop: 31562, Start Num: 39

Candidate Starts for Raqqa\_51:

(Start: 39 @31407 has 13 MA's),

Gene: Richie\_61 Start: 34703, Stop: 34861, Start Num: 39

Candidate Starts for Richie\_61:

(11, 34571), (12, 34577), (28, 34643), (31, 34649), (Start: 39 @34703 has 13 MA's),

Gene: Rooter\_43 Start: 27383, Stop: 27583, Start Num: 41  
Candidate Starts for Rooter\_43:  
(30, 27326), (32, 27335), (Start: 41 @27383 has 2 MA's),

Gene: Sakai\_58 Start: 33514, Stop: 33669, Start Num: 40  
Candidate Starts for Sakai\_58:  
(19, 33409), (20, 33418), (33, 33472), (Start: 40 @33514 has 19 MA's),

Gene: Sarge\_40 Start: 26191, Stop: 26391, Start Num: 41  
Candidate Starts for Sarge\_40:  
(30, 26134), (32, 26143), (Start: 41 @26191 has 2 MA's),

Gene: Sashimi\_58 Start: 34556, Stop: 34708, Start Num: 40  
Candidate Starts for Sashimi\_58:  
(Start: 39 @34553 has 13 MA's), (Start: 40 @34556 has 19 MA's),

Gene: Shoya\_46 Start: 28159, Stop: 28359, Start Num: 41  
Candidate Starts for Shoya\_46:  
(30, 28102), (32, 28111), (Start: 41 @28159 has 2 MA's),

Gene: SonDevVon\_63 Start: 34120, Stop: 34275, Start Num: 40  
Candidate Starts for SonDevVon\_63:  
(19, 34015), (20, 34024), (33, 34078), (Start: 40 @34120 has 19 MA's),

Gene: SpicyFrank\_62 Start: 34804, Stop: 35013, Start Num: 39  
Candidate Starts for SpicyFrank\_62:  
(36, 34792), (Start: 39 @34804 has 13 MA's), (46, 34891),

Gene: Sporco\_63 Start: 35101, Stop: 35253, Start Num: 40  
Candidate Starts for Sporco\_63:  
(14, 34981), (34, 35068), (Start: 40 @35101 has 19 MA's),

Gene: ThayneTheZag\_59 Start: 33373, Stop: 33531, Start Num: 39  
Candidate Starts for ThayneTheZag\_59:  
(22, 33292), (35, 33361), (Start: 39 @33373 has 13 MA's),

Gene: Vopal\_61 Start: 36835, Stop: 36987, Start Num: 39  
Candidate Starts for Vopal\_61:  
(35, 36823), (Start: 39 @36835 has 13 MA's), (45, 36874),

Gene: Windest\_61 Start: 32811, Stop: 32963, Start Num: 40  
Candidate Starts for Windest\_61:  
(8, 32634), (10, 32667), (19, 32706), (33, 32769), (Start: 40 @32811 has 19 MA's), (45, 32850),

Gene: YoungHarleezy\_59 Start: 34206, Stop: 34364, Start Num: 39  
Candidate Starts for YoungHarleezy\_59:  
(3, 33930), (11, 34074), (12, 34080), (28, 34146), (31, 34152), (Start: 39 @34206 has 13 MA's),

Gene: Zucker\_51 Start: 32868, Stop: 33035, Start Num: 37  
Candidate Starts for Zucker\_51:  
(17, 32769), (24, 32808), (Start: 37 @32868 has 2 MA's), (43, 32886),