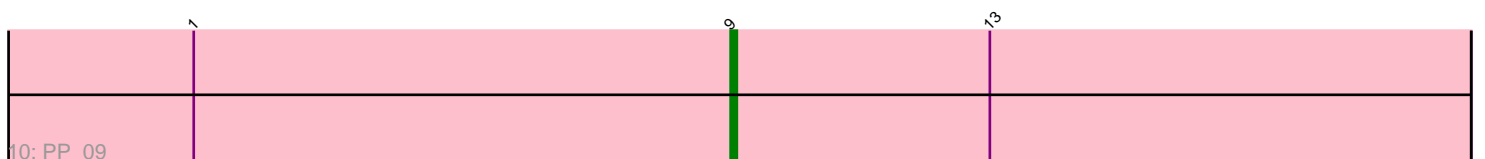
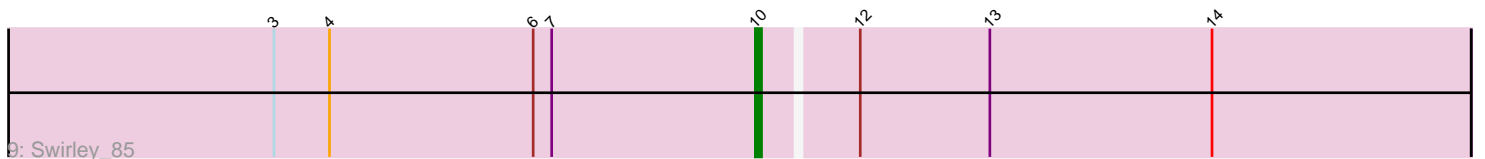
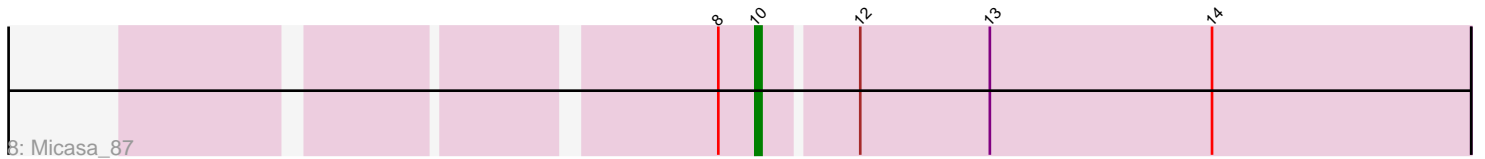
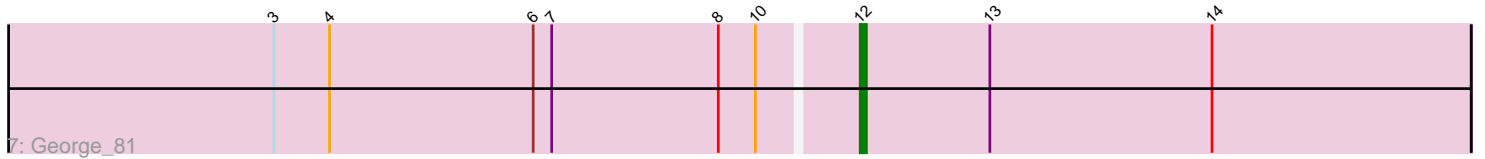
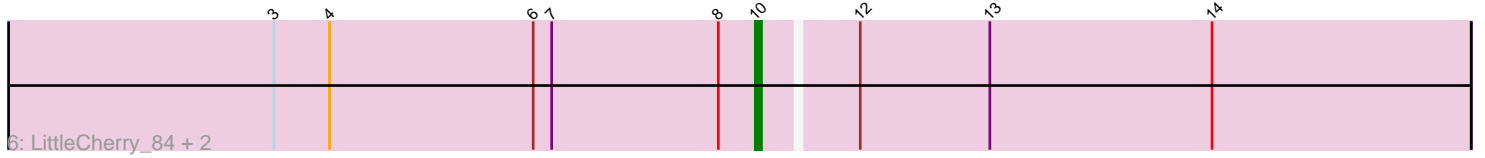
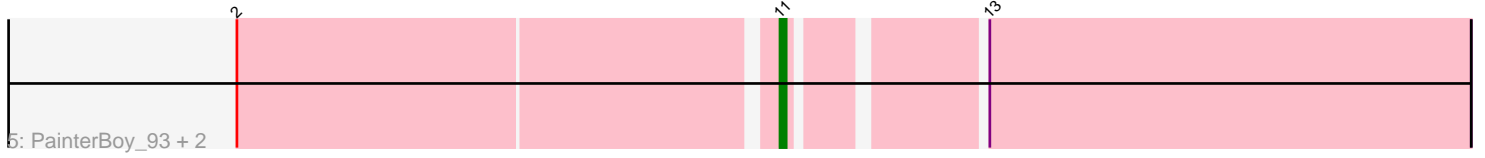
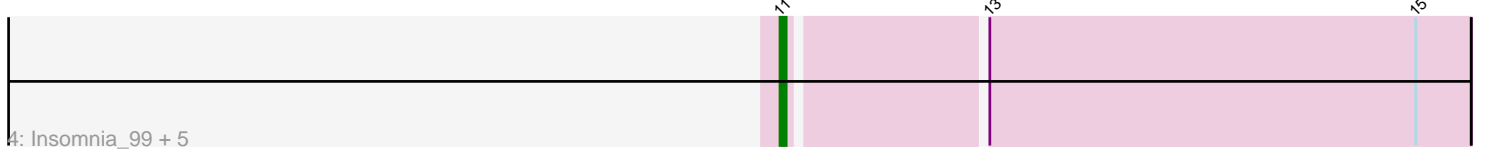
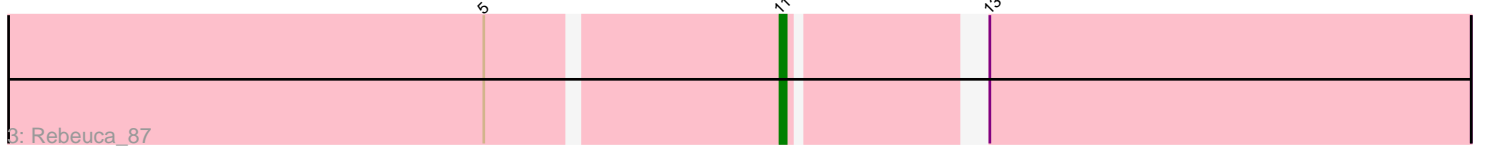
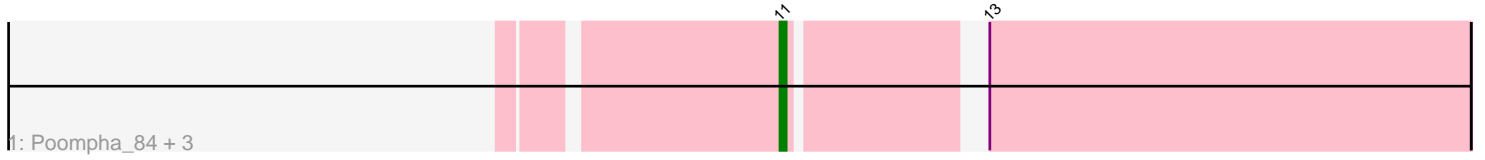


Pham 203220



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 203220 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203220 has 27 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Poompha\_84, Drake94\_83, PeaceMeal1\_83, KittenMittens\_81
- Track 2 : Twister\_87, Topanga\_76, Edison31\_73, Hutc2\_97, Salz\_96, WalterMcMickey\_86
- Track 3 : Rebeuca\_87
- Track 4 : Insomnia\_99, Sham4\_96, TinyTimmy\_97, Petersenfast\_93, Flaverint\_100, MaCh\_99
- Track 5 : PainterBoy\_93, EagleEye\_96, Lucyedi\_94
- Track 6 : LittleCherry\_84, Milcery\_84, Twigg\_85
- Track 7 : George\_81
- Track 8 : Micasa\_87
- Track 9 : Swirley\_85
- Track 10 : PP\_09

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

The start number called the most often in the published annotations is 11, it was called in 19 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Drake94\_83, EagleEye\_96, Edison31\_73, Flaverint\_100, Hutc2\_97, Insomnia\_99, KittenMittens\_81, Lucyedi\_94, MaCh\_99, PainterBoy\_93, PeaceMeal1\_83, Petersenfast\_93, Poompha\_84, Rebeuca\_87, Salz\_96, Sham4\_96, TinyTimmy\_97, Topanga\_76, Twister\_87, WalterMcMickey\_86,

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

- 

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

- George\_81, LittleCherry\_84, Micasa\_87, Milcery\_84, PP\_09, Swirley\_85, Twigg\_85,

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

Start 9:

- Found in 1 of 27 ( 3.7% ) of genes in pham

- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP\_09 (A7),

Start 10:

- Found in 6 of 27 ( 22.2% ) of genes in pham
- Manual Annotations of this start: 4 of 25
- Called 83.3% of time when present
- Phage (with cluster) where this start called: LittleCherry\_84 (A5), Micasa\_87 (A5), Milcery\_84 (A5), Swirley\_85 (A5), Twiggy\_85 (A5),

Start 11:

- Found in 20 of 27 ( 74.1% ) of genes in pham
- Manual Annotations of this start: 19 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Drake94\_83 (A10), EagleEye\_96 (A16), Edison31\_73 (A10), Flaverint\_100 (A11), Hutc2\_97 (A11), Insomnia\_99 (A11), KittenMittens\_81 (A10), Lucyedi\_94 (A16), MaCh\_99 (A11), PainterBoy\_93 (A16), PeaceMeal1\_83 (A10), Petersenfast\_93 (A11), Poompha\_84 (A10), Rebeuca\_87 (A10), Salz\_96 (A11), Sham4\_96 (A11), TinyTimmy\_97 (A11), Topanga\_76 (A10), Twister\_87 (A10), WalterMcMickey\_86 (A10),

Start 12:

- Found in 6 of 27 ( 22.2% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 16.7% of time when present
- Phage (with cluster) where this start called: George\_81 (A5),

### **Summary by clusters:**

There are 5 clusters represented in this pham: A5, A16, A11, A10, A7,

Info for manual annotations of cluster A10:

- Start number 11 was manually annotated 9 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 11 was manually annotated 7 times for cluster A11.

Info for manual annotations of cluster A16:

- Start number 11 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A5:

- Start number 10 was manually annotated 4 times for cluster A5.
- Start number 12 was manually annotated 1 time for cluster A5.

Info for manual annotations of cluster A7:

- Start number 9 was manually annotated 1 time for cluster A7.

### **Gene Information:**

Gene: Drake94\_83 Start: 48766, Stop: 48662, Start Num: 11

Candidate Starts for Drake94\_83:  
(Start: 11 @48766 has 19 MA's), (13, 48739),

Gene: EagleEye\_96 Start: 51407, Stop: 51303, Start Num: 11  
Candidate Starts for EagleEye\_96:  
(2, 51491), (Start: 11 @51407 has 19 MA's), (13, 51380),

Gene: Edison31\_73 Start: 45753, Stop: 45649, Start Num: 11  
Candidate Starts for Edison31\_73:  
(Start: 11 @45753 has 19 MA's), (13, 45726),

Gene: Flaverint\_100 Start: 51095, Stop: 50988, Start Num: 11  
Candidate Starts for Flaverint\_100:  
(Start: 11 @51095 has 19 MA's), (13, 51065), (15, 50996),

Gene: George\_81 Start: 49646, Stop: 49548, Start Num: 12  
Candidate Starts for George\_81:  
(3, 49739), (4, 49730), (6, 49697), (7, 49694), (8, 49667), (Start: 10 @49661 has 4 MA's), (Start: 12 @49646 has 1 MA's), (13, 49625), (14, 49589),

Gene: Hutc2\_97 Start: 49903, Stop: 49796, Start Num: 11  
Candidate Starts for Hutc2\_97:  
(Start: 11 @49903 has 19 MA's), (13, 49873),

Gene: Insomnia\_99 Start: 51129, Stop: 51022, Start Num: 11  
Candidate Starts for Insomnia\_99:  
(Start: 11 @51129 has 19 MA's), (13, 51099), (15, 51030),

Gene: KittenMittens\_81 Start: 48769, Stop: 48665, Start Num: 11  
Candidate Starts for KittenMittens\_81:  
(Start: 11 @48769 has 19 MA's), (13, 48742),

Gene: LittleCherry\_84 Start: 48771, Stop: 48658, Start Num: 10  
Candidate Starts for LittleCherry\_84:  
(3, 48849), (4, 48840), (6, 48807), (7, 48804), (8, 48777), (Start: 10 @48771 has 4 MA's), (Start: 12 @48756 has 1 MA's), (13, 48735), (14, 48699),

Gene: Lucyedi\_94 Start: 51420, Stop: 51316, Start Num: 11  
Candidate Starts for Lucyedi\_94:  
(2, 51504), (Start: 11 @51420 has 19 MA's), (13, 51393),

Gene: MaCh\_99 Start: 51092, Stop: 50985, Start Num: 11  
Candidate Starts for MaCh\_99:  
(Start: 11 @51092 has 19 MA's), (13, 51062), (15, 50993),

Gene: Micasa\_87 Start: 49438, Stop: 49325, Start Num: 10  
Candidate Starts for Micasa\_87:  
(8, 49444), (Start: 10 @49438 has 4 MA's), (Start: 12 @49423 has 1 MA's), (13, 49402), (14, 49366),

Gene: Milcery\_84 Start: 49067, Stop: 48954, Start Num: 10  
Candidate Starts for Milcery\_84:  
(3, 49145), (4, 49136), (6, 49103), (7, 49100), (8, 49073), (Start: 10 @49067 has 4 MA's), (Start: 12 @49052 has 1 MA's), (13, 49031), (14, 48995),

Gene: PP\_09 Start: 2269, Stop: 2150, Start Num: 9  
Candidate Starts for PP\_09:  
(1, 2356), (Start: 9 @2269 has 1 MA's), (13, 2227),

Gene: PainterBoy\_93 Start: 51131, Stop: 51027, Start Num: 11  
Candidate Starts for PainterBoy\_93:  
(2, 51215), (Start: 11 @51131 has 19 MA's), (13, 51104),

Gene: PeaceMeal1\_83 Start: 48773, Stop: 48669, Start Num: 11  
Candidate Starts for PeaceMeal1\_83:  
(Start: 11 @48773 has 19 MA's), (13, 48746),

Gene: Petersenfast\_93 Start: 49528, Stop: 49421, Start Num: 11  
Candidate Starts for Petersenfast\_93:  
(Start: 11 @49528 has 19 MA's), (13, 49498), (15, 49429),

Gene: Poompha\_84 Start: 48962, Stop: 48858, Start Num: 11  
Candidate Starts for Poompha\_84:  
(Start: 11 @48962 has 19 MA's), (13, 48935),

Gene: Rebeuca\_87 Start: 50078, Stop: 49974, Start Num: 11  
Candidate Starts for Rebeuca\_87:  
(5, 50123), (Start: 11 @50078 has 19 MA's), (13, 50051),

Gene: Salz\_96 Start: 49825, Stop: 49718, Start Num: 11  
Candidate Starts for Salz\_96:  
(Start: 11 @49825 has 19 MA's), (13, 49795),

Gene: Sham4\_96 Start: 49843, Stop: 49736, Start Num: 11  
Candidate Starts for Sham4\_96:  
(Start: 11 @49843 has 19 MA's), (13, 49813), (15, 49744),

Gene: Swirley\_85 Start: 47789, Stop: 47676, Start Num: 10  
Candidate Starts for Swirley\_85:  
(3, 47867), (4, 47858), (6, 47825), (7, 47822), (Start: 10 @47789 has 4 MA's), (Start: 12 @47774 has 1 MA's), (13, 47753), (14, 47717),

Gene: TinyTimmy\_97 Start: 50342, Stop: 50235, Start Num: 11  
Candidate Starts for TinyTimmy\_97:  
(Start: 11 @50342 has 19 MA's), (13, 50312), (15, 50243),

Gene: Topanga\_76 Start: 46554, Stop: 46450, Start Num: 11  
Candidate Starts for Topanga\_76:  
(Start: 11 @46554 has 19 MA's), (13, 46527),

Gene: Twigg\_85 Start: 49193, Stop: 49080, Start Num: 10  
Candidate Starts for Twigg\_85:  
(3, 49271), (4, 49262), (6, 49229), (7, 49226), (8, 49199), (Start: 10 @49193 has 4 MA's), (Start: 12 @49178 has 1 MA's), (13, 49157), (14, 49121),

Gene: Twister\_87 Start: 49768, Stop: 49664, Start Num: 11  
Candidate Starts for Twister\_87:

(Start: 11 @49768 has 19 MA's), (13, 49741),

Gene: WalterMcMickey\_86 Start: 49768, Stop: 49664, Start Num: 11

Candidate Starts for WalterMcMickey\_86:

(Start: 11 @49768 has 19 MA's), (13, 49741),