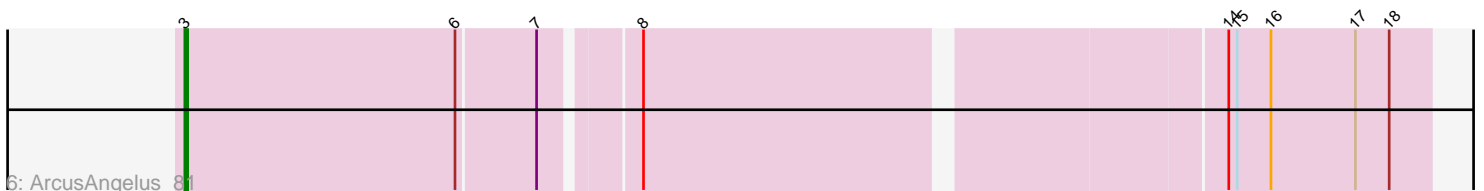
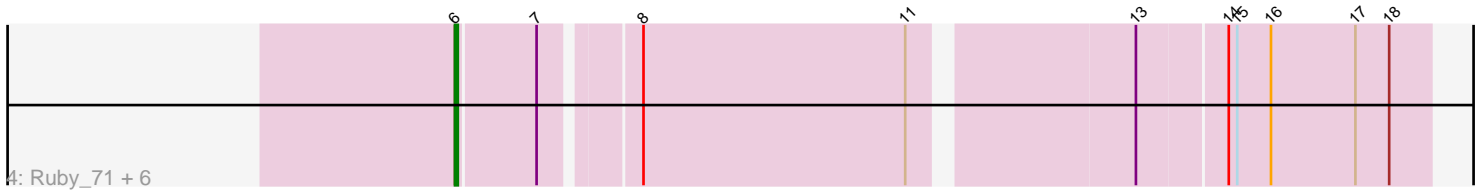
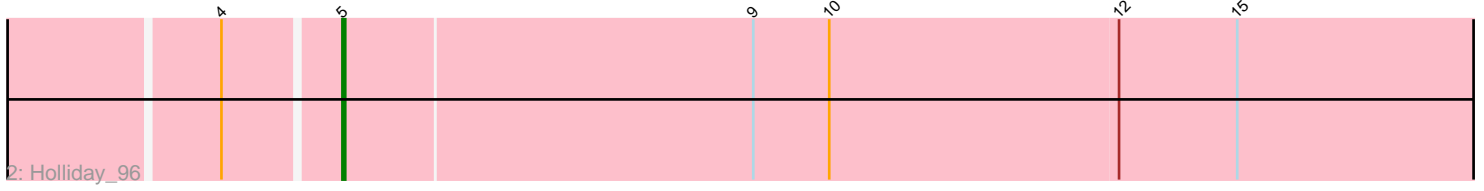
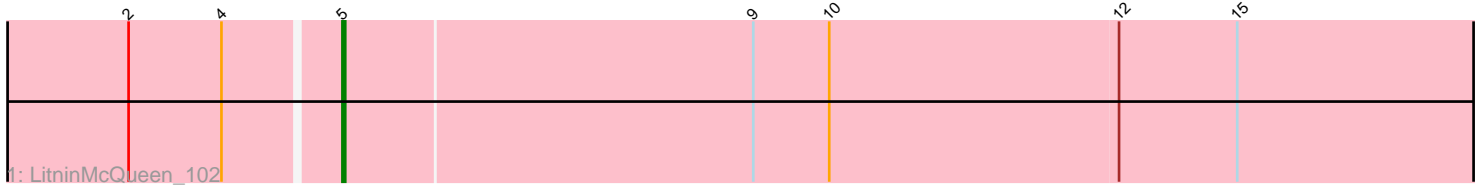


Pham 220176



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 220176 Report

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

Pham number 220176 has 18 members, 3 are drafts.

Phages represented in each track:

- Track 1 : LitninMcQueen\_102
- Track 2 : Holliday\_96
- Track 3 : Brushbloom\_86, MulchSalad\_87, Hades\_77, Burwell21\_73
- Track 4 : Ruby\_71, Ovechkin\_79, Girr\_73, MisterCuddles\_74, ShroomBoi\_77, Flathead\_76, SilverChicken\_86
- Track 5 : Fancypants\_81, SimranZ1\_77
- Track 6 : ArcusAngelus\_81
- Track 7 : Chevrolet\_84
- Track 8 : Estave1\_83

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

The start number called the most often in the published annotations is 6, it was called in 8 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chevrolet\_84, Estave1\_83, Flathead\_76, Girr\_73, MisterCuddles\_74, Ovechkin\_79, Ruby\_71, ShroomBoi\_77, SilverChicken\_86,

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

- ArcusAngelus\_81, Brushbloom\_86, Burwell21\_73, Fancypants\_81, Hades\_77, MulchSalad\_87, SimranZ1\_77,

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

- Holliday\_96, LitninMcQueen\_102,

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

Start 3:

- Found in 5 of 18 ( 27.8% ) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 20.0% of time when present
- Phage (with cluster) where this start called: ArcusAngelus\_81 (F1),

Start 5:

- Found in 2 of 18 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Holliday\_96 (DN1), LitninMcQueen\_102 (DN1),

Start 6:

- Found in 16 of 18 ( 88.9% ) of genes in pham
- Manual Annotations of this start: 8 of 15
- Called 56.2% of time when present
- Phage (with cluster) where this start called: Chevrolet\_84 (F1), Estave1\_83 (F1), Flathead\_76 (F1), Girr\_73 (F1), MisterCuddles\_74 (F1), Ovechkin\_79 (F1), Ruby\_71 (F1), ShroomBoi\_77 (F1), SilverChicken\_86 (F2),

Start 8:

- Found in 16 of 18 ( 88.9% ) of genes in pham
- Manual Annotations of this start: 4 of 15
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Brushbloom\_86 (F1), Burwell21\_73 (F1), Fancypants\_81 (F1), Hades\_77 (F1), MulchSalad\_87 (F), SimranZ1\_77 (F1),

**Summary by clusters:**

There are 4 clusters represented in this pham: F1, F2, DN1, F,

Info for manual annotations of cluster DN1:

- Start number 5 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster F1:

- Start number 3 was manually annotated 1 time for cluster F1.
- Start number 6 was manually annotated 8 times for cluster F1.
- Start number 8 was manually annotated 4 times for cluster F1.

**Gene Information:**

Gene: ArcusAngelus\_81 Start: 49069, Stop: 49488, Start Num: 3

Candidate Starts for ArcusAngelus\_81:

(Start: 3 @49069 has 1 MA's), (Start: 6 @49165 has 8 MA's), (7, 49192), (Start: 8 @49222 has 4 MA's), (14, 49417), (15, 49420), (16, 49432), (17, 49462), (18, 49474),

Gene: Brushbloom\_86 Start: 49453, Stop: 49719, Start Num: 8

Candidate Starts for Brushbloom\_86:

(Start: 6 @49396 has 8 MA's), (7, 49423), (Start: 8 @49453 has 4 MA's), (11, 49546), (13, 49618), (14, 49648), (15, 49651), (16, 49663), (17, 49693), (18, 49705),

Gene: Burwell21\_73 Start: 47545, Stop: 47811, Start Num: 8

Candidate Starts for Burwell21\_73:

(Start: 6 @47488 has 8 MA's), (7, 47515), (Start: 8 @47545 has 4 MA's), (11, 47638), (13, 47710), (14, 47740), (15, 47743), (16, 47755), (17, 47785), (18, 47797),

Gene: Chevrolet\_84 Start: 49166, Stop: 49489, Start Num: 6  
Candidate Starts for Chevrolet\_84:

(Start: 3 @49070 has 1 MA's), (Start: 6 @49166 has 8 MA's), (7, 49193), (Start: 8 @49223 has 4 MA's), (14, 49418), (15, 49421), (16, 49433), (17, 49463), (18, 49475),

Gene: Estave1\_83 Start: 51160, Stop: 51483, Start Num: 6  
Candidate Starts for Estave1\_83:

(1, 51031), (Start: 3 @51064 has 1 MA's), (Start: 6 @51160 has 8 MA's), (7, 51187), (Start: 8 @51217 has 4 MA's), (14, 51412), (15, 51415), (16, 51427), (17, 51457), (18, 51469),

Gene: Fancypants\_81 Start: 49515, Stop: 49781, Start Num: 8  
Candidate Starts for Fancypants\_81:

(Start: 3 @49362 has 1 MA's), (Start: 6 @49458 has 8 MA's), (7, 49485), (Start: 8 @49515 has 4 MA's), (14, 49710), (15, 49713), (16, 49725), (17, 49755), (18, 49767),

Gene: Flathead\_76 Start: 47266, Stop: 47589, Start Num: 6  
Candidate Starts for Flathead\_76:

(Start: 6 @47266 has 8 MA's), (7, 47293), (Start: 8 @47323 has 4 MA's), (11, 47416), (13, 47488), (14, 47518), (15, 47521), (16, 47533), (17, 47563), (18, 47575),

Gene: Girr\_73 Start: 47736, Stop: 48059, Start Num: 6  
Candidate Starts for Girr\_73:

(Start: 6 @47736 has 8 MA's), (7, 47763), (Start: 8 @47793 has 4 MA's), (11, 47886), (13, 47958), (14, 47988), (15, 47991), (16, 48003), (17, 48033), (18, 48045),

Gene: Hades\_77 Start: 46144, Stop: 46410, Start Num: 8  
Candidate Starts for Hades\_77:

(Start: 6 @46087 has 8 MA's), (7, 46114), (Start: 8 @46144 has 4 MA's), (11, 46237), (13, 46309), (14, 46339), (15, 46342), (16, 46354), (17, 46384), (18, 46396),

Gene: Holliday\_96 Start: 54368, Stop: 54769, Start Num: 5  
Candidate Starts for Holliday\_96:

(4, 54329), (Start: 5 @54368 has 2 MA's), (9, 54512), (10, 54539), (12, 54641), (15, 54683),

Gene: LitninMcQueen\_102 Start: 53580, Stop: 53981, Start Num: 5  
Candidate Starts for LitninMcQueen\_102:

(2, 53508), (4, 53541), (Start: 5 @53580 has 2 MA's), (9, 53724), (10, 53751), (12, 53853), (15, 53895),

Gene: MisterCuddles\_74 Start: 47736, Stop: 48059, Start Num: 6  
Candidate Starts for MisterCuddles\_74:

(Start: 6 @47736 has 8 MA's), (7, 47763), (Start: 8 @47793 has 4 MA's), (11, 47886), (13, 47958), (14, 47988), (15, 47991), (16, 48003), (17, 48033), (18, 48045),

Gene: MulchSalad\_87 Start: 50295, Stop: 50561, Start Num: 8  
Candidate Starts for MulchSalad\_87:

(Start: 6 @50238 has 8 MA's), (7, 50265), (Start: 8 @50295 has 4 MA's), (11, 50388), (13, 50460), (14, 50490), (15, 50493), (16, 50505), (17, 50535), (18, 50547),

Gene: Ovechkin\_79 Start: 48301, Stop: 48624, Start Num: 6  
Candidate Starts for Ovechkin\_79:

(Start: 6 @48301 has 8 MA's), (7, 48328), (Start: 8 @48358 has 4 MA's), (11, 48451), (13, 48523), (14, 48553), (15, 48556), (16, 48568), (17, 48598), (18, 48610),

Gene: Ruby\_71 Start: 47737, Stop: 48060, Start Num: 6

Candidate Starts for Ruby\_71:

(Start: 6 @47737 has 8 MA's), (7, 47764), (Start: 8 @47794 has 4 MA's), (11, 47887), (13, 47959), (14, 47989), (15, 47992), (16, 48004), (17, 48034), (18, 48046),

Gene: ShroomBoi\_77 Start: 47879, Stop: 48202, Start Num: 6

Candidate Starts for ShroomBoi\_77:

(Start: 6 @47879 has 8 MA's), (7, 47906), (Start: 8 @47936 has 4 MA's), (11, 48029), (13, 48101), (14, 48131), (15, 48134), (16, 48146), (17, 48176), (18, 48188),

Gene: SilverChicken\_86 Start: 47815, Stop: 48138, Start Num: 6

Candidate Starts for SilverChicken\_86:

(Start: 6 @47815 has 8 MA's), (7, 47842), (Start: 8 @47872 has 4 MA's), (11, 47965), (13, 48037), (14, 48067), (15, 48070), (16, 48082), (17, 48112), (18, 48124),

Gene: SimranZ1\_77 Start: 47116, Stop: 47382, Start Num: 8

Candidate Starts for SimranZ1\_77:

(Start: 3 @46963 has 1 MA's), (Start: 6 @47059 has 8 MA's), (7, 47086), (Start: 8 @47116 has 4 MA's), (14, 47311), (15, 47314), (16, 47326), (17, 47356), (18, 47368),