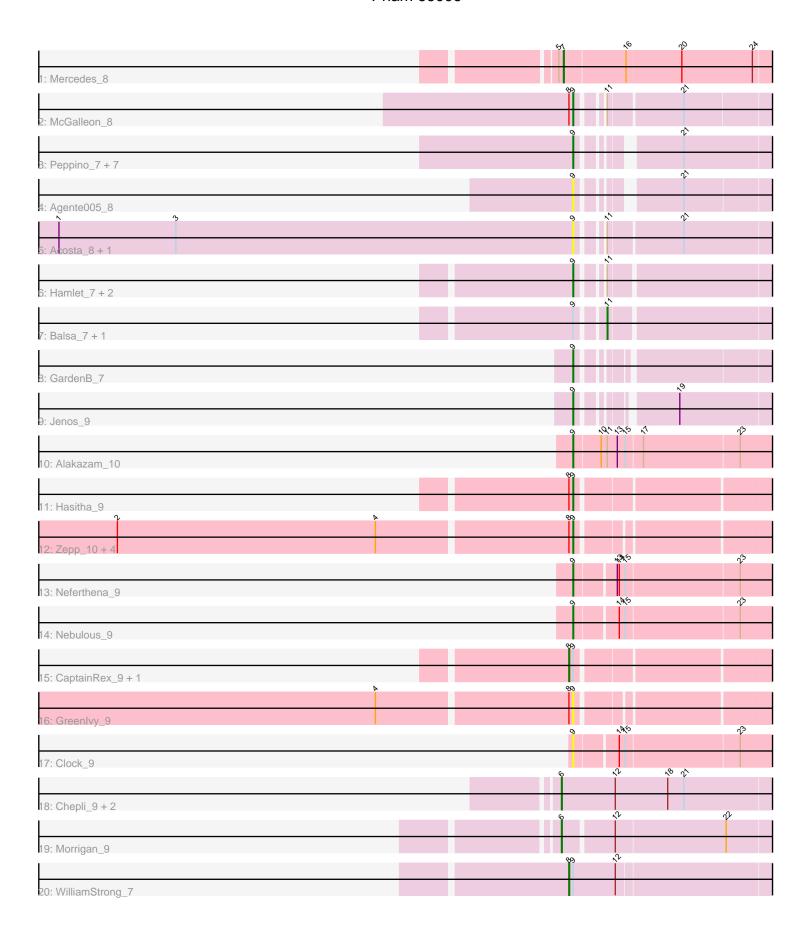
# Pham 66006



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 66006 Report

This analysis was run 04/28/24 on database version 559.

Pham number 66006 has 38 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Mercedes\_8
- Track 2 : McGalleon 8
- Track 3 : Peppino\_7, Etna\_7, Redfield\_7, KingJulien\_7, BeeBee8\_8,
- Stormbreaker8\_7, Leafus\_7, Schnapsidee\_7
- Track 4 : Agente005\_8
- Track 5 : Acosta\_8, JasonD\_9
- Track 6 : Hamlet\_7, FarmerDoug\_7, Endor\_8
- Track 7 : Balsa\_7, Raccoon\_7
- Track 8 : GardenB 7
- Track 9: Jenos 9
- Track 10 : Alakazam\_10
- Track 11 : Hasitha\_9
- Track 12 : Zepp\_10, QuadZero\_9, Zayuliv\_9, LilTerminator\_9, Fulton\_9
- Track 13 : Neferthena\_9
- Track 14: Nebulous 9
- Track 15 : CaptainRex 9, Librie 9
- Track 16 : Greenlvy\_9
- Track 17 : Clock 9
- Track 18: Chepli\_9, KatChan\_9, Luna18\_9
- Track 19 : Morrigan\_9
- Track 20 : WilliamStrong\_7

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

The start number called the most often in the published annotations is 9, it was called in 19 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Acosta\_8, Agente005\_8, Alakazam\_10, BeeBee8\_8, Clock\_9, Endor\_8, Etna\_7, FarmerDoug\_7, Fulton\_9, GardenB\_7, GreenIvy\_9, Hamlet\_7, Hasitha\_9, JasonD\_9, Jenos\_9, KingJulien\_7, Leafus\_7, LilTerminator\_9, McGalleon\_8, Nebulous\_9, Neferthena\_9, Peppino\_7, QuadZero\_9, Redfield\_7, Schnapsidee\_7, Stormbreaker8\_7, Zayuliv\_9, Zepp\_10,

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

Balsa\_7, CaptainRex\_9, Librie\_9, Raccoon\_7, WilliamStrong\_7,

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

Chepli\_9, KatChan\_9, Luna18\_9, Mercedes\_8, Morrigan\_9,

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

#### Start 6:

- Found in 4 of 38 (10.5%) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chepli\_9 (EA6), KatChan\_9 (EA6), Luna18\_9 (EA6), Morrigan\_9 (EA6),

#### Start 7:

- Found in 1 of 38 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mercedes\_8 (EA),

#### Start 8:

- Found in 11 of 38 (28.9%) of genes in pham
- Manual Annotations of this start: 3 of 29
- Called 27.3% of time when present
- Phage (with cluster) where this start called: CaptainRex\_9 (EA5), Librie\_9 (EA5), WilliamStrong\_7 (EA6),

#### Start 9:

- Found in 33 of 38 (86.8%) of genes in pham
- Manual Annotations of this start: 19 of 29
- Called 84.8% of time when present
- Phage (with cluster) where this start called: Acosta\_8 (EA1), Agente005\_8 (EA1), Alakazam\_10 (EA5), BeeBee8\_8 (EA1), Clock\_9 (EA5), Endor\_8 (EA1), Etna\_7 (EA1), FarmerDoug\_7 (EA1), Fulton\_9 (EA5), GardenB\_7 (EA1), GreenIvy\_9 (EA5), Hamlet\_7 (EA1), Hasitha\_9 (EA5), JasonD\_9 (EA1), Jenos\_9 (EA1), KingJulien\_7 (EA1), Leafus\_7 (EA1), LilTerminator\_9 (EA5), McGalleon\_8 (EA1), Nebulous\_9 (EA5), Neferthena\_9 (EA5), Peppino\_7 (EA1), QuadZero\_9 (EA5), Redfield\_7 (EA1), Schnapsidee\_7 (EA1), Stormbreaker8\_7 (EA1), Zayuliv\_9 (EA5), Zepp\_10 (EA5),

### Start 11:

- Found in 9 of 38 (23.7%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Balsa\_7 (EA1), Raccoon\_7 (EA1),

## **Summary by clusters:**

There are 4 clusters represented in this pham: EA1, EA, EA5, EA6,

Info for manual annotations of cluster EA:

•Start number 7 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA1:

- •Start number 9 was manually annotated 12 times for cluster EA1.
- •Start number 11 was manually annotated 2 times for cluster EA1.

Info for manual annotations of cluster EA5:

- •Start number 8 was manually annotated 2 times for cluster EA5.
- •Start number 9 was manually annotated 7 times for cluster EA5.

Info for manual annotations of cluster EA6:

- •Start number 6 was manually annotated 4 times for cluster EA6.
- •Start number 8 was manually annotated 1 time for cluster EA6.

### Gene Information:

Gene: Acosta\_8 Start: 5822, Stop: 6115, Start Num: 9

Candidate Starts for Acosta 8:

(1, 5057), (3, 5231), (Start: 9 @5822 has 19 MA's), (Start: 11 @5849 has 2 MA's), (21, 5954),

Gene: Agente005 8 Start: 5865, Stop: 6137, Start Num: 9

Candidate Starts for Agente005\_8: (Start: 9 @5865 has 19 MA's), (21, 5982),

Gene: Alakazam\_10 Start: 6949, Stop: 7263, Start Num: 9

Candidate Starts for Alakazam 10:

(Start: 9 @6949 has 19 MA's), (10, 6988), (Start: 11 @6997 has 2 MA's), (13, 7012), (15, 7024), (17,

7048), (23, 7189),

Gene: Balsa\_7 Start: 5724, Stop: 5981, Start Num: 11

Candidate Starts for Balsa\_7:

(Start: 9 @5697 has 19 MA's), (Start: 11 @5724 has 2 MA's),

Gene: BeeBee8 8 Start: 5875, Stop: 6147, Start Num: 9

Candidate Starts for BeeBee8 8:

(Start: 9 @5875 has 19 MA's), (21, 5992),

Gene: CaptainRex\_9 Start: 6162, Stop: 6464, Start Num: 8

Candidate Starts for CaptainRex 9:

(Start: 8 @6162 has 3 MA's), (Start: 9 @6168 has 19 MA's),

Gene: Chepli\_9 Start: 6131, Stop: 6466, Start Num: 6

Candidate Starts for Chepli 9:

(Start: 6 @6131 has 4 MA's), (12, 6209), (18, 6287), (21, 6311),

Gene: Clock\_9 Start: 6887, Stop: 7195, Start Num: 9

Candidate Starts for Clock\_9:

(Start: 9 @6887 has 19 MA's), (14, 6947), (15, 6956), (23, 7121),

Gene: Endor 8 Start: 6106, Stop: 6390, Start Num: 9

Candidate Starts for Endor 8:

(Start: 9 @6106 has 19 MA's), (Start: 11 @6133 has 2 MA's),

Gene: Etna\_7 Start: 5700, Stop: 5972, Start Num: 9

Candidate Starts for Etna\_7:

(Start: 9 @5700 has 19 MA's), (21, 5817),

Gene: FarmerDoug\_7 Start: 5691, Stop: 5975, Start Num: 9

Candidate Starts for FarmerDoug\_7:

(Start: 9 @5691 has 19 MA's), (Start: 11 @5718 has 2 MA's),

Gene: Fulton\_9 Start: 6156, Stop: 6446, Start Num: 9

Candidate Starts for Fulton\_9:

(2, 5490), (4, 5874), (Start: 8 @6150 has 3 MA's), (Start: 9 @6156 has 19 MA's),

Gene: GardenB\_7 Start: 5706, Stop: 5987, Start Num: 9

Candidate Starts for GardenB\_7: (Start: 9 @5706 has 19 MA's),

Gene: Greenlvy\_9 Start: 6171, Stop: 6461, Start Num: 9

Candidate Starts for Greenlvy\_9:

(4, 5889), (Start: 8 @6165 has 3 MA's), (Start: 9 @6171 has 19 MA's),

Gene: Hamlet\_7 Start: 5697, Stop: 5981, Start Num: 9

Candidate Starts for Hamlet\_7:

(Start: 9 @ 5697 has 19 MA's), (Start: 11 @ 5724 has 2 MA's),

Gene: Hasitha\_9 Start: 6168, Stop: 6464, Start Num: 9

Candidate Starts for Hasitha\_9:

(Start: 8 @6162 has 3 MA's), (Start: 9 @6168 has 19 MA's),

Gene: JasonD\_9 Start: 5980, Stop: 6270, Start Num: 9

Candidate Starts for JasonD\_9:

(1, 5215), (3, 5389), (Start: 9 @5980 has 19 MA's), (Start: 11 @6007 has 2 MA's), (21, 6112),

Gene: Jenos\_9 Start: 6313, Stop: 6594, Start Num: 9

Candidate Starts for Jenos 9:

(Start: 9 @6313 has 19 MA's), (19, 6427),

Gene: KatChan\_9 Start: 6137, Stop: 6472, Start Num: 6

Candidate Starts for KatChan\_9:

(Start: 6 @ 6137 has 4 MA's), (12, 6215), (18, 6293), (21, 6317),

Gene: KingJulien\_7 Start: 5700, Stop: 5972, Start Num: 9

Candidate Starts for KingJulien\_7:

(Start: 9 @5700 has 19 MA's), (21, 5817),

Gene: Leafus 7 Start: 5847, Stop: 6119, Start Num: 9

Candidate Starts for Leafus\_7:

(Start: 9 @5847 has 19 MA's), (21, 5964),

Gene: Librie\_9 Start: 6162, Stop: 6464, Start Num: 8

Candidate Starts for Librie 9:

(Start: 8 @6162 has 3 MA's), (Start: 9 @6168 has 19 MA's),

Gene: LilTerminator\_9 Start: 6180, Stop: 6470, Start Num: 9

Candidate Starts for LilTerminator 9:

(2, 5514), (4, 5898), (Start: 8 @6174 has 3 MA's), (Start: 9 @6180 has 19 MA's),

Gene: Luna18\_9 Start: 6137, Stop: 6472, Start Num: 6

Candidate Starts for Luna18\_9:

(Start: 6 @6137 has 4 MA's), (12, 6215), (18, 6293), (21, 6317),

Gene: McGalleon\_8 Start: 6417, Stop: 6707, Start Num: 9

Candidate Starts for McGalleon\_8:

(Start: 8 @6411 has 3 MA's), (Start: 9 @6417 has 19 MA's), (Start: 11 @6444 has 2 MA's), (21, 6549),

Gene: Mercedes\_8 Start: 5895, Stop: 6221, Start Num: 7

Candidate Starts for Mercedes\_8:

(5, 5889), (Start: 7 @5895 has 1 MA's), (16, 5982), (20, 6063), (24, 6168),

Gene: Morrigan\_9 Start: 7044, Stop: 7370, Start Num: 6

Candidate Starts for Morrigan\_9:

(Start: 6 @7044 has 4 MA's), (12, 7113), (22, 7275),

Gene: Nebulous\_9 Start: 6896, Stop: 7204, Start Num: 9

Candidate Starts for Nebulous 9:

(Start: 9 @6896 has 19 MA's), (14, 6956), (15, 6965), (23, 7130),

Gene: Neferthena\_9 Start: 6907, Stop: 7215, Start Num: 9

Candidate Starts for Neferthena\_9:

(Start: 9 @ 6907 has 19 MA's), (13, 6964), (14, 6967), (15, 6976), (23, 7141),

Gene: Peppino 7 Start: 5700, Stop: 5972, Start Num: 9

Candidate Starts for Peppino\_7:

(Start: 9 @ 5700 has 19 MA's), (21, 5817),

Gene: QuadZero\_9 Start: 6180, Stop: 6476, Start Num: 9

Candidate Starts for QuadZero 9:

(2, 5514), (4, 5898), (Start: 8 @6174 has 3 MA's), (Start: 9 @6180 has 19 MA's),

Gene: Raccoon\_7 Start: 5721, Stop: 5978, Start Num: 11

Candidate Starts for Raccoon\_7:

(Start: 9 @5694 has 19 MA's), (Start: 11 @5721 has 2 MA's),

Gene: Redfield\_7 Start: 5708, Stop: 5980, Start Num: 9

Candidate Starts for Redfield 7:

(Start: 9 @5708 has 19 MA's), (21, 5825),

Gene: Schnapsidee 7 Start: 5699, Stop: 5971, Start Num: 9

Candidate Starts for Schnapsidee\_7: (Start: 9 @5699 has 19 MA's), (21, 5816),

Gene: Stormbreaker8\_7 Start: 5700, Stop: 5972, Start Num: 9

Candidate Starts for Stormbreaker8\_7: (Start: 9 @5700 has 19 MA's), (21, 5817),

Gene: WilliamStrong\_7 Start: 6746, Stop: 7072, Start Num: 8

Candidate Starts for WilliamStrong\_7:

(Start: 8 @6746 has 3 MA's), (Start: 9 @6752 has 19 MA's), (12, 6815),

Gene: Zayuliv\_9 Start: 6156, Stop: 6452, Start Num: 9

Candidate Starts for Zayuliv\_9:

(2, 5490), (4, 5874), (Start: 8 @6150 has 3 MA's), (Start: 9 @6156 has 19 MA's),

Gene: Zepp\_10 Start: 6171, Stop: 6461, Start Num: 9

Candidate Starts for Zepp\_10:

(2, 5505), (4, 5889), (Start: 8 @6165 has 3 MA's), (Start: 9 @6171 has 19 MA's),