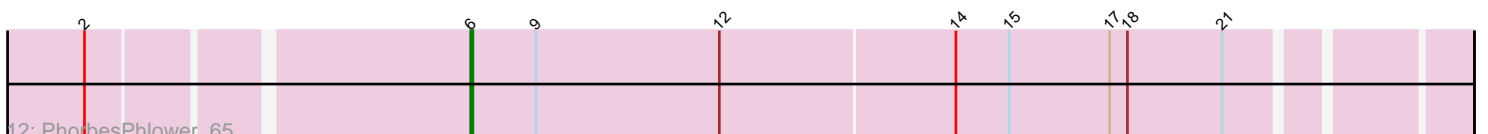
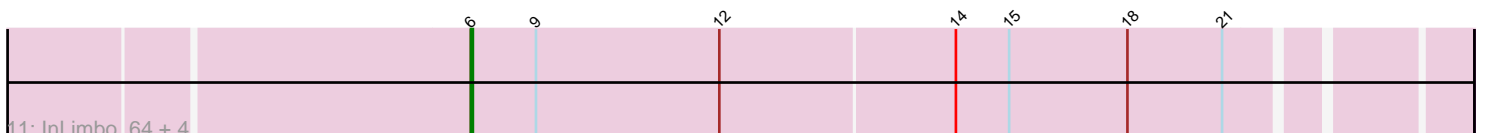
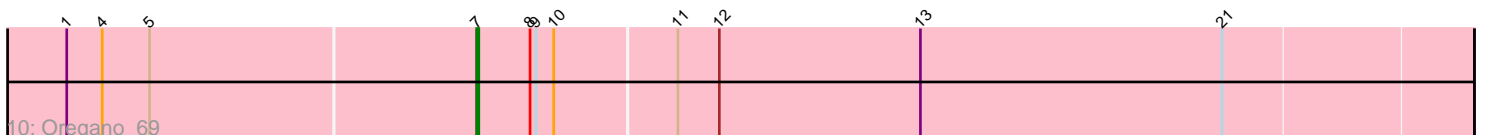
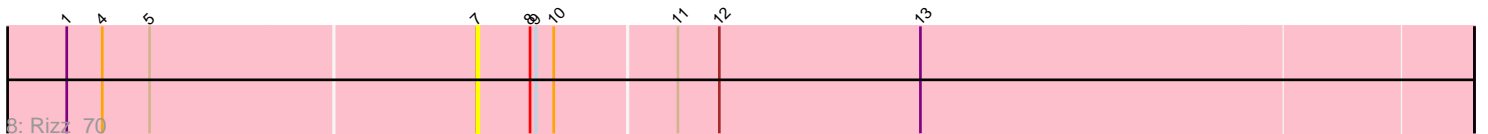
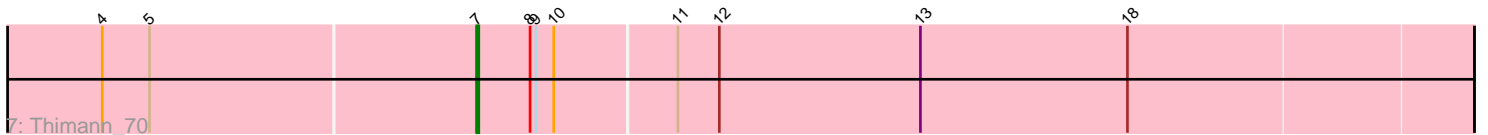
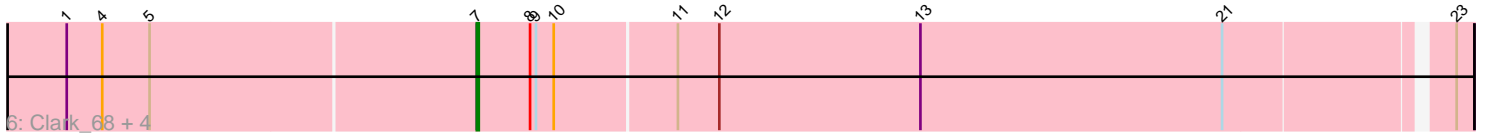
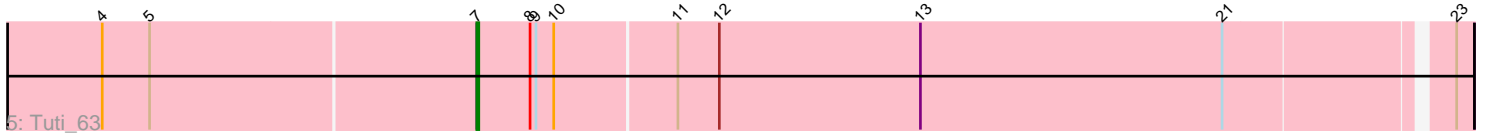
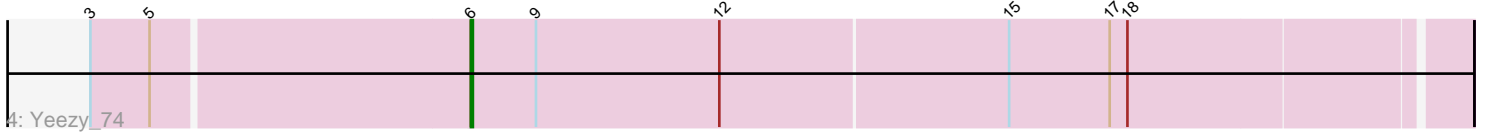
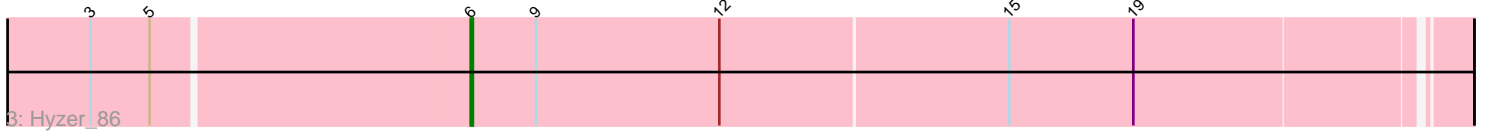
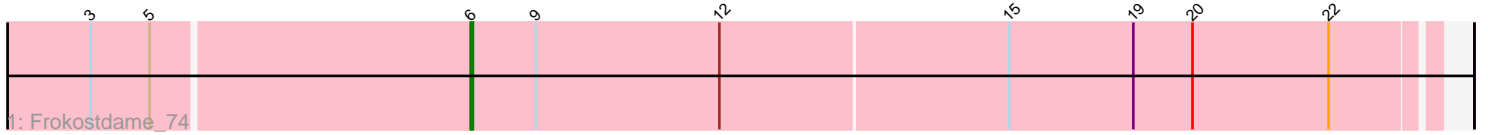


Pham 312039



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 312039 Report

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

Pham number 312039 has 20 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Frokostdame\_74
- Track 2 : Ohgeesy\_72
- Track 3 : Hyzer\_86
- Track 4 : Yeezy\_74
- Track 5 : Tuti\_63
- Track 6 : Clark\_68, Invectra\_72, Beenie\_63, Samman98\_70, MichaelScott\_70
- Track 7 : Thimann\_70
- Track 8 : Rizz\_70
- Track 9 : Easley\_67
- Track 10 : Oregano\_69
- Track 11 : InLimbo\_64, Morkie\_67, OneDirection\_61, Lton\_64, Kuwabara\_85
- Track 12 : PhorbesPhlower\_65

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

The start number called the most often in the published annotations is 7, it was called in 10 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beenie\_63, Clark\_68, Easley\_67, Invectra\_72, MichaelScott\_70, Ohgeesy\_72, Oregano\_69, Rizz\_70, Samman98\_70, Thimann\_70, Tuti\_63,

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

- 

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

- Frokostdame\_74, Hyzer\_86, InLimbo\_64, Kuwabara\_85, Lton\_64, Morkie\_67, OneDirection\_61, PhorbesPhlower\_65, Yeezy\_74,

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

Start 6:

- Found in 9 of 20 ( 45.0% ) of genes in pham
- Manual Annotations of this start: 8 of 18

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Frokostdame\_74 (CV), Hyzer\_86 (CZ1), InLimbo\_64 (DH), Kuwabara\_85 (DN4), Lton\_64 (CZ), Morkie\_67 (DH), OneDirection\_61 (CZ6), PhorbesPhlower\_65 (DH), Yeezy\_74 (CZ3),

Start 7:

- Found in 11 of 20 ( 55.0% ) of genes in pham
- Manual Annotations of this start: 10 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beenie\_63 (CZ4), Clark\_68 (CZ4), Easley\_67 (CZ4), Invectora\_72 (CZ4), MichaelScott\_70 (CZ4), Ohgeesy\_72 (CZ), Oregano\_69 (CZ4), Rizz\_70 (CZ4), Samman98\_70 (CZ4), Thimann\_70 (CZ4), Tuti\_63 (CZ4),

### **Summary by clusters:**

There are 8 clusters represented in this pham: DH, DN4, CZ3, CZ1, CZ6, CZ4, CZ, CV,

Info for manual annotations of cluster CV:

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

Info for manual annotations of cluster CZ:

- Start number 6 was manually annotated 1 time for cluster CZ.
- Start number 7 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

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

Info for manual annotations of cluster CZ3:

- Start number 6 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 7 was manually annotated 9 times for cluster CZ4.

Info for manual annotations of cluster CZ6:

- Start number 6 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DH:

- Start number 6 was manually annotated 2 times for cluster DH.

Info for manual annotations of cluster DN4:

- Start number 6 was manually annotated 1 time for cluster DN4.

### **Gene Information:**

Gene: Beenie\_63 Start: 44040, Stop: 44528, Start Num: 7

Candidate Starts for Beenie\_63:

(1, 43836), (4, 43854), (5, 43878), (Start: 7 @44040 has 10 MA's), (8, 44067), (9, 44070), (10, 44079), (11, 44139), (12, 44160), (13, 44262), (21, 44415), (23, 44520),

Gene: Clark\_68 Start: 43803, Stop: 44291, Start Num: 7

Candidate Starts for Clark\_68:

(1, 43599), (4, 43617), (5, 43641), (Start: 7 @43803 has 10 MA's), (8, 43830), (9, 43833), (10, 43842), (11, 43902), (12, 43923), (13, 44025), (21, 44178), (23, 44283),

Gene: Easley\_67 Start: 42795, Stop: 43292, Start Num: 7

Candidate Starts for Easley\_67:

(4, 42609), (5, 42633), (Start: 7 @42795 has 10 MA's), (8, 42822), (9, 42825), (10, 42834), (11, 42894), (12, 42915), (13, 43017), (18, 43122), (21, 43170),

Gene: Frokostdame\_74 Start: 47068, Stop: 47550, Start Num: 6

Candidate Starts for Frokostdame\_74:

(3, 46882), (5, 46912), (Start: 6 @47068 has 8 MA's), (9, 47101), (12, 47194), (15, 47338), (19, 47401), (20, 47431), (22, 47500),

Gene: Hyzer\_86 Start: 55452, Stop: 55943, Start Num: 6

Candidate Starts for Hyzer\_86:

(3, 55266), (5, 55296), (Start: 6 @55452 has 8 MA's), (9, 55485), (12, 55578), (15, 55722), (19, 55785),

Gene: InLimbo\_64 Start: 38586, Stop: 39071, Start Num: 6

Candidate Starts for InLimbo\_64:

(Start: 6 @38586 has 8 MA's), (9, 38619), (12, 38712), (14, 38829), (15, 38856), (18, 38916), (21, 38964),

Gene: Invectra\_72 Start: 45376, Stop: 45864, Start Num: 7

Candidate Starts for Invectra\_72:

(1, 45172), (4, 45190), (5, 45214), (Start: 7 @45376 has 10 MA's), (8, 45403), (9, 45406), (10, 45415), (11, 45475), (12, 45496), (13, 45598), (21, 45751), (23, 45856),

Gene: Kuwabara\_85 Start: 50759, Stop: 51244, Start Num: 6

Candidate Starts for Kuwabara\_85:

(Start: 6 @50759 has 8 MA's), (9, 50792), (12, 50885), (14, 51002), (15, 51029), (18, 51089), (21, 51137),

Gene: Lton\_64 Start: 37912, Stop: 38397, Start Num: 6

Candidate Starts for Lton\_64:

(Start: 6 @37912 has 8 MA's), (9, 37945), (12, 38038), (14, 38155), (15, 38182), (18, 38242), (21, 38290),

Gene: MichaelScott\_70 Start: 44484, Stop: 44972, Start Num: 7

Candidate Starts for MichaelScott\_70:

(1, 44280), (4, 44298), (5, 44322), (Start: 7 @44484 has 10 MA's), (8, 44511), (9, 44514), (10, 44523), (11, 44583), (12, 44604), (13, 44706), (21, 44859), (23, 44964),

Gene: Morkie\_67 Start: 39060, Stop: 39545, Start Num: 6

Candidate Starts for Morkie\_67:

(Start: 6 @39060 has 8 MA's), (9, 39093), (12, 39186), (14, 39303), (15, 39330), (18, 39390), (21, 39438),

Gene: Ohgeesy\_72 Start: 48265, Stop: 48756, Start Num: 7

Candidate Starts for Ohgeesy\_72:

(4, 48079), (5, 48103), (Start: 7 @48265 has 10 MA's), (9, 48295), (11, 48364), (12, 48385), (16, 48556), (17, 48583), (18, 48592),

Gene: OneDirection\_61 Start: 36474, Stop: 36959, Start Num: 6

Candidate Starts for OneDirection\_61:

(Start: 6 @36474 has 8 MA's), (9, 36507), (12, 36600), (14, 36717), (15, 36744), (18, 36804), (21, 36852),

Gene: Oregano\_69 Start: 43358, Stop: 43855, Start Num: 7

Candidate Starts for Oregano\_69:

(1, 43154), (4, 43172), (5, 43196), (Start: 7 @43358 has 10 MA's), (8, 43385), (9, 43388), (10, 43397), (11, 43457), (12, 43478), (13, 43580), (21, 43733),

Gene: PhorbesPhlower\_65 Start: 38455, Stop: 38940, Start Num: 6

Candidate Starts for PhorbesPhlower\_65:

(2, 38278), (Start: 6 @38455 has 8 MA's), (9, 38488), (12, 38581), (14, 38698), (15, 38725), (17, 38776), (18, 38785), (21, 38833),

Gene: Rizz\_70 Start: 44592, Stop: 45089, Start Num: 7

Candidate Starts for Rizz\_70:

(1, 44388), (4, 44406), (5, 44430), (Start: 7 @44592 has 10 MA's), (8, 44619), (9, 44622), (10, 44631), (11, 44691), (12, 44712), (13, 44814),

Gene: Samman98\_70 Start: 43906, Stop: 44394, Start Num: 7

Candidate Starts for Samman98\_70:

(1, 43702), (4, 43720), (5, 43744), (Start: 7 @43906 has 10 MA's), (8, 43933), (9, 43936), (10, 43945), (11, 44005), (12, 44026), (13, 44128), (21, 44281), (23, 44386),

Gene: Thimann\_70 Start: 44163, Stop: 44660, Start Num: 7

Candidate Starts for Thimann\_70:

(4, 43977), (5, 44001), (Start: 7 @44163 has 10 MA's), (8, 44190), (9, 44193), (10, 44202), (11, 44262), (12, 44283), (13, 44385), (18, 44490),

Gene: Tuti\_63 Start: 44342, Stop: 44830, Start Num: 7

Candidate Starts for Tuti\_63:

(4, 44156), (5, 44180), (Start: 7 @44342 has 10 MA's), (8, 44369), (9, 44372), (10, 44381), (11, 44441), (12, 44462), (13, 44564), (21, 44717), (23, 44822),

Gene: Yeezy\_74 Start: 46717, Stop: 47211, Start Num: 6

Candidate Starts for Yeezy\_74:

(3, 46531), (5, 46561), (Start: 6 @46717 has 8 MA's), (9, 46750), (12, 46843), (15, 46987), (17, 47038), (18, 47047),