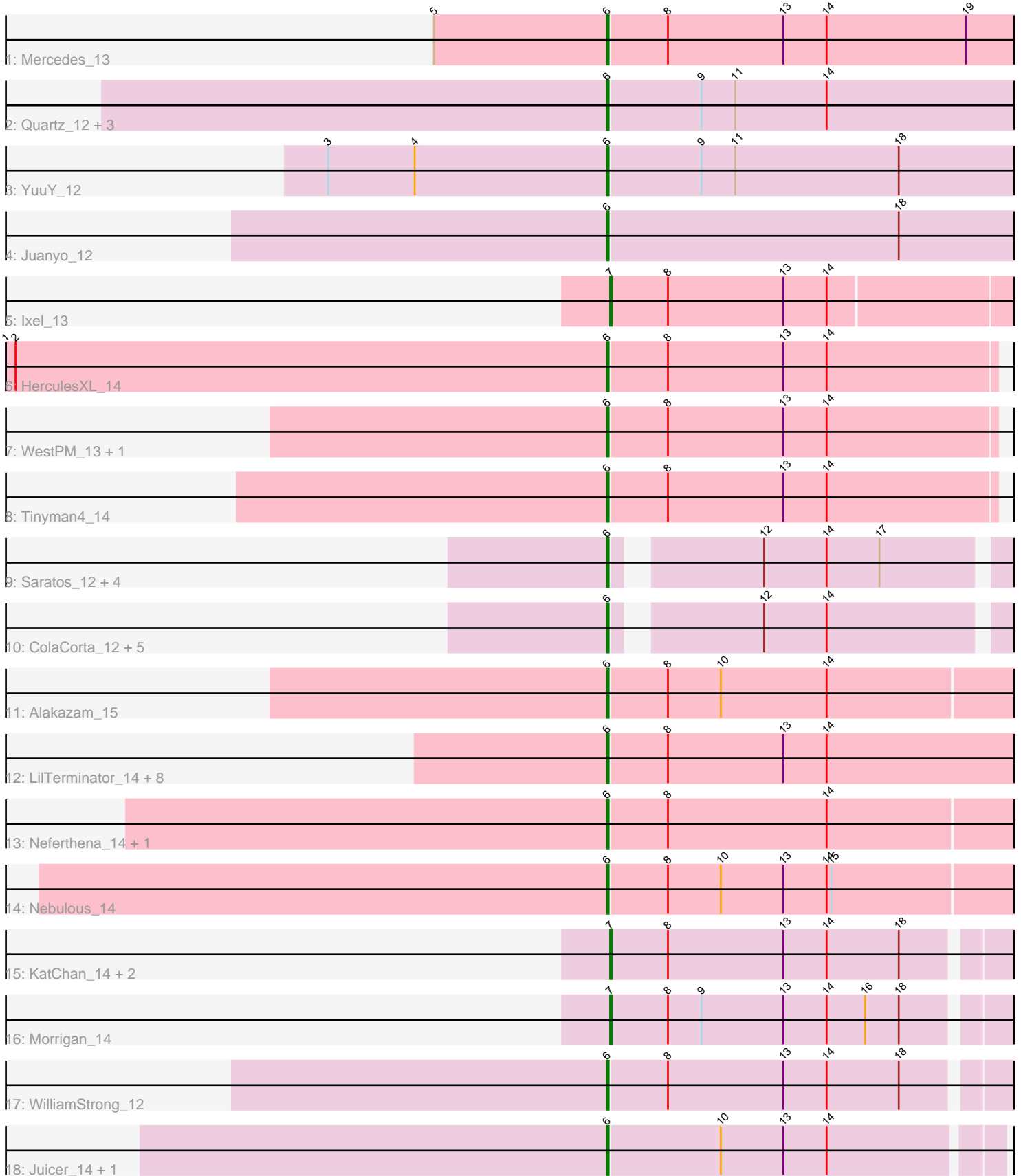


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 196646 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196646 has 43 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Mercedes\_13
- Track 2 : Quartz\_12, Mandalorian\_12, Nucci\_12, Carostasia\_12
- Track 3 : YuuY\_12
- Track 4 : Juanyo\_12
- Track 5 : Ixel\_13
- Track 6 : HerculesXL\_14
- Track 7 : WestPM\_13, Schimmels22\_14
- Track 8 : Tinyman4\_14
- Track 9 : Saratos\_12, Eleri\_12, Shamu\_12, Glamour\_11, Finny\_12
- Track 10 : ColaCorta\_12, ChikPic\_12, Zenitsu\_12, Andromedas\_12, Sansa\_11, MCubed\_12
- Track 11 : Alakazam\_15
- Track 12 : LilTerminator\_14, Zepp\_15, Fulton\_14, QuadZero\_14, Hasitha\_14, CaptainRex\_14, Zayuliv\_14, Librie\_14, Greenlvy\_14
- Track 13 : Neferthena\_14, Clock\_14
- Track 14 : Nebulous\_14
- Track 15 : KatChan\_14, Chepli\_14, Luna18\_14
- Track 16 : Morigan\_14
- Track 17 : WilliamStrong\_12
- Track 18 : Juicer\_14, Jemerald\_14

### ***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 37 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alakazam\_15, Andromedas\_12, CaptainRex\_14, Carostasia\_12, ChikPic\_12, Clock\_14, ColaCorta\_12, Eleri\_12, Finny\_12, Fulton\_14, Glamour\_11, Greenlvy\_14, Hasitha\_14, HerculesXL\_14, Jemerald\_14, Juanyo\_12, Juicer\_14, Librie\_14, LilTerminator\_14, MCubed\_12, Mandalorian\_12, Mercedes\_13, Nebulous\_14, Neferthena\_14, Nucci\_12, QuadZero\_14, Quartz\_12, Sansa\_11, Saratos\_12, Schimmels22\_14, Shamu\_12, Tinyman4\_14, WestPM\_13, WilliamStrong\_12, YuuY\_12, Zayuliv\_14, Zenitsu\_12, Zepp\_15,

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

- 

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

- Chepli\_14, Ixel\_13, KatChan\_14, Luna18\_14, Moriggan\_14,

### Summary by start number:

Start 6:

- Found in 38 of 43 ( 88.4% ) of genes in pham
- Manual Annotations of this start: 37 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alakazam\_15 (EA5), Andromedas\_12 (EA2), CaptainRex\_14 (EA5), Carostasia\_12 (EA10), ChikPic\_12 (EA2), Clock\_14 (EA5), ColaCorta\_12 (EA2), Eleri\_12 (EA2), Finny\_12 (EA2), Fulton\_14 (EA5), Glamour\_11 (EA2), GreenIvy\_14 (EA5), Hasitha\_14 (EA5), HerculesXL\_14 (EA11), Jemerald\_14 (EA6), Juanyo\_12 (EA10), Juicer\_14 (EA6), Librie\_14 (EA5), LilTerminator\_14 (EA5), MCubed\_12 (EA2), Mandalorian\_12 (EA10), Mercedes\_13 (EA), Nebulous\_14 (EA5), Neferthena\_14 (EA5), Nucci\_12 (EA10), QuadZero\_14 (EA5), Quartz\_12 (EA10), Sansa\_11 (EA2), Saratos\_12 (EA2), Schimmels22\_14 (EA11), Shamu\_12 (EA2), Tinyman4\_14 (EA11), WestPM\_13 (EA11), WilliamStrong\_12 (EA6), YuuY\_12 (EA10), Zayuliv\_14 (EA5), Zenitsu\_12 (EA2), Zepp\_15 (EA5),

Start 7:

- Found in 5 of 43 ( 11.6% ) of genes in pham
- Manual Annotations of this start: 5 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chepli\_14 (EA6), Ixel\_13 (EA11), KatChan\_14 (EA6), Luna18\_14 (EA6), Moriggan\_14 (EA6),

### Summary by clusters:

There are 6 clusters represented in this pham: EA11, EA10, EA, EA2, EA5, EA6,

Info for manual annotations of cluster EA:

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

Info for manual annotations of cluster EA10:

- Start number 6 was manually annotated 6 times for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 6 was manually annotated 4 times for cluster EA11.
- Start number 7 was manually annotated 1 time for cluster EA11.

Info for manual annotations of cluster EA2:

- Start number 6 was manually annotated 11 times for cluster EA2.

Info for manual annotations of cluster EA5:

- Start number 6 was manually annotated 12 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 6 was manually annotated 3 times for cluster EA6.
- Start number 7 was manually annotated 4 times for cluster EA6.

### **Gene Information:**

Gene: Alakazam\_15 Start: 8832, Stop: 9137, Start Num: 6

Candidate Starts for Alakazam\_15:

(Start: 6 @8832 has 37 MA's), (8, 8868), (10, 8901), (14, 8967),

Gene: Andromedas\_12 Start: 7650, Stop: 7910, Start Num: 6

Candidate Starts for Andromedas\_12:

(Start: 6 @7650 has 37 MA's), (12, 7728), (14, 7767),

Gene: CaptainRex\_14 Start: 8035, Stop: 8367, Start Num: 6

Candidate Starts for CaptainRex\_14:

(Start: 6 @8035 has 37 MA's), (8, 8071), (13, 8143), (14, 8170),

Gene: Carostasia\_12 Start: 7815, Stop: 8102, Start Num: 6

Candidate Starts for Carostasia\_12:

(Start: 6 @7815 has 37 MA's), (9, 7872), (11, 7893), (14, 7950),

Gene: Chepli\_14 Start: 8030, Stop: 8344, Start Num: 7

Candidate Starts for Chepli\_14:

(Start: 7 @8030 has 5 MA's), (8, 8066), (13, 8138), (14, 8165), (18, 8210),

Gene: ChikPic\_12 Start: 7666, Stop: 7926, Start Num: 6

Candidate Starts for ChikPic\_12:

(Start: 6 @7666 has 37 MA's), (12, 7744), (14, 7783),

Gene: Clock\_14 Start: 8762, Stop: 9085, Start Num: 6

Candidate Starts for Clock\_14:

(Start: 6 @8762 has 37 MA's), (8, 8798), (14, 8897),

Gene: ColaCorta\_12 Start: 7650, Stop: 7910, Start Num: 6

Candidate Starts for ColaCorta\_12:

(Start: 6 @7650 has 37 MA's), (12, 7728), (14, 7767),

Gene: Eleri\_12 Start: 7663, Stop: 7923, Start Num: 6

Candidate Starts for Eleri\_12:

(Start: 6 @7663 has 37 MA's), (12, 7741), (14, 7780), (17, 7813),

Gene: Finny\_12 Start: 7650, Stop: 7910, Start Num: 6

Candidate Starts for Finny\_12:

(Start: 6 @7650 has 37 MA's), (12, 7728), (14, 7767), (17, 7800),

Gene: Fulton\_14 Start: 8017, Stop: 8349, Start Num: 6

Candidate Starts for Fulton\_14:

(Start: 6 @8017 has 37 MA's), (8, 8053), (13, 8125), (14, 8152),

Gene: Glamour\_11 Start: 7651, Stop: 7911, Start Num: 6

Candidate Starts for Glamour\_11:

(Start: 6 @7651 has 37 MA's), (12, 7729), (14, 7768), (17, 7801),

Gene: Greenlvy\_14 Start: 8034, Stop: 8366, Start Num: 6

Candidate Starts for Greenlvy\_14:

(Start: 6 @8034 has 37 MA's), (8, 8070), (13, 8142), (14, 8169),

Gene: Hasitha\_14 Start: 8035, Stop: 8367, Start Num: 6

Candidate Starts for Hasitha\_14:

(Start: 6 @8035 has 37 MA's), (8, 8071), (13, 8143), (14, 8170),

Gene: HerculesXL\_14 Start: 8142, Stop: 8444, Start Num: 6

Candidate Starts for HerculesXL\_14:

(1, 7767), (2, 7773), (Start: 6 @8142 has 37 MA's), (8, 8178), (13, 8250), (14, 8277),

Gene: Ixel\_13 Start: 7700, Stop: 8020, Start Num: 7

Candidate Starts for Ixel\_13:

(Start: 7 @7700 has 5 MA's), (8, 7736), (13, 7808), (14, 7835),

Gene: Jemerald\_14 Start: 8998, Stop: 9297, Start Num: 6

Candidate Starts for Jemerald\_14:

(Start: 6 @8998 has 37 MA's), (10, 9067), (13, 9106), (14, 9133),

Gene: Juanyo\_12 Start: 7777, Stop: 8067, Start Num: 6

Candidate Starts for Juanyo\_12:

(Start: 6 @7777 has 37 MA's), (18, 7957),

Gene: Juicer\_14 Start: 8998, Stop: 9297, Start Num: 6

Candidate Starts for Juicer\_14:

(Start: 6 @8998 has 37 MA's), (10, 9067), (13, 9106), (14, 9133),

Gene: KatChan\_14 Start: 8036, Stop: 8350, Start Num: 7

Candidate Starts for KatChan\_14:

(Start: 7 @8036 has 5 MA's), (8, 8072), (13, 8144), (14, 8171), (18, 8216),

Gene: Librie\_14 Start: 8035, Stop: 8367, Start Num: 6

Candidate Starts for Librie\_14:

(Start: 6 @8035 has 37 MA's), (8, 8071), (13, 8143), (14, 8170),

Gene: LilTerminator\_14 Start: 8041, Stop: 8373, Start Num: 6

Candidate Starts for LilTerminator\_14:

(Start: 6 @8041 has 37 MA's), (8, 8077), (13, 8149), (14, 8176),

Gene: Luna18\_14 Start: 8036, Stop: 8350, Start Num: 7

Candidate Starts for Luna18\_14:

(Start: 7 @8036 has 5 MA's), (8, 8072), (13, 8144), (14, 8171), (18, 8216),

Gene: MCubed\_12 Start: 7675, Stop: 7935, Start Num: 6

Candidate Starts for MCubed\_12:

(Start: 6 @7675 has 37 MA's), (12, 7753), (14, 7792),

Gene: Mandalorian\_12 Start: 7814, Stop: 8101, Start Num: 6

Candidate Starts for Mandalorian\_12:

(Start: 6 @7814 has 37 MA's), (9, 7871), (11, 7892), (14, 7949),

Gene: Mercedes\_13 Start: 7790, Stop: 8113, Start Num: 6

Candidate Starts for Mercedes\_13:

(5, 7682), (Start: 6 @7790 has 37 MA's), (8, 7826), (13, 7898), (14, 7925), (19, 8012),

Gene: Morrigan\_14 Start: 8937, Stop: 9251, Start Num: 7

Candidate Starts for Morrigan\_14:

(Start: 7 @8937 has 5 MA's), (8, 8973), (9, 8994), (13, 9045), (14, 9072), (16, 9096), (18, 9117),

Gene: Nebulous\_14 Start: 8771, Stop: 9094, Start Num: 6

Candidate Starts for Nebulous\_14:

(Start: 6 @8771 has 37 MA's), (8, 8807), (10, 8840), (13, 8879), (14, 8906), (15, 8909),

Gene: Neferthena\_14 Start: 8782, Stop: 9105, Start Num: 6

Candidate Starts for Neferthena\_14:

(Start: 6 @8782 has 37 MA's), (8, 8818), (14, 8917),

Gene: Nucci\_12 Start: 7802, Stop: 8089, Start Num: 6

Candidate Starts for Nucci\_12:

(Start: 6 @7802 has 37 MA's), (9, 7859), (11, 7880), (14, 7937),

Gene: QuadZero\_14 Start: 8047, Stop: 8379, Start Num: 6

Candidate Starts for QuadZero\_14:

(Start: 6 @8047 has 37 MA's), (8, 8083), (13, 8155), (14, 8182),

Gene: Quartz\_12 Start: 7815, Stop: 8102, Start Num: 6

Candidate Starts for Quartz\_12:

(Start: 6 @7815 has 37 MA's), (9, 7872), (11, 7893), (14, 7950),

Gene: Sansa\_11 Start: 7671, Stop: 7931, Start Num: 6

Candidate Starts for Sansa\_11:

(Start: 6 @7671 has 37 MA's), (12, 7749), (14, 7788),

Gene: Saratos\_12 Start: 7651, Stop: 7911, Start Num: 6

Candidate Starts for Saratos\_12:

(Start: 6 @7651 has 37 MA's), (12, 7729), (14, 7768), (17, 7801),

Gene: Schimmels22\_14 Start: 8501, Stop: 8803, Start Num: 6

Candidate Starts for Schimmels22\_14:

(Start: 6 @8501 has 37 MA's), (8, 8537), (13, 8609), (14, 8636),

Gene: Shamu\_12 Start: 7663, Stop: 7923, Start Num: 6

Candidate Starts for Shamu\_12:

(Start: 6 @7663 has 37 MA's), (12, 7741), (14, 7780), (17, 7813),

Gene: Tinyman4\_14 Start: 8142, Stop: 8444, Start Num: 6

Candidate Starts for Tinyman4\_14:

(Start: 6 @8142 has 37 MA's), (8, 8178), (13, 8250), (14, 8277),

Gene: WestPM\_13 Start: 7980, Stop: 8282, Start Num: 6

Candidate Starts for WestPM\_13:

(Start: 6 @7980 has 37 MA's), (8, 8016), (13, 8088), (14, 8115),

Gene: WilliamStrong\_12 Start: 8631, Stop: 8936, Start Num: 6  
Candidate Starts for WilliamStrong\_12:  
(Start: 6 @8631 has 37 MA's), (8, 8667), (13, 8739), (14, 8766), (18, 8811),

Gene: YuuY\_12 Start: 7805, Stop: 8095, Start Num: 6  
Candidate Starts for YuuY\_12:  
(3, 7631), (4, 7685), (Start: 6 @7805 has 37 MA's), (9, 7862), (11, 7883), (18, 7985),

Gene: Zayuliv\_14 Start: 8023, Stop: 8355, Start Num: 6  
Candidate Starts for Zayuliv\_14:  
(Start: 6 @8023 has 37 MA's), (8, 8059), (13, 8131), (14, 8158),

Gene: Zenitsu\_12 Start: 7675, Stop: 7935, Start Num: 6  
Candidate Starts for Zenitsu\_12:  
(Start: 6 @7675 has 37 MA's), (12, 7753), (14, 7792),

Gene: Zepp\_15 Start: 8032, Stop: 8364, Start Num: 6  
Candidate Starts for Zepp\_15:  
(Start: 6 @8032 has 37 MA's), (8, 8068), (13, 8140), (14, 8167),