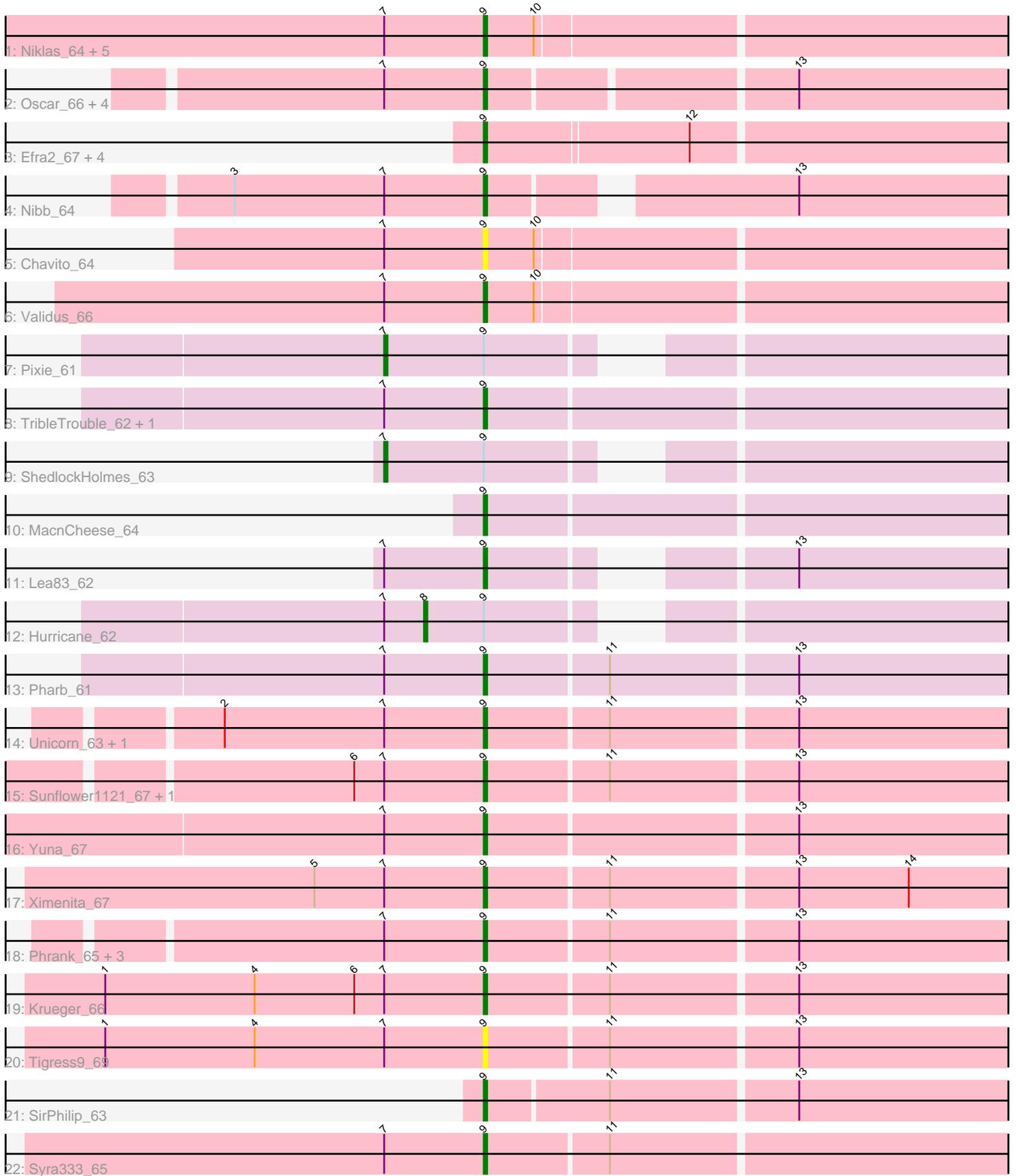


Pham 288036



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 288036 Report

This analysis was run 03/28/26 on database version 641.

Pham number 288036 has 41 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Niklas\_64, Richo\_64, McMater\_64, Dartin\_64, Shaobing\_64, Peanam\_64
- Track 2 : Oscar\_66, MarkPhew\_65, KiSi\_67, LeMond\_66, Scarlett\_67
- Track 3 : Efra2\_67, TingHuaYa\_65, Guanica15\_66, Yunkel11\_66, LastHope\_66
- Track 4 : Nibb\_64
- Track 5 : Chavito\_64
- Track 6 : Validus\_66
- Track 7 : Pixie\_61
- Track 8 : TribbleTrouble\_62, Keshu\_64
- Track 9 : ShedlockHolmes\_63
- Track 10 : MacnCheese\_64
- Track 11 : Lea83\_62
- Track 12 : Hurricane\_62
- Track 13 : Pharb\_61
- Track 14 : Unicorn\_63, PhelpsODU\_63
- Track 15 : Sunflower1121\_67, Shadow1\_66
- Track 16 : Yuna\_67
- Track 17 : Ximenita\_67
- Track 18 : Phrank\_65, Tierra\_65, Cain\_65, Bryler\_65
- Track 19 : Krueger\_66
- Track 20 : Tigress9\_69
- Track 21 : SirPhilip\_63
- Track 22 : Syra333\_65

### ***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 32 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bryler\_65, Cain\_65, Chavito\_64, Dartin\_64, Efra2\_67, Guanica15\_66, Keshu\_64, KiSi\_67, Krueger\_66, LastHope\_66, LeMond\_66, Lea83\_62, MacnCheese\_64, MarkPhew\_65, McMater\_64, Nibb\_64, Niklas\_64, Oscar\_66, Peanam\_64, Pharb\_61, PhelpsODU\_63, Phrank\_65, Richo\_64, Scarlett\_67, Shadow1\_66, Shaobing\_64, SirPhilip\_63, Sunflower1121\_67, Syra333\_65, Tierra\_65, Tigress9\_69,

TingHuaYa\_65, TribbleTrouble\_62, Unicorn\_63, Validus\_66, Ximenita\_67, Yuna\_67, Yunkel11\_66,

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

- Hurricane\_62, Pixie\_61, ShedlockHolmes\_63,

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

- 

### Summary by start number:

Start 7:

- Found in 34 of 41 ( 82.9% ) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Pixie\_61 (K3), ShedlockHolmes\_63 (K3),

Start 8:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hurricane\_62 (K3),

Start 9:

- Found in 41 of 41 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 32 of 35
- Called 92.7% of time when present
- Phage (with cluster) where this start called: Bryler\_65 (K6), Cain\_65 (K6), Chavito\_64 (K1), Dartin\_64 (K1), Efra2\_67 (K1), Guanica15\_66 (K1), Keshu\_64 (K3), KiSi\_67 (K1), Krueger\_66 (K6), LastHope\_66 (K1), LeMond\_66 (K1), Lea83\_62 (K3), MacnCheese\_64 (K3), MarkPhew\_65 (K1), McMater\_64 (K1), Nibb\_64 (K1), Niklas\_64 (K1), Oscar\_66 (K1), Peanam\_64 (K1), Pharb\_61 (K3), PhelpsODU\_63 (K6), Phrank\_65 (K6), Richo\_64 (K1), Scarlett\_67 (K1), Shadow1\_66 (K6), Shaobing\_64 (K1), SirPhilip\_63 (K6), Sunflower1121\_67 (K6), Syra333\_65 (K6), Tierra\_65 (K6), Tigress9\_69 (K6), TingHuaYa\_65 (K1), TribbleTrouble\_62 (K3), Unicorn\_63 (K6), Validus\_66 (K1), Ximenita\_67 (K6), Yuna\_67 (K6), Yunkel11\_66 (K1),

### Summary by clusters:

There are 3 clusters represented in this pham: K3, K1, K6,

Info for manual annotations of cluster K1:

- Start number 9 was manually annotated 14 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 7 was manually annotated 2 times for cluster K3.
- Start number 8 was manually annotated 1 time for cluster K3.
- Start number 9 was manually annotated 5 times for cluster K3.

Info for manual annotations of cluster K6:

- Start number 9 was manually annotated 13 times for cluster K6.

**Gene Information:**

Gene: Bryler\_65 Start: 41993, Stop: 42184, Start Num: 9

Candidate Starts for Bryler\_65:

(Start: 7 @41963 has 2 MA's), (Start: 9 @41993 has 32 MA's), (11, 42029), (13, 42083),

Gene: Cain\_65 Start: 41981, Stop: 42172, Start Num: 9

Candidate Starts for Cain\_65:

(Start: 7 @41951 has 2 MA's), (Start: 9 @41981 has 32 MA's), (11, 42017), (13, 42071),

Gene: Chavito\_64 Start: 43106, Stop: 43297, Start Num: 9

Candidate Starts for Chavito\_64:

(Start: 7 @43076 has 2 MA's), (Start: 9 @43106 has 32 MA's), (10, 43121),

Gene: Dartin\_64 Start: 42605, Stop: 42799, Start Num: 9

Candidate Starts for Dartin\_64:

(Start: 7 @42575 has 2 MA's), (Start: 9 @42605 has 32 MA's), (10, 42620),

Gene: Efra2\_67 Start: 42478, Stop: 42672, Start Num: 9

Candidate Starts for Efra2\_67:

(Start: 9 @42478 has 32 MA's), (12, 42538),

Gene: Guanica15\_66 Start: 42219, Stop: 42413, Start Num: 9

Candidate Starts for Guanica15\_66:

(Start: 9 @42219 has 32 MA's), (12, 42279),

Gene: Hurricane\_62 Start: 42432, Stop: 42641, Start Num: 8

Candidate Starts for Hurricane\_62:

(Start: 7 @42420 has 2 MA's), (Start: 8 @42432 has 1 MA's), (Start: 9 @42450 has 32 MA's),

Gene: Keshu\_64 Start: 42548, Stop: 42739, Start Num: 9

Candidate Starts for Keshu\_64:

(Start: 7 @42518 has 2 MA's), (Start: 9 @42548 has 32 MA's),

Gene: KiSi\_67 Start: 43442, Stop: 43639, Start Num: 9

Candidate Starts for KiSi\_67:

(Start: 7 @43412 has 2 MA's), (Start: 9 @43442 has 32 MA's), (13, 43529),

Gene: Krueger\_66 Start: 42279, Stop: 42470, Start Num: 9

Candidate Starts for Krueger\_66:

(1, 42165), (4, 42210), (6, 42240), (Start: 7 @42249 has 2 MA's), (Start: 9 @42279 has 32 MA's), (11, 42315), (13, 42369),

Gene: LastHope\_66 Start: 41540, Stop: 41734, Start Num: 9

Candidate Starts for LastHope\_66:

(Start: 9 @41540 has 32 MA's), (12, 41600),

Gene: LeMond\_66 Start: 43076, Stop: 43273, Start Num: 9

Candidate Starts for LeMond\_66:

(Start: 7 @43046 has 2 MA's), (Start: 9 @43076 has 32 MA's), (13, 43163),

Gene: Lea83\_62 Start: 42485, Stop: 42676, Start Num: 9  
Candidate Starts for Lea83\_62:  
(Start: 7 @42455 has 2 MA's), (Start: 9 @42485 has 32 MA's), (13, 42554),

Gene: MacnCheese\_64 Start: 43048, Stop: 43242, Start Num: 9  
Candidate Starts for MacnCheese\_64:  
(Start: 9 @43048 has 32 MA's),

Gene: MarkPhew\_65 Start: 42579, Stop: 42773, Start Num: 9  
Candidate Starts for MarkPhew\_65:  
(Start: 7 @42549 has 2 MA's), (Start: 9 @42579 has 32 MA's), (13, 42663),

Gene: McMater\_64 Start: 42605, Stop: 42799, Start Num: 9  
Candidate Starts for McMater\_64:  
(Start: 7 @42575 has 2 MA's), (Start: 9 @42605 has 32 MA's), (10, 42620),

Gene: Nibb\_64 Start: 42433, Stop: 42618, Start Num: 9  
Candidate Starts for Nibb\_64:  
(3, 42358), (Start: 7 @42403 has 2 MA's), (Start: 9 @42433 has 32 MA's), (13, 42514),

Gene: Niklas\_64 Start: 42666, Stop: 42860, Start Num: 9  
Candidate Starts for Niklas\_64:  
(Start: 7 @42636 has 2 MA's), (Start: 9 @42666 has 32 MA's), (10, 42681),

Gene: Oscar\_66 Start: 42993, Stop: 43190, Start Num: 9  
Candidate Starts for Oscar\_66:  
(Start: 7 @42963 has 2 MA's), (Start: 9 @42993 has 32 MA's), (13, 43080),

Gene: Peanam\_64 Start: 42624, Stop: 42818, Start Num: 9  
Candidate Starts for Peanam\_64:  
(Start: 7 @42594 has 2 MA's), (Start: 9 @42624 has 32 MA's), (10, 42639),

Gene: Pharb\_61 Start: 41781, Stop: 41975, Start Num: 9  
Candidate Starts for Pharb\_61:  
(Start: 7 @41751 has 2 MA's), (Start: 9 @41781 has 32 MA's), (11, 41817), (13, 41871),

Gene: PhelpsODU\_63 Start: 41907, Stop: 42098, Start Num: 9  
Candidate Starts for PhelpsODU\_63:  
(2, 41829), (Start: 7 @41877 has 2 MA's), (Start: 9 @41907 has 32 MA's), (11, 41943), (13, 41997),

Gene: Phrank\_65 Start: 41971, Stop: 42162, Start Num: 9  
Candidate Starts for Phrank\_65:  
(Start: 7 @41941 has 2 MA's), (Start: 9 @41971 has 32 MA's), (11, 42007), (13, 42061),

Gene: Pixie\_61 Start: 41940, Stop: 42161, Start Num: 7  
Candidate Starts for Pixie\_61:  
(Start: 7 @41940 has 2 MA's), (Start: 9 @41970 has 32 MA's),

Gene: Richo\_64 Start: 42605, Stop: 42799, Start Num: 9  
Candidate Starts for Richo\_64:  
(Start: 7 @42575 has 2 MA's), (Start: 9 @42605 has 32 MA's), (10, 42620),

Gene: Scarlett\_67 Start: 43320, Stop: 43517, Start Num: 9

Candidate Starts for Scarlett\_67:

(Start: 7 @43290 has 2 MA's), (Start: 9 @43320 has 32 MA's), (13, 43407),

Gene: Shadow1\_66 Start: 42432, Stop: 42623, Start Num: 9

Candidate Starts for Shadow1\_66:

(6, 42393), (Start: 7 @42402 has 2 MA's), (Start: 9 @42432 has 32 MA's), (11, 42468), (13, 42522),

Gene: Shaobing\_64 Start: 42642, Stop: 42836, Start Num: 9

Candidate Starts for Shaobing\_64:

(Start: 7 @42612 has 2 MA's), (Start: 9 @42642 has 32 MA's), (10, 42657),

Gene: ShedlockHolmes\_63 Start: 42459, Stop: 42680, Start Num: 7

Candidate Starts for ShedlockHolmes\_63:

(Start: 7 @42459 has 2 MA's), (Start: 9 @42489 has 32 MA's),

Gene: SirPhilip\_63 Start: 43069, Stop: 43278, Start Num: 9

Candidate Starts for SirPhilip\_63:

(Start: 9 @43069 has 32 MA's), (11, 43105), (13, 43159),

Gene: Sunflower1121\_67 Start: 42578, Stop: 42769, Start Num: 9

Candidate Starts for Sunflower1121\_67:

(6, 42539), (Start: 7 @42548 has 2 MA's), (Start: 9 @42578 has 32 MA's), (11, 42614), (13, 42668),

Gene: Syra333\_65 Start: 42291, Stop: 42482, Start Num: 9

Candidate Starts for Syra333\_65:

(Start: 7 @42261 has 2 MA's), (Start: 9 @42291 has 32 MA's), (11, 42327),

Gene: Tierra\_65 Start: 42782, Stop: 42973, Start Num: 9

Candidate Starts for Tierra\_65:

(Start: 7 @42752 has 2 MA's), (Start: 9 @42782 has 32 MA's), (11, 42818), (13, 42872),

Gene: Tigress9\_69 Start: 42608, Stop: 42799, Start Num: 9

Candidate Starts for Tigress9\_69:

(1, 42494), (4, 42539), (Start: 7 @42578 has 2 MA's), (Start: 9 @42608 has 32 MA's), (11, 42644), (13, 42698),

Gene: TingHuaYa\_65 Start: 41708, Stop: 41902, Start Num: 9

Candidate Starts for TingHuaYa\_65:

(Start: 9 @41708 has 32 MA's), (12, 41768),

Gene: TribbleTrouble\_62 Start: 42947, Stop: 43141, Start Num: 9

Candidate Starts for TribbleTrouble\_62:

(Start: 7 @42917 has 2 MA's), (Start: 9 @42947 has 32 MA's),

Gene: Unicorn\_63 Start: 41907, Stop: 42098, Start Num: 9

Candidate Starts for Unicorn\_63:

(2, 41829), (Start: 7 @41877 has 2 MA's), (Start: 9 @41907 has 32 MA's), (11, 41943), (13, 41997),

Gene: Validus\_66 Start: 42988, Stop: 43194, Start Num: 9

Candidate Starts for Validus\_66:

(Start: 7 @42958 has 2 MA's), (Start: 9 @42988 has 32 MA's), (10, 43003),

Gene: Ximenita\_67 Start: 42617, Stop: 42808, Start Num: 9

Candidate Starts for Ximenita\_67:

(5, 42566), (Start: 7 @42587 has 2 MA's), (Start: 9 @42617 has 32 MA's), (11, 42653), (13, 42707),  
(14, 42740),

Gene: Yuna\_67 Start: 43685, Stop: 43879, Start Num: 9

Candidate Starts for Yuna\_67:

(Start: 7 @43655 has 2 MA's), (Start: 9 @43685 has 32 MA's), (13, 43775),

Gene: Yunkel11\_66 Start: 42224, Stop: 42418, Start Num: 9

Candidate Starts for Yunkel11\_66:

(Start: 9 @42224 has 32 MA's), (12, 42284),