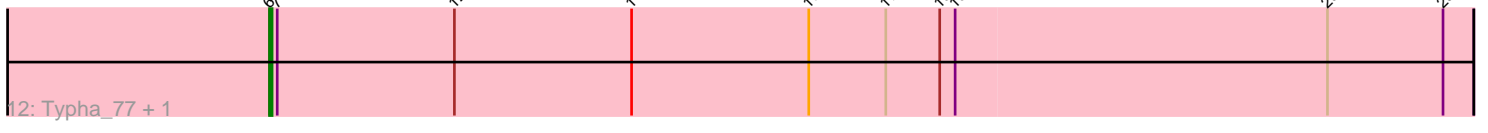
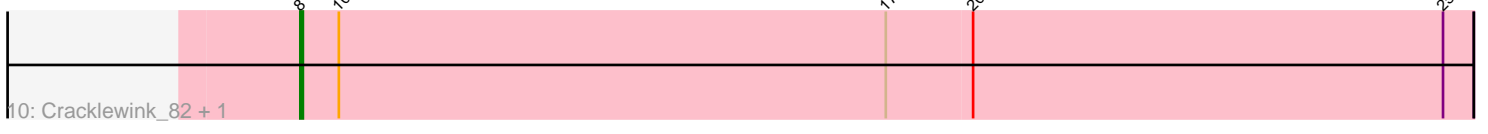
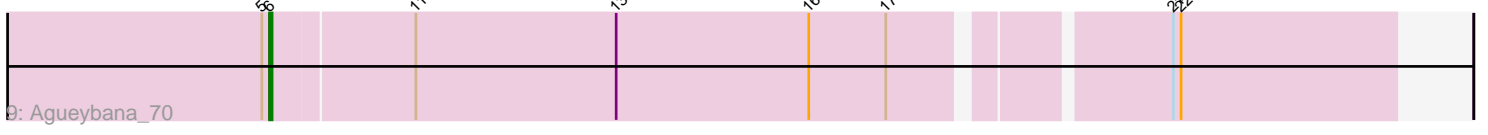
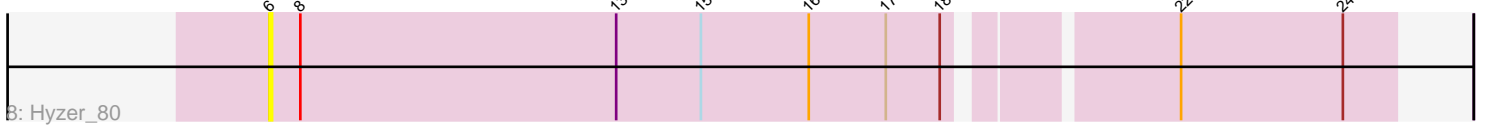
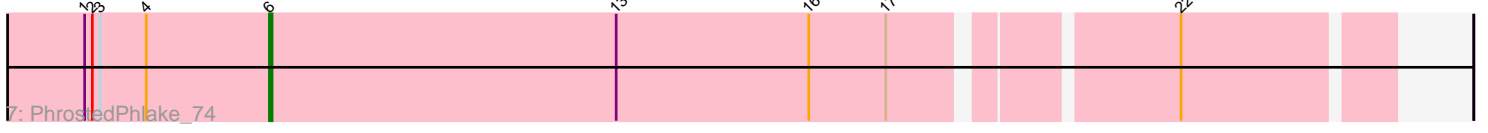
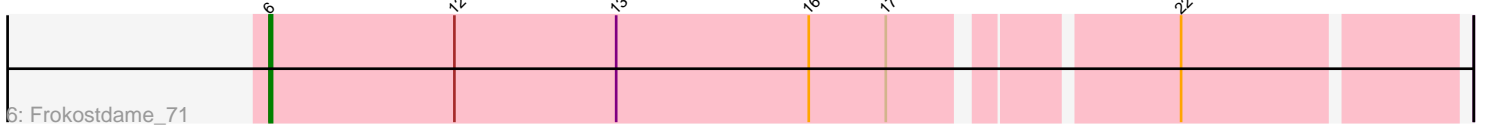
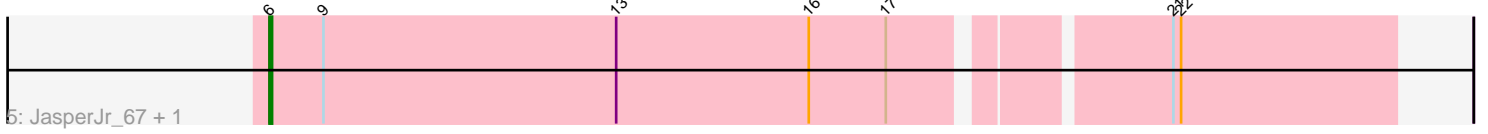
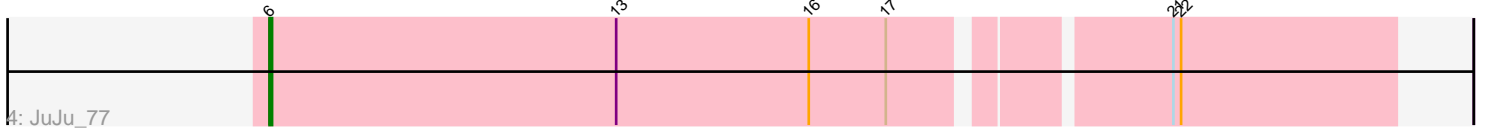
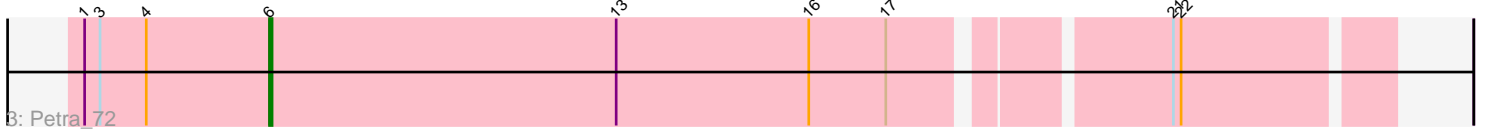
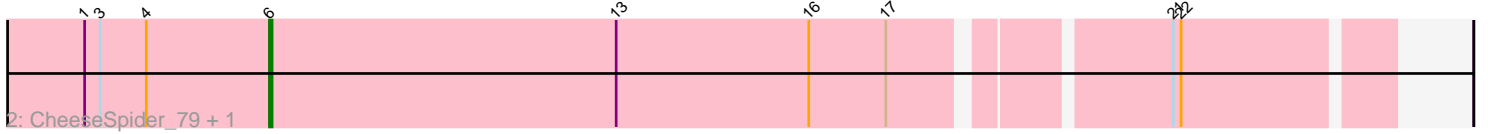
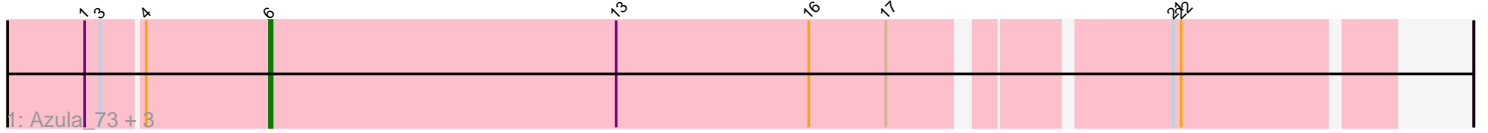


Pham 300374



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 300374 Report

This analysis was run 06/08/26 on database version 649.

Pham number 300374 has 20 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Azula\_73, Blueberry\_72, Gambino\_75, MissRona\_73
- Track 2 : CheeseSpider\_79, Zarbodnamra\_71
- Track 3 : Petra\_72
- Track 4 : JuJu\_77
- Track 5 : JasperJr\_67, Guacamole\_67
- Track 6 : Frokostdame\_71
- Track 7 : PhrostedPhlake\_74
- Track 8 : Hyzer\_80
- Track 9 : Agueybana\_70
- Track 10 : Cracklewink\_82, Bipper\_82
- Track 11 : AuntGwenStacy\_77, Faiyaz\_79
- Track 12 : Typha\_77, Hilltopfarm\_78

### ***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 14 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agueybana\_70, Azula\_73, Blueberry\_72, CheeseSpider\_79, Frokostdame\_71, Gambino\_75, Guacamole\_67, Hilltopfarm\_78, Hyzer\_80, JasperJr\_67, JuJu\_77, MissRona\_73, Petra\_72, PhrostedPhlake\_74, Typha\_77, Zarbodnamra\_71,

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

- AuntGwenStacy\_77, Faiyaz\_79,

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

- Bipper\_82, Cracklewink\_82,

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

Start 6:

- Found in 18 of 20 ( 90.0% ) of genes in pham
- Manual Annotations of this start: 14 of 17

- Called 88.9% of time when present
- Phage (with cluster) where this start called: Agueybana\_70 (CZ1), Azula\_73 (CV), Blueberry\_72 (CV), CheeseSpider\_79 (CV), Frokostdame\_71 (CV), Gambino\_75 (CV), Guacamole\_67 (CV), Hilltopfarm\_78 (Y), Hyzer\_80 (CZ1), JasperJr\_67 (CV), JuJu\_77 (CV), MissRona\_73 (CV), Petra\_72 (CV), PhrostedPhlake\_74 (CV), Typha\_77 (Y), Zarbodnamra\_71 (CV),

Start 7:

- Found in 4 of 20 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy\_77 (Y), Faiyaz\_79 (Y),

Start 8:

- Found in 3 of 20 ( 15.0% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bipper\_82 (Y), Cracklewink\_82 (Y),

### **Summary by clusters:**

There are 3 clusters represented in this pham: Y, CZ1, CV,

Info for manual annotations of cluster CV:

- Start number 6 was manually annotated 11 times for cluster CV.

Info for manual annotations of cluster CZ1:

- Start number 6 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster Y:

- Start number 6 was manually annotated 2 times for cluster Y.
- Start number 7 was manually annotated 1 time for cluster Y.
- Start number 8 was manually annotated 2 times for cluster Y.

### **Gene Information:**

Gene: Agueybana\_70 Start: 46757, Stop: 47176, Start Num: 6

Candidate Starts for Agueybana\_70:

(5, 46754), (Start: 6 @46757 has 14 MA's), (11, 46811), (13, 46889), (16, 46964), (17, 46994), (21, 47090), (22, 47093),

Gene: AuntGwenStacy\_77 Start: 51888, Stop: 52352, Start Num: 7

Candidate Starts for AuntGwenStacy\_77:

(Start: 6 @51885 has 14 MA's), (Start: 7 @51888 has 1 MA's), (12, 51957), (14, 52026), (16, 52095), (17, 52125), (18, 52146), (19, 52152), (23, 52296), (25, 52341),

Gene: Azula\_73 Start: 46202, Stop: 46618, Start Num: 6

Candidate Starts for Azula\_73:

(1, 46133), (3, 46139), (4, 46154), (Start: 6 @46202 has 14 MA's), (13, 46337), (16, 46412), (17, 46442), (21, 46538), (22, 46541),

Gene: Bipper\_82 Start: 53819, Stop: 54274, Start Num: 8

Candidate Starts for Bipper\_82:

(Start: 8 @53819 has 2 MA's), (10, 53834), (17, 54047), (20, 54080), (25, 54263),

Gene: Blueberry\_72 Start: 46202, Stop: 46618, Start Num: 6

Candidate Starts for Blueberry\_72:

(1, 46133), (3, 46139), (4, 46154), (Start: 6 @46202 has 14 MA's), (13, 46337), (16, 46412), (17, 46442), (21, 46538), (22, 46541),

Gene: CheeseSpider\_79 Start: 46127, Stop: 46543, Start Num: 6

Candidate Starts for CheeseSpider\_79:

(1, 46055), (3, 46061), (4, 46079), (Start: 6 @46127 has 14 MA's), (13, 46262), (16, 46337), (17, 46367), (21, 46463), (22, 46466),

Gene: Cracklewink\_82 Start: 52871, Stop: 53326, Start Num: 8

Candidate Starts for Cracklewink\_82:

(Start: 8 @52871 has 2 MA's), (10, 52886), (17, 53099), (20, 53132), (25, 53315),

Gene: Faiyaz\_79 Start: 51894, Stop: 52358, Start Num: 7

Candidate Starts for Faiyaz\_79:

(Start: 6 @51891 has 14 MA's), (Start: 7 @51894 has 1 MA's), (12, 51963), (14, 52032), (16, 52101), (17, 52131), (18, 52152), (19, 52158), (23, 52302), (25, 52347),

Gene: Frokostdame\_71 Start: 45512, Stop: 45952, Start Num: 6

Candidate Starts for Frokostdame\_71:

(Start: 6 @45512 has 14 MA's), (12, 45584), (13, 45647), (16, 45722), (17, 45752), (22, 45851),

Gene: Gambino\_75 Start: 46202, Stop: 46618, Start Num: 6

Candidate Starts for Gambino\_75:

(1, 46133), (3, 46139), (4, 46154), (Start: 6 @46202 has 14 MA's), (13, 46337), (16, 46412), (17, 46442), (21, 46538), (22, 46541),

Gene: Guacamole\_67 Start: 43197, Stop: 43619, Start Num: 6

Candidate Starts for Guacamole\_67:

(Start: 6 @43197 has 14 MA's), (9, 43218), (13, 43332), (16, 43407), (17, 43437), (21, 43533), (22, 43536),

Gene: Hilltopfarm\_78 Start: 51591, Stop: 52058, Start Num: 6

Candidate Starts for Hilltopfarm\_78:

(Start: 6 @51591 has 14 MA's), (Start: 7 @51594 has 1 MA's), (12, 51663), (14, 51732), (16, 51801), (17, 51831), (18, 51852), (19, 51858), (23, 52002), (25, 52047),

Gene: Hyzer\_80 Start: 53106, Stop: 53528, Start Num: 6

Candidate Starts for Hyzer\_80:

(Start: 6 @53106 has 14 MA's), (Start: 8 @53118 has 2 MA's), (13, 53241), (15, 53274), (16, 53316), (17, 53346), (18, 53367), (22, 53445), (24, 53508),

Gene: JasperJr\_67 Start: 43197, Stop: 43619, Start Num: 6

Candidate Starts for JasperJr\_67:

(Start: 6 @43197 has 14 MA's), (9, 43218), (13, 43332), (16, 43407), (17, 43437), (21, 43533), (22, 43536),

Gene: JuJu\_77 Start: 47933, Stop: 48355, Start Num: 6

Candidate Starts for JuJu\_77:

(Start: 6 @47933 has 14 MA's), (13, 48068), (16, 48143), (17, 48173), (21, 48269), (22, 48272),

Gene: MissRona\_73 Start: 46203, Stop: 46619, Start Num: 6

Candidate Starts for MissRona\_73:

(1, 46134), (3, 46140), (4, 46155), (Start: 6 @46203 has 14 MA's), (13, 46338), (16, 46413), (17, 46443), (21, 46539), (22, 46542),

Gene: Petra\_72 Start: 44355, Stop: 44771, Start Num: 6

Candidate Starts for Petra\_72:

(1, 44283), (3, 44289), (4, 44307), (Start: 6 @44355 has 14 MA's), (13, 44490), (16, 44565), (17, 44595), (21, 44691), (22, 44694),

Gene: PhrostedPhlake\_74 Start: 44603, Stop: 45019, Start Num: 6

Candidate Starts for PhrostedPhlake\_74:

(1, 44531), (2, 44534), (3, 44537), (4, 44555), (Start: 6 @44603 has 14 MA's), (13, 44738), (16, 44813), (17, 44843), (22, 44942),

Gene: Typha\_77 Start: 51885, Stop: 52352, Start Num: 6

Candidate Starts for Typha\_77:

(Start: 6 @51885 has 14 MA's), (Start: 7 @51888 has 1 MA's), (12, 51957), (14, 52026), (16, 52095), (17, 52125), (18, 52146), (19, 52152), (23, 52296), (25, 52341),

Gene: Zarbodnamra\_71 Start: 43296, Stop: 43712, Start Num: 6

Candidate Starts for Zarbodnamra\_71:

(1, 43224), (3, 43230), (4, 43248), (Start: 6 @43296 has 14 MA's), (13, 43431), (16, 43506), (17, 43536), (21, 43632), (22, 43635),