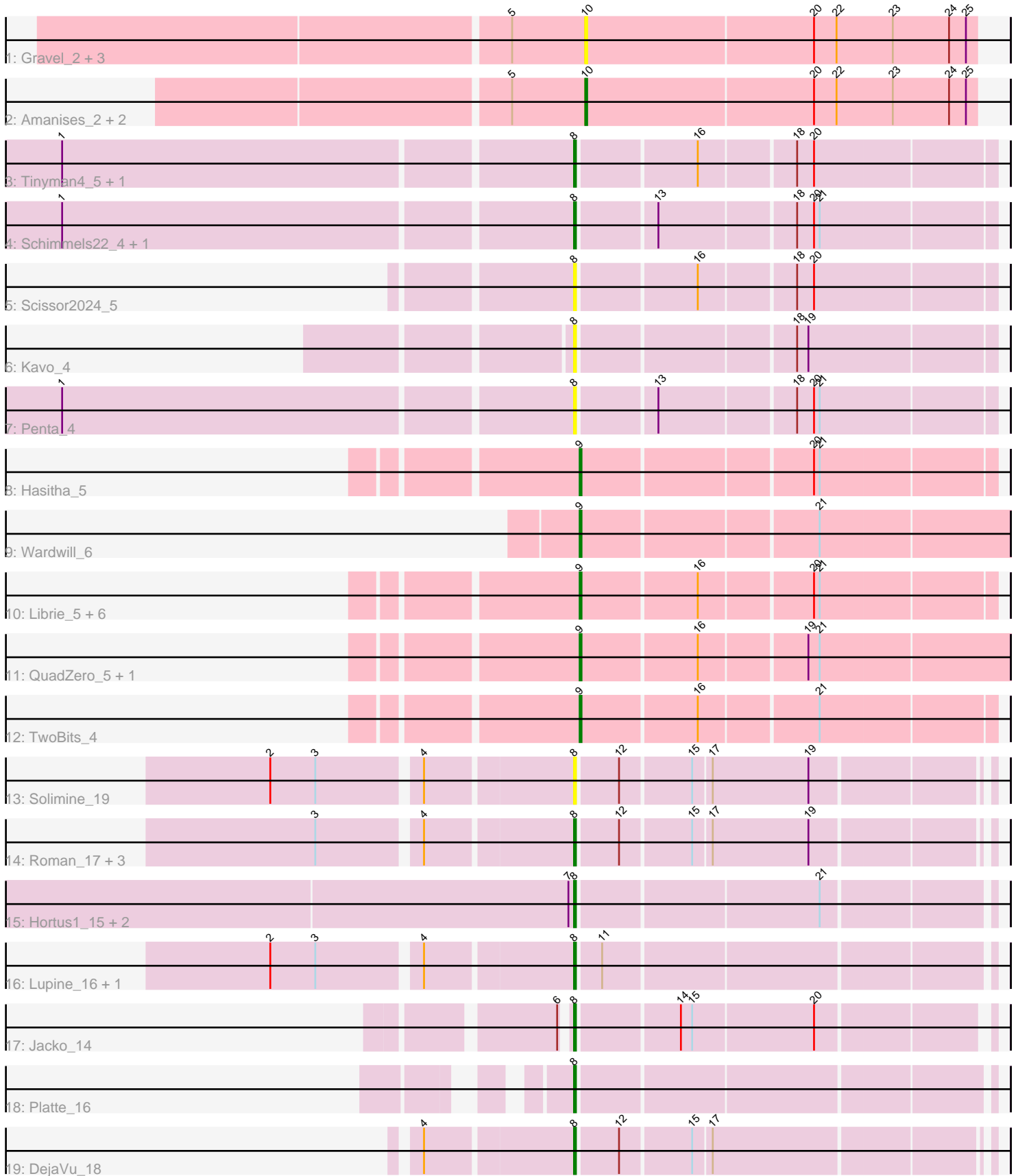


Pham 308898



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 308898 Report

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

Pham number 308898 has 39 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Gravel\_2, KendraB23\_2, Pelletreau\_2, Westrich\_2
- Track 2 : Amanises\_2, Shen\_2, Toad24\_2
- Track 3 : Tinyman4\_5, HerculesXL\_5
- Track 4 : Schimmels22\_4, WestPM\_4
- Track 5 : Scissor2024\_5
- Track 6 : Kavo\_4
- Track 7 : Penta\_4
- Track 8 : Hasitha\_5
- Track 9 : Wardwill\_6
- Track 10 : Librie\_5, BaronJohn\_5, Zepp\_5, CaptainRex\_5, Zayuliv\_5, Greenlvy\_5, Fulton\_5
- Track 11 : QuadZero\_5, LilTerminator\_5
- Track 12 : TwoBits\_4
- Track 13 : Solimine\_19
- Track 14 : Roman\_17, Hubbs\_17, Uterion\_19, Saradis\_18
- Track 15 : Hortus1\_15, OlinDD\_15, Tandem\_15
- Track 16 : Lupine\_16, Pavlo\_16
- Track 17 : Jacko\_14
- Track 18 : Platte\_16
- Track 19 : DejaVu\_18

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

The start number called the most often in the published annotations is 8, it was called in 14 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- DejaVu\_18, HerculesXL\_5, Hortus1\_15, Hubbs\_17, Jacko\_14, Kavo\_4, Lupine\_16, OlinDD\_15, Pavlo\_16, Penta\_4, Platte\_16, Roman\_17, Saradis\_18, Schimmels22\_4, Scissor2024\_5, Solimine\_19, Tandem\_15, Tinyman4\_5, Uterion\_19, WestPM\_4,

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

-

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

- Amanises\_2, BaronJohn\_5, CaptainRex\_5, Fulton\_5, Gravel\_2, Greenlvy\_5, Hasitha\_5, KendraB23\_2, Librie\_5, LilTerminator\_5, Pelletreau\_2, QuadZero\_5, Shen\_2, Toad24\_2, TwoBits\_4, Wardwill\_6, Westrich\_2, Zayuliv\_5, Zepp\_5,

### Summary by start number:

Start 8:

- Found in 20 of 39 ( 51.3% ) of genes in pham
- Manual Annotations of this start: 14 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DejaVu\_18 (ED1), HerculesXL\_5 (EA11), Hortus1\_15 (ED1), Hubbs\_17 (ED1), Jacko\_14 (ED1), Kavo\_4 (EA11), Lupine\_16 (ED1), OlinDD\_15 (ED1), Pavlo\_16 (ED1), Penta\_4 (EA11), Platte\_16 (ED1), Roman\_17 (ED1), Saradis\_18 (ED1), Schimmels22\_4 (EA11), Scissor2024\_5 (EA11), Solimine\_19 (ED1), Tandem\_15 (ED1), Tinyman4\_5 (EA11), Uterion\_19 (ED1), WestPM\_4 (EA11),

Start 9:

- Found in 12 of 39 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 12 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaronJohn\_5 (EA5), CaptainRex\_5 (EA5), Fulton\_5 (EA5), Greenlvy\_5 (EA5), Hasitha\_5 (EA5), Librie\_5 (EA5), LilTerminator\_5 (EA5), QuadZero\_5 (EA5), TwoBits\_4 (EA5), Wardwill\_6 (EA5), Zayuliv\_5 (EA5), Zepp\_5 (EA5),

Start 10:

- Found in 7 of 39 ( 17.9% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amanises\_2 (AS1), Gravel\_2 (AS1), KendraB23\_2 (AS1), Pelletreau\_2 (AS1), Shen\_2 (AS1), Toad24\_2 (AS1), Westrich\_2 (AS1),

### Summary by clusters:

There are 4 clusters represented in this pham: EA5, AS1, ED1, EA11,

Info for manual annotations of cluster AS1:

- Start number 10 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster EA11:

- Start number 8 was manually annotated 4 times for cluster EA11.

Info for manual annotations of cluster EA5:

- Start number 9 was manually annotated 12 times for cluster EA5.

Info for manual annotations of cluster ED1:

- Start number 8 was manually annotated 10 times for cluster ED1.

**Gene Information:**

Gene: Amanises\_2 Start: 435, Stop: 641, Start Num: 10

Candidate Starts for Amanises\_2:

(5, 396), (Start: 10 @435 has 2 MA's), (20, 555), (22, 567), (23, 597), (24, 627), (25, 636),

Gene: BaronJohn\_5 Start: 3546, Stop: 3755, Start Num: 9

Candidate Starts for BaronJohn\_5:

(Start: 9 @3546 has 12 MA's), (16, 3606), (20, 3663), (21, 3666),

Gene: CaptainRex\_5 Start: 3543, Stop: 3752, Start Num: 9

Candidate Starts for CaptainRex\_5:

(Start: 9 @3543 has 12 MA's), (16, 3603), (20, 3660), (21, 3663),

Gene: DejaVu\_18 Start: 5209, Stop: 5412, Start Num: 8

Candidate Starts for DejaVu\_18:

(4, 5134), (Start: 8 @5209 has 14 MA's), (12, 5230), (15, 5266), (17, 5275),

Gene: Fulton\_5 Start: 3546, Stop: 3755, Start Num: 9

Candidate Starts for Fulton\_5:

(Start: 9 @3546 has 12 MA's), (16, 3606), (20, 3663), (21, 3666),

Gene: Gravel\_2 Start: 435, Stop: 641, Start Num: 10

Candidate Starts for Gravel\_2:

(5, 396), (Start: 10 @435 has 2 MA's), (20, 555), (22, 567), (23, 597), (24, 627), (25, 636),

Gene: Greenlvy\_5 Start: 3546, Stop: 3755, Start Num: 9

Candidate Starts for Greenlvy\_5:

(Start: 9 @3546 has 12 MA's), (16, 3606), (20, 3663), (21, 3666),

Gene: Hasitha\_5 Start: 3543, Stop: 3752, Start Num: 9

Candidate Starts for Hasitha\_5:

(Start: 9 @3543 has 12 MA's), (20, 3660), (21, 3663),

Gene: HerculesXL\_5 Start: 3532, Stop: 3741, Start Num: 8

Candidate Starts for HerculesXL\_5:

(1, 3268), (Start: 8 @3532 has 14 MA's), (16, 3592), (18, 3640), (20, 3649),

Gene: Hortus1\_15 Start: 5300, Stop: 5506, Start Num: 8

Candidate Starts for Hortus1\_15:

(7, 5297), (Start: 8 @5300 has 14 MA's), (21, 5423),

Gene: Hubbs\_17 Start: 5396, Stop: 5599, Start Num: 8

Candidate Starts for Hubbs\_17:

(3, 5270), (4, 5321), (Start: 8 @5396 has 14 MA's), (12, 5417), (15, 5453), (17, 5462), (19, 5513),

Gene: Jacko\_14 Start: 4600, Stop: 4803, Start Num: 8

Candidate Starts for Jacko\_14:

(6, 4597), (Start: 8 @4600 has 14 MA's), (14, 4651), (15, 4657), (20, 4720),

Gene: Kavo\_4 Start: 3364, Stop: 3573, Start Num: 8

Candidate Starts for Kavo\_4:

(Start: 8 @3364 has 14 MA's), (18, 3472), (19, 3478),

Gene: KendraB23\_2 Start: 435, Stop: 641, Start Num: 10

Candidate Starts for KendraB23\_2:

(5, 396), (Start: 10 @435 has 2 MA's), (20, 555), (22, 567), (23, 597), (24, 627), (25, 636),

Gene: Librie\_5 Start: 3543, Stop: 3752, Start Num: 9

Candidate Starts for Librie\_5:

(Start: 9 @3543 has 12 MA's), (16, 3603), (20, 3660), (21, 3663),

Gene: LilTerminator\_5 Start: 3546, Stop: 3764, Start Num: 9

Candidate Starts for LilTerminator\_5:

(Start: 9 @3546 has 12 MA's), (16, 3606), (19, 3660), (21, 3666),

Gene: Lupine\_16 Start: 5191, Stop: 5397, Start Num: 8

Candidate Starts for Lupine\_16:

(2, 5041), (3, 5065), (4, 5116), (Start: 8 @5191 has 14 MA's), (11, 5203),

Gene: OlinDD\_15 Start: 5299, Stop: 5505, Start Num: 8

Candidate Starts for OlinDD\_15:

(7, 5296), (Start: 8 @5299 has 14 MA's), (21, 5422),

Gene: Pavlo\_16 Start: 5463, Stop: 5669, Start Num: 8

Candidate Starts for Pavlo\_16:

(2, 5313), (3, 5337), (4, 5388), (Start: 8 @5463 has 14 MA's), (11, 5475),

Gene: Pelletreau\_2 Start: 435, Stop: 641, Start Num: 10

Candidate Starts for Pelletreau\_2:

(5, 396), (Start: 10 @435 has 2 MA's), (20, 555), (22, 567), (23, 597), (24, 627), (25, 636),

Gene: Penta\_4 Start: 3373, Stop: 3582, Start Num: 8

Candidate Starts for Penta\_4:

(1, 3109), (Start: 8 @3373 has 14 MA's), (13, 3412), (18, 3481), (20, 3490), (21, 3493),

Gene: Platte\_16 Start: 5333, Stop: 5539, Start Num: 8

Candidate Starts for Platte\_16:

(Start: 8 @5333 has 14 MA's),

Gene: QuadZero\_5 Start: 3546, Stop: 3764, Start Num: 9

Candidate Starts for QuadZero\_5:

(Start: 9 @3546 has 12 MA's), (16, 3606), (19, 3660), (21, 3666),

Gene: Roman\_17 Start: 5348, Stop: 5551, Start Num: 8

Candidate Starts for Roman\_17:

(3, 5222), (4, 5273), (Start: 8 @5348 has 14 MA's), (12, 5369), (15, 5405), (17, 5414), (19, 5465),

Gene: Saradis\_18 Start: 5408, Stop: 5611, Start Num: 8

Candidate Starts for Saradis\_18:

(3, 5282), (4, 5333), (Start: 8 @5408 has 14 MA's), (12, 5429), (15, 5465), (17, 5474), (19, 5525),

Gene: Schimmels22\_4 Start: 3373, Stop: 3582, Start Num: 8

Candidate Starts for Schimmels22\_4:

(1, 3109), (Start: 8 @3373 has 14 MA's), (13, 3412), (18, 3481), (20, 3490), (21, 3493),

Gene: Scissor2024\_5 Start: 3532, Stop: 3741, Start Num: 8  
Candidate Starts for Scissor2024\_5:  
(Start: 8 @3532 has 14 MA's), (16, 3592), (18, 3640), (20, 3649),

Gene: Shen\_2 Start: 435, Stop: 641, Start Num: 10  
Candidate Starts for Shen\_2:  
(5, 396), (Start: 10 @435 has 2 MA's), (20, 555), (22, 567), (23, 597), (24, 627), (25, 636),

Gene: Solimine\_19 Start: 5823, Stop: 6026, Start Num: 8  
Candidate Starts for Solimine\_19:  
(2, 5673), (3, 5697), (4, 5748), (Start: 8 @5823 has 14 MA's), (12, 5844), (15, 5880), (17, 5889), (19, 5940),

Gene: Tandem\_15 Start: 5237, Stop: 5443, Start Num: 8  
Candidate Starts for Tandem\_15:  
(7, 5234), (Start: 8 @5237 has 14 MA's), (21, 5360),

Gene: Tinyman4\_5 Start: 3532, Stop: 3741, Start Num: 8  
Candidate Starts for Tinyman4\_5:  
(1, 3268), (Start: 8 @3532 has 14 MA's), (16, 3592), (18, 3640), (20, 3649),

Gene: Toad24\_2 Start: 435, Stop: 641, Start Num: 10  
Candidate Starts for Toad24\_2:  
(5, 396), (Start: 10 @435 has 2 MA's), (20, 555), (22, 567), (23, 597), (24, 627), (25, 636),

Gene: TwoBits\_4 Start: 3371, Stop: 3580, Start Num: 9  
Candidate Starts for TwoBits\_4:  
(Start: 9 @3371 has 12 MA's), (16, 3431), (21, 3491),

Gene: Uterion\_19 Start: 5954, Stop: 6157, Start Num: 8  
Candidate Starts for Uterion\_19:  
(3, 5828), (4, 5879), (Start: 8 @5954 has 14 MA's), (12, 5975), (15, 6011), (17, 6020), (19, 6071),

Gene: Wardwill\_6 Start: 3708, Stop: 3926, Start Num: 9  
Candidate Starts for Wardwill\_6:  
(Start: 9 @3708 has 12 MA's), (21, 3828),

Gene: WestPM\_4 Start: 3373, Stop: 3582, Start Num: 8  
Candidate Starts for WestPM\_4:  
(1, 3109), (Start: 8 @3373 has 14 MA's), (13, 3412), (18, 3481), (20, 3490), (21, 3493),

Gene: Westrich\_2 Start: 435, Stop: 641, Start Num: 10  
Candidate Starts for Westrich\_2:  
(5, 396), (Start: 10 @435 has 2 MA's), (20, 555), (22, 567), (23, 597), (24, 627), (25, 636),

Gene: Zayuliv\_5 Start: 3546, Stop: 3755, Start Num: 9  
Candidate Starts for Zayuliv\_5:  
(Start: 9 @3546 has 12 MA's), (16, 3606), (20, 3663), (21, 3666),

Gene: Zepp\_5 Start: 3546, Stop: 3755, Start Num: 9  
Candidate Starts for Zepp\_5:  
(Start: 9 @3546 has 12 MA's), (16, 3606), (20, 3663), (21, 3666),