

Pham 305225



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 305225 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305225 has 29 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Phroglets\_47
- Track 2 : Phabba\_145
- Track 3 : ScoobyDoobyDoo\_136
- Track 4 : Mahdia\_38
- Track 5 : Gustav\_40
- Track 6 : Applejacks\_38
- Track 7 : Widow\_38
- Track 8 : Upyo\_40
- Track 9 : Trine\_38
- Track 10 : Morrissey\_39
- Track 11 : CoffeeBean\_62, Braxoaddie\_62, Polyyuki\_62, Maselop\_62, Apiary\_62
- Track 12 : Gagieri\_61
- Track 13 : MacGully\_71
- Track 14 : Orchid\_78, Kampe\_79, PatrickStar\_79
- Track 15 : Towmatter\_47, Daredevil\_48
- Track 16 : Wrackline\_10
- Track 17 : EniyanLRS\_175, MaryV\_129, Wildcat\_143, Azrael100\_136, Cosmo\_143
- Track 18 : Kumao\_98

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

The start number called the most often in the published annotations is 26, it was called in 11 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apiary\_62, Braxoaddie\_62, CoffeeBean\_62, Gagieri\_61, Gustav\_40, Mahdia\_38, Maselop\_62, Morrissey\_39, Polyyuki\_62, Trine\_38, Widow\_38,

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

- Daredevil\_48, Towmatter\_47, Wrackline\_10,

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

- Applejacks\_38, Azrael100\_136, Cosmo\_143, EniyanLRS\_175, Kampe\_79, Kumao\_98, MacGully\_71, MaryV\_129, Orchid\_78, PatrickStar\_79, Phabba\_145,

Phroglets\_47, ScoobyDoobyDoo\_136, Upyo\_40, Wildcat\_143,

### Summary by start number:

Start 17:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phroglets\_47 (AV),

Start 20:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao\_98 (singleton),

Start 22:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MacGully\_71 (CR7),

Start 23:

- Found in 2 of 29 ( 6.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Applejacks\_38 (CD),

Start 26:

- Found in 14 of 29 ( 48.3% ) of genes in pham
- Manual Annotations of this start: 11 of 28
- Called 78.6% of time when present
- Phage (with cluster) where this start called: Apiary\_62 (CR6), Braxoaddie\_62 (CR6), CoffeeBean\_62 (CR6), Gagieri\_61 (CR6), Gustav\_40 (CD), Mahdia\_38 (CD), Maselop\_62 (CR6), Morrissey\_39 (CD), Polyuyuki\_62 (CR6), Trine\_38 (CD), Widow\_38 (CD),

Start 28:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wrackline\_10 (GF),

Start 29:

- Found in 3 of 29 ( 10.3% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Daredevil\_48 (DL), Towmatter\_47 (DL),

Start 31:

- Found in 2 of 29 ( 6.9% ) 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: Phabba\_145 (C2), ScoobyDoobyDoo\_136 (C2),

Start 32:

- Found in 3 of 29 ( 10.3% ) of genes in pham
- Manual Annotations of this start: 3 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kampe\_79 (CX), Orchid\_78 (CX), PatrickStar\_79 (CX),

Start 33:

- Found in 6 of 29 ( 20.7% ) of genes in pham
- Manual Annotations of this start: 6 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100\_136 (V), Cosmo\_143 (V), EniyanLRS\_175 (V), MaryV\_129 (V), Upyo\_40 (CD), Wildcat\_143 (V),

### **Summary by clusters:**

There are 10 clusters represented in this pham: DL, CR6, CR7, AV, singleton, CD, GF, CX, V, C2,

Info for manual annotations of cluster AV:

- Start number 17 was manually annotated 1 time for cluster AV.

Info for manual annotations of cluster C2:

- Start number 31 was manually annotated 2 times for cluster C2.

Info for manual annotations of cluster CD:

- Start number 26 was manually annotated 5 times for cluster CD.
- Start number 33 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CR6:

- Start number 26 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:

- Start number 22 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster CX:

- Start number 32 was manually annotated 3 times for cluster CX.

Info for manual annotations of cluster DL:

- Start number 29 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster GF:

- Start number 28 was manually annotated 1 time for cluster GF.

Info for manual annotations of cluster V:

- Start number 33 was manually annotated 5 times for cluster V.

### **Gene Information:**

Gene: Apiary\_62 Start: 46584, Stop: 46390, Start Num: 26  
Candidate Starts for Apiary\_62:  
(18, 46605), (19, 46602), (Start: 26 @46584 has 11 MA's), (34, 46569), (37, 46512), (38, 46503), (42, 46464), (45, 46434),

Gene: Applejacks\_38 Start: 30621, Stop: 30367, Start Num: 23  
Candidate Starts for Applejacks\_38:  
(23, 30621), (43, 30474), (48, 30408),

Gene: Azrael100\_136 Start: 67289, Stop: 67110, Start Num: 33  
Candidate Starts for Azrael100\_136:  
(Start: 33 @67289 has 6 MA's), (38, 67220), (41, 67178),

Gene: Braxoaddie\_62 Start: 46573, Stop: 46379, Start Num: 26  
Candidate Starts for Braxoaddie\_62:  
(18, 46594), (19, 46591), (Start: 26 @46573 has 11 MA's), (34, 46558), (37, 46501), (38, 46492), (42, 46453), (45, 46423),

Gene: CoffeeBean\_62 Start: 46531, Stop: 46337, Start Num: 26  
Candidate Starts for CoffeeBean\_62:  
(18, 46552), (19, 46549), (Start: 26 @46531 has 11 MA's), (34, 46516), (37, 46459), (38, 46450), (42, 46411), (45, 46381),

Gene: Cosmo\_143 Start: 67452, Stop: 67273, Start Num: 33  
Candidate Starts for Cosmo\_143:  
(Start: 33 @67452 has 6 MA's), (38, 67383), (41, 67341),

Gene: Daredevil\_48 Start: 40251, Stop: 40478, Start Num: 29  
Candidate Starts for Daredevil\_48:  
(Start: 26 @40239 has 11 MA's), (Start: 29 @40251 has 2 MA's), (37, 40329), (38, 40338),

Gene: EniyanLRS\_175 Start: 67797, Stop: 67618, Start Num: 33  
Candidate Starts for EniyanLRS\_175:  
(Start: 33 @67797 has 6 MA's), (38, 67728), (41, 67686),

Gene: Gagieri\_61 Start: 46767, Stop: 46573, Start Num: 26  
Candidate Starts for Gagieri\_61:  
(16, 46800), (Start: 26 @46767 has 11 MA's), (34, 46752), (37, 46695), (38, 46686), (42, 46647), (44, 46626), (45, 46617),

Gene: Gustav\_40 Start: 31883, Stop: 31605, Start Num: 26  
Candidate Starts for Gustav\_40:  
(9, 32087), (10, 32084), (Start: 26 @31883 has 11 MA's), (52, 31640),

Gene: Kampe\_79 Start: 59645, Stop: 59466, Start Num: 32  
Candidate Starts for Kampe\_79:  
(25, 59675), (Start: 32 @59645 has 3 MA's),

Gene: Kumao\_98 Start: 61160, Stop: 60951, Start Num: 20  
Candidate Starts for Kumao\_98:  
(Start: 20 @61160 has 1 MA's), (30, 61115), (34, 61097), (35, 61085), (36, 61082),

Gene: MacGully\_71 Start: 49770, Stop: 49540, Start Num: 22

Candidate Starts for MacGully\_71:

(Start: 22 @49770 has 1 MA's), (37, 49668), (38, 49659), (44, 49596), (45, 49587),

Gene: Mahdia\_38 Start: 31109, Stop: 30855, Start Num: 26

Candidate Starts for Mahdia\_38:

(1, 31604), (2, 31586), (3, 31484), (6, 31367), (8, 31355), (9, 31325), (10, 31322), (11, 31289), (13, 31250), (Start: 26 @31109 has 11 MA's), (45, 30938), (50, 30866),

Gene: MaryV\_129 Start: 65640, Stop: 65461, Start Num: 33

Candidate Starts for MaryV\_129:

(Start: 33 @65640 has 6 MA's), (38, 65571), (41, 65529),

Gene: Maselop\_62 Start: 46607, Stop: 46413, Start Num: 26

Candidate Starts for Maselop\_62:

(18, 46628), (19, 46625), (Start: 26 @46607 has 11 MA's), (34, 46592), (37, 46535), (38, 46526), (42, 46487), (45, 46457),

Gene: Morrissey\_39 Start: 31553, Stop: 31275, Start Num: 26

Candidate Starts for Morrissey\_39:

(9, 31757), (10, 31754), (Start: 26 @31553 has 11 MA's), (40, 31430), (51, 31313),

Gene: Orchid\_78 Start: 59646, Stop: 59467, Start Num: 32

Candidate Starts for Orchid\_78:

(25, 59676), (Start: 32 @59646 has 3 MA's),

Gene: PatrickStar\_79 Start: 59645, Stop: 59466, Start Num: 32

Candidate Starts for PatrickStar\_79:

(25, 59675), (Start: 32 @59645 has 3 MA's),

Gene: Phabba\_145 Start: 88454, Stop: 88248, Start Num: 31

Candidate Starts for Phabba\_145:

(Start: 31 @88454 has 2 MA's), (37, 88382), (42, 88337),

Gene: Phroglets\_47 Start: 39977, Stop: 39744, Start Num: 17

Candidate Starts for Phroglets\_47:

(Start: 17 @39977 has 1 MA's), (27, 39935), (Start: 29 @39923 has 2 MA's), (41, 39815),

Gene: Polyuyki\_62 Start: 46596, Stop: 46402, Start Num: 26

Candidate Starts for Polyuyki\_62:

(18, 46617), (19, 46614), (Start: 26 @46596 has 11 MA's), (34, 46581), (37, 46524), (38, 46515), (42, 46476), (45, 46446),

Gene: ScoobyDoobyDoo\_136 Start: 88103, Stop: 87900, Start Num: 31

Candidate Starts for ScoobyDoobyDoo\_136:

(Start: 31 @88103 has 2 MA's), (39, 88010),

Gene: Towmatter\_47 Start: 40088, Stop: 40315, Start Num: 29

Candidate Starts for Towmatter\_47:

(Start: 26 @40076 has 11 MA's), (Start: 29 @40088 has 2 MA's), (37, 40166), (38, 40175),

Gene: Trine\_38 Start: 31043, Stop: 30771, Start Num: 26

Candidate Starts for Trine\_38:

(Start: 26 @31043 has 11 MA's), (40, 30914),

Gene: Upyo\_40 Start: 32017, Stop: 31766, Start Num: 33

Candidate Starts for Upyo\_40:

(4, 32392), (5, 32371), (21, 32068), (24, 32056), (Start: 33 @32017 has 6 MA's), (37, 31960), (49, 31804),

Gene: Widow\_38 Start: 31430, Stop: 31161, Start Num: 26

Candidate Starts for Widow\_38:

(6, 31676), (7, 31667), (9, 31634), (Start: 26 @31430 has 11 MA's),

Gene: Wildcat\_143 Start: 67533, Stop: 67354, Start Num: 33

Candidate Starts for Wildcat\_143:

(Start: 33 @67533 has 6 MA's), (38, 67464), (41, 67422),

Gene: Wrackline\_10 Start: 2288, Stop: 2479, Start Num: 28

Candidate Starts for Wrackline\_10:

(12, 2126), (14, 2171), (15, 2213), (23, 2267), (Start: 26 @2279 has 11 MA's), (Start: 28 @2288 has 1 MA's), (41, 2402), (46, 2447), (47, 2474),