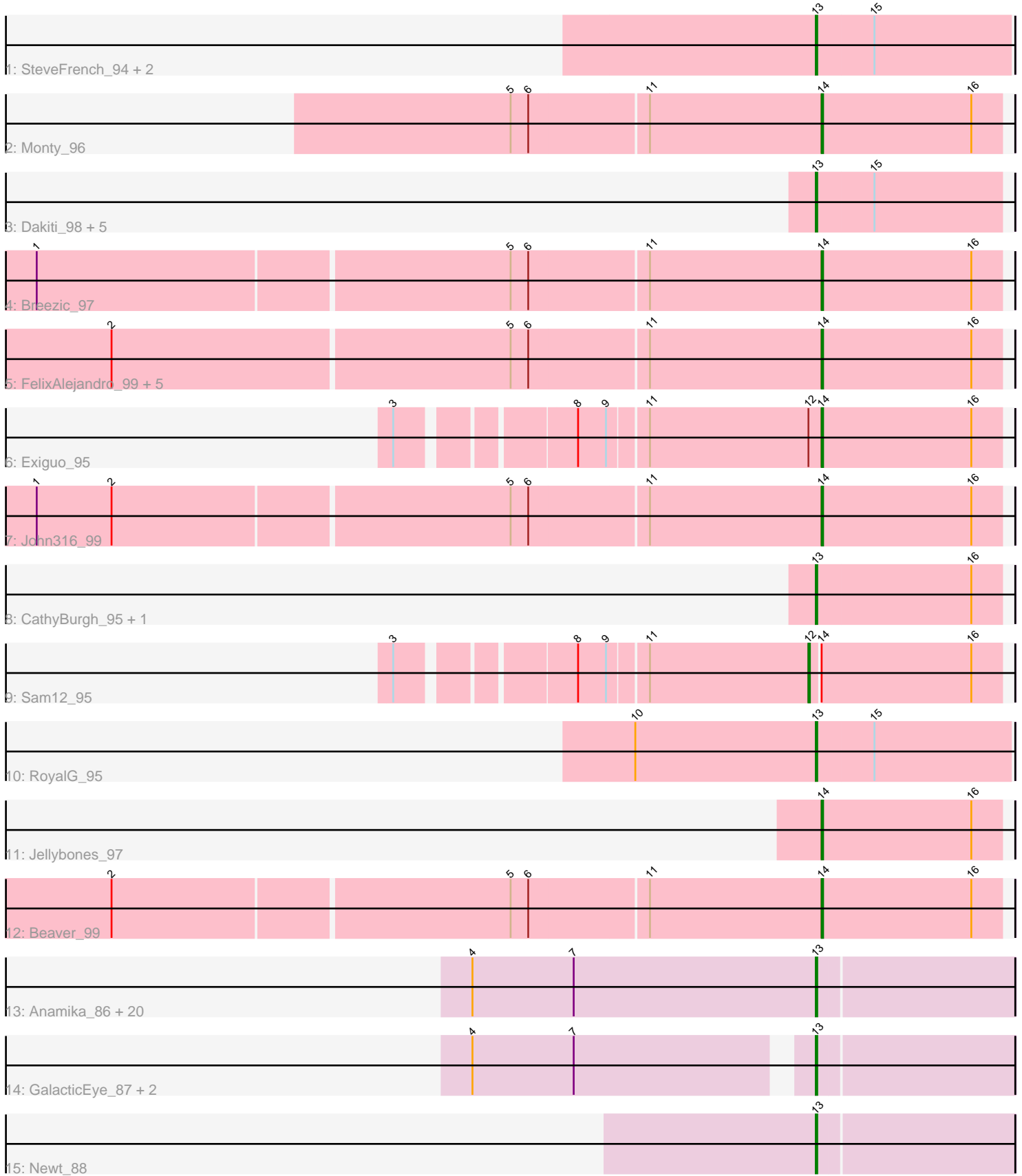


Pham 219821



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 219821 Report

This analysis was run 03/28/25 on database version 593.

Pham number 219821 has 50 members, 2 are drafts.

Phages represented in each track:

- Track 1 : SteveFrench\_94, Eggsie\_93, Diabla\_100
- Track 2 : Monty\_96
- Track 3 : Dakiti\_98, BenoitCattle\_98, BigShaq\_97, Chelms\_96, PierreThree\_96, GourdThymes\_96
- Track 4 : Breezic\_97
- Track 5 : FelixAlejandro\_99, BirksAndSocks\_99, Msay19\_100, Boneham\_98, Poland\_100, Butterball\_97
- Track 6 : Exiguo\_95
- Track 7 : John316\_99
- Track 8 : CathyBurgh\_95, Lizzo\_96
- Track 9 : Sam12\_95
- Track 10 : RoyalG\_95
- Track 11 : Jellybones\_97
- Track 12 : Beaver\_99
- Track 13 : Anamika\_86, Neoevie\_86, MrWormie\_87, Jormungandr\_86, Minos\_88, Lidong\_87, Nimi13\_86, Harambe\_86, Bianmat\_87, Charianelly\_87, Woes\_86, Shelley\_87, Hail2Pitt\_85, Hello\_86, Berries\_87, Teal\_86, Jams\_87, Lahirium\_87, Guillaume\_86, Luker\_88, Kaseim\_86
- Track 14 : GalacticEye\_87, Sticker17\_87, Damp\_87
- Track 15 : Newt\_88

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

The start number called the most often in the published annotations is 13, it was called in 35 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anamika\_86, BenoitCattle\_98, Berries\_87, Bianmat\_87, BigShaq\_97, CathyBurgh\_95, Charianelly\_87, Chelms\_96, Dakiti\_98, Damp\_87, Diabla\_100, Eggsie\_93, GalacticEye\_87, GourdThymes\_96, Guillaume\_86, Hail2Pitt\_85, Harambe\_86, Hello\_86, Jams\_87, Jormungandr\_86, Kaseim\_86, Lahirium\_87, Lidong\_87, Lizzo\_96, Luker\_88, Minos\_88, MrWormie\_87, Neoevie\_86, Newt\_88, Nimi13\_86, PierreThree\_96, RoyalG\_95, Shelley\_87, SteveFrench\_94, Sticker17\_87, Teal\_86, Woes\_86,

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

- 

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

- Beaver\_99, BirksAndSocks\_99, Boneham\_98, Breezic\_97, Butterball\_97, Exiguo\_95, FelixAlejandro\_99, Jellybones\_97, John316\_99, Monty\_96, Msay19\_100, Poland\_100, Sam12\_95,

### Summary by start number:

Start 12:

- Found in 2 of 50 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sam12\_95 (CS2),

Start 13:

- Found in 37 of 50 ( 74.0% ) of genes in pham
- Manual Annotations of this start: 35 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anamika\_86 (CS3), BenoitCattle\_98 (CS2), Berries\_87 (CS3), Bianmat\_87 (CS3), BigShaq\_97 (CS2), CathyBurgh\_95 (CS2), Charianelly\_87 (CS3), Chelms\_96 (CS2), Dakiti\_98 (CS2), Damp\_87 (CS3), Diabla\_100 (CS2), Eggsie\_93 (CS2), GalacticEye\_87 (CS3), GourdThymes\_96 (CS2), Guillaume\_86 (CS3), Hail2Pitt\_85 (CS3), Harambe\_86 (CS3), Hello\_86 (CS3), Jams\_87 (CS3), Jormungandr\_86 (CS3), Kaseim\_86 (CS3), Lahirium\_87 (CS3), Lidong\_87 (CS3), Lizzo\_96 (CS2), Luker\_88 (CS3), Minos\_88 (CS3), MrWormie\_87 (CS3), Neeovie\_86 (CS3), Newt\_88 (CS3), Nimi13\_86 (CS3), PierreThree\_96 (CS2), RoyalG\_95 (CS2), Shelley\_87 (CS3), SteveFrench\_94 (CS2), Sticker17\_87 (CS3), Teal\_86 (CS3), Woes\_86 (CS3),

Start 14:

- Found in 13 of 50 ( 26.0% ) of genes in pham
- Manual Annotations of this start: 12 of 48
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Beaver\_99 (CS2), BirksAndSocks\_99 (CS2), Boneham\_98 (CS2), Breezic\_97 (CS2), Butterball\_97 (CS2), Exiguo\_95 (CS2), FelixAlejandro\_99 (CS2), Jellybones\_97 (CS2), John316\_99 (CS2), Monty\_96 (CS2), Msay19\_100 (CS2), Poland\_100 (CS2),

### Summary by clusters:

There are 2 clusters represented in this pham: CS3, CS2,

Info for manual annotations of cluster CS2:

- Start number 12 was manually annotated 1 time for cluster CS2.
- Start number 13 was manually annotated 11 times for cluster CS2.
- Start number 14 was manually annotated 12 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 13 was manually annotated 24 times for cluster CS3.

**Gene Information:**

Gene: Anamika\_86 Start: 69030, Stop: 68899, Start Num: 13

Candidate Starts for Anamika\_86:

(4, 69264), (7, 69195), (Start: 13 @69030 has 35 MA's),

Gene: Beaver\_99 Start: 72089, Stop: 71967, Start Num: 14

Candidate Starts for Beaver\_99:

(2, 72560), (5, 72296), (6, 72284), (11, 72206), (Start: 14 @72089 has 12 MA's), (16, 71987),

Gene: BenoitCattle\_98 Start: 71490, Stop: 71365, Start Num: 13

Candidate Starts for BenoitCattle\_98:

(Start: 13 @71490 has 35 MA's), (15, 71451),

Gene: Berries\_87 Start: 69002, Stop: 68871, Start Num: 13

Candidate Starts for Berries\_87:

(4, 69236), (7, 69167), (Start: 13 @69002 has 35 MA's),

Gene: Bianmat\_87 Start: 69042, Stop: 68911, Start Num: 13

Candidate Starts for Bianmat\_87:

(4, 69276), (7, 69207), (Start: 13 @69042 has 35 MA's),

Gene: BigShaq\_97 Start: 71089, Stop: 70964, Start Num: 13

Candidate Starts for BigShaq\_97:

(Start: 13 @71089 has 35 MA's), (15, 71050),

Gene: BirksAndSocks\_99 Start: 71703, Stop: 71581, Start Num: 14

Candidate Starts for BirksAndSocks\_99:

(2, 72177), (5, 71913), (6, 71901), (11, 71820), (Start: 14 @71703 has 12 MA's), (16, 71601),

Gene: Boneham\_98 Start: 71628, Stop: 71506, Start Num: 14

Candidate Starts for Boneham\_98:

(2, 72102), (5, 71838), (6, 71826), (11, 71745), (Start: 14 @71628 has 12 MA's), (16, 71526),

Gene: Breezic\_97 Start: 70637, Stop: 70515, Start Num: 14

Candidate Starts for Breezic\_97:

(1, 71159), (5, 70844), (6, 70832), (11, 70754), (Start: 14 @70637 has 12 MA's), (16, 70535),

Gene: Butterball\_97 Start: 71633, Stop: 71511, Start Num: 14

Candidate Starts for Butterball\_97:

(2, 72107), (5, 71843), (6, 71831), (11, 71750), (Start: 14 @71633 has 12 MA's), (16, 71531),

Gene: CathyBurgh\_95 Start: 70670, Stop: 70545, Start Num: 13

Candidate Starts for CathyBurgh\_95:

(Start: 13 @70670 has 35 MA's), (16, 70565),

Gene: Charianelly\_87 Start: 68752, Stop: 68621, Start Num: 13

Candidate Starts for Charianelly\_87:

(4, 68986), (7, 68917), (Start: 13 @68752 has 35 MA's),

Gene: Chelms\_96 Start: 71227, Stop: 71102, Start Num: 13

Candidate Starts for Chelms\_96:  
(Start: 13 @71227 has 35 MA's), (15, 71188),

Gene: Dakiti\_98 Start: 72170, Stop: 72045, Start Num: 13  
Candidate Starts for Dakiti\_98:  
(Start: 13 @72170 has 35 MA's), (15, 72131),

Gene: Damp\_87 Start: 67916, Stop: 67785, Start Num: 13  
Candidate Starts for Damp\_87:  
(4, 68132), (7, 68063), (Start: 13 @67916 has 35 MA's),

Gene: Diabla\_100 Start: 71646, Stop: 71515, Start Num: 13  
Candidate Starts for Diabla\_100:  
(Start: 13 @71646 has 35 MA's), (15, 71607),

Gene: Eggsie\_93 Start: 69202, Stop: 69071, Start Num: 13  
Candidate Starts for Eggsie\_93:  
(Start: 13 @69202 has 35 MA's), (15, 69163),

Gene: Exiguo\_95 Start: 70100, Stop: 69978, Start Num: 14  
Candidate Starts for Exiguo\_95:  
(3, 70361), (8, 70256), (9, 70238), (11, 70214), (Start: 12 @70106 has 1 MA's), (Start: 14 @70100 has 12 MA's), (16, 69998),

Gene: FelixAlejandro\_99 Start: 72146, Stop: 72024, Start Num: 14  
Candidate Starts for FelixAlejandro\_99:  
(2, 72620), (5, 72353), (6, 72341), (11, 72263), (Start: 14 @72146 has 12 MA's), (16, 72044),

Gene: GalacticEye\_87 Start: 68710, Stop: 68579, Start Num: 13  
Candidate Starts for GalacticEye\_87:  
(4, 68926), (7, 68857), (Start: 13 @68710 has 35 MA's),

Gene: GourdThymes\_96 Start: 70697, Stop: 70572, Start Num: 13  
Candidate Starts for GourdThymes\_96:  
(Start: 13 @70697 has 35 MA's), (15, 70658),

Gene: Guillaume\_86 Start: 68763, Stop: 68632, Start Num: 13  
Candidate Starts for Guillaume\_86:  
(4, 68997), (7, 68928), (Start: 13 @68763 has 35 MA's),

Gene: Hail2Pitt\_85 Start: 69236, Stop: 69105, Start Num: 13  
Candidate Starts for Hail2Pitt\_85:  
(4, 69470), (7, 69401), (Start: 13 @69236 has 35 MA's),

Gene: Harambe\_86 Start: 69030, Stop: 68899, Start Num: 13  
Candidate Starts for Harambe\_86:  
(4, 69264), (7, 69195), (Start: 13 @69030 has 35 MA's),

Gene: Hello\_86 Start: 68992, Stop: 68861, Start Num: 13  
Candidate Starts for Hello\_86:  
(4, 69226), (7, 69157), (Start: 13 @68992 has 35 MA's),

Gene: Jams\_87 Start: 68040, Stop: 67909, Start Num: 13

Candidate Starts for Jams\_87:  
(4, 68274), (7, 68205), (Start: 13 @68040 has 35 MA's),

Gene: Jellybones\_97 Start: 71834, Stop: 71712, Start Num: 14  
Candidate Starts for Jellybones\_97:  
(Start: 14 @71834 has 12 MA's), (16, 71732),

Gene: John316\_99 Start: 71808, Stop: 71686, Start Num: 14  
Candidate Starts for John316\_99:  
(1, 72330), (2, 72279), (5, 72015), (6, 72003), (11, 71925), (Start: 14 @71808 has 12 MA's), (16, 71706),

Gene: Jormungandr\_86 Start: 68745, Stop: 68614, Start Num: 13  
Candidate Starts for Jormungandr\_86:  
(4, 68979), (7, 68910), (Start: 13 @68745 has 35 MA's),

Gene: Kaseim\_86 Start: 68187, Stop: 68056, Start Num: 13  
Candidate Starts for Kaseim\_86:  
(4, 68421), (7, 68352), (Start: 13 @68187 has 35 MA's),

Gene: Lahirium\_87 Start: 69781, Stop: 69650, Start Num: 13  
Candidate Starts for Lahirium\_87:  
(4, 70015), (7, 69946), (Start: 13 @69781 has 35 MA's),

Gene: Lidong\_87 Start: 69002, Stop: 68871, Start Num: 13  
Candidate Starts for Lidong\_87:  
(4, 69236), (7, 69167), (Start: 13 @69002 has 35 MA's),

Gene: Lizzo\_96 Start: 70670, Stop: 70545, Start Num: 13  
Candidate Starts for Lizzo\_96:  
(Start: 13 @70670 has 35 MA's), (16, 70565),

Gene: Luker\_88 Start: 69055, Stop: 68924, Start Num: 13  
Candidate Starts for Luker\_88:  
(4, 69289), (7, 69220), (Start: 13 @69055 has 35 MA's),

Gene: Minos\_88 Start: 68729, Stop: 68598, Start Num: 13  
Candidate Starts for Minos\_88:  
(4, 68963), (7, 68894), (Start: 13 @68729 has 35 MA's),

Gene: Monty\_96 Start: 70369, Stop: 70247, Start Num: 14  
Candidate Starts for Monty\_96:  
(5, 70576), (6, 70564), (11, 70486), (Start: 14 @70369 has 12 MA's), (16, 70267),

Gene: MrWormie\_87 Start: 67743, Stop: 67612, Start Num: 13  
Candidate Starts for MrWormie\_87:  
(4, 67977), (7, 67908), (Start: 13 @67743 has 35 MA's),

Gene: Msay19\_100 Start: 72429, Stop: 72307, Start Num: 14  
Candidate Starts for Msay19\_100:  
(2, 72903), (5, 72639), (6, 72627), (11, 72546), (Start: 14 @72429 has 12 MA's), (16, 72327),

Gene: Neoevie\_86 Start: 69003, Stop: 68872, Start Num: 13

Candidate Starts for Neevie\_86:  
(4, 69237), (7, 69168), (Start: 13 @69003 has 35 MA's),

Gene: Newt\_88 Start: 69072, Stop: 68941, Start Num: 13  
Candidate Starts for Newt\_88:  
(Start: 13 @69072 has 35 MA's),

Gene: Nimi13\_86 Start: 68753, Stop: 68622, Start Num: 13  
Candidate Starts for Nimi13\_86:  
(4, 68987), (7, 68918), (Start: 13 @68753 has 35 MA's),

Gene: PierreThree\_96 Start: 71801, Stop: 71676, Start Num: 13  
Candidate Starts for PierreThree\_96:  
(Start: 13 @71801 has 35 MA's), (15, 71762),

Gene: Poland\_100 Start: 72411, Stop: 72289, Start Num: 14  
Candidate Starts for Poland\_100:  
(2, 72885), (5, 72621), (6, 72609), (11, 72528), (Start: 14 @72411 has 12 MA's), (16, 72309),

Gene: RoyalG\_95 Start: 70393, Stop: 70262, Start Num: 13  
Candidate Starts for RoyalG\_95:  
(10, 70516), (Start: 13 @70393 has 35 MA's), (15, 70354),

Gene: Sam12\_95 Start: 70103, Stop: 69975, Start Num: 12  
Candidate Starts for Sam12\_95:  
(3, 70358), (8, 70253), (9, 70235), (11, 70211), (Start: 12 @70103 has 1 MA's), (Start: 14 @70097 has 12 MA's), (16, 69995),

Gene: Shelley\_87 Start: 68229, Stop: 68098, Start Num: 13  
Candidate Starts for Shelley\_87:  
(4, 68463), (7, 68394), (Start: 13 @68229 has 35 MA's),

Gene: SteveFrench\_94 Start: 70633, Stop: 70502, Start Num: 13  
Candidate Starts for SteveFrench\_94:  
(Start: 13 @70633 has 35 MA's), (15, 70594),

Gene: Sticker17\_87 Start: 68717, Stop: 68586, Start Num: 13  
Candidate Starts for Sticker17\_87:  
(4, 68933), (7, 68864), (Start: 13 @68717 has 35 MA's),

Gene: Teal\_86 Start: 69208, Stop: 69077, Start Num: 13  
Candidate Starts for Teal\_86:  
(4, 69442), (7, 69373), (Start: 13 @69208 has 35 MA's),

Gene: Woes\_86 Start: 69259, Stop: 69128, Start Num: 13  
Candidate Starts for Woes\_86:  
(4, 69493), (7, 69424), (Start: 13 @69259 has 35 MA's),