

Pham 305171



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 305171 Report

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

Pham number 305171 has 36 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Eugenia\_68, HogWash\_68
- Track 2 : UAch1\_68
- Track 3 : Morty007\_67
- Track 4 : Shenyu\_67, StinkyVeggy\_66, Nangang\_66, DigitDog\_67, KarasumaRum\_66
- Track 5 : Nehemiah\_65
- Track 6 : MakoManhole\_59, CaiB\_62
- Track 7 : AnClar\_58
- Track 8 : Fresco\_62, Axumite\_62, Shatter\_62, Ligma\_62
- Track 9 : BiggityBass\_60
- Track 10 : LittleMunchkin\_63
- Track 11 : TraderJ\_62
- Track 12 : Yeshua\_62, AnarQue\_64
- Track 13 : AksarBAT\_65
- Track 14 : Mariokart\_58
- Track 15 : CharlottesWeb\_58, JellyBelly\_57
- Track 16 : CloverMinnie\_61
- Track 17 : Coldpizza\_60
- Track 18 : Blackpen\_61, Wooper\_63, FelixTres\_63
- Track 19 : Sour\_62
- Track 20 : Yago84\_59, Sisko\_60
- Track 21 : Evaa\_60
- Track 22 : BobRoss2024\_65

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

The start number called the most often in the published annotations is 16, it was called in 10 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AnClar\_58, Axumite\_62, BiggityBass\_60, CharlottesWeb\_58, Fresco\_62, JellyBelly\_57, Ligma\_62, LittleMunchkin\_63, Shatter\_62, Sisko\_60, Sour\_62, Yago84\_59,

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

- Mariokart\_58,

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

- AksarBAT\_65, AnarQue\_64, Blackpen\_61, BobRoss2024\_65, CaiB\_62, CloverMinnie\_61, Coldpizza\_60, DigitDog\_67, Eugenia\_68, Evaa\_60, FelixTres\_63, HogWash\_68, KarasumaRum\_66, MakoManhole\_59, Morty007\_67, Nangang\_66, Nehemiah\_65, Shenyu\_67, StinkyVeggy\_66, TraderJ\_62, UAch1\_68, Wooper\_63, Yeshua\_62,

### Summary by start number:

Start 12:

- Found in 9 of 36 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Mariokart\_58 (DR),

Start 15:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evaa\_60 (DR),

Start 16:

- Found in 13 of 36 ( 36.1% ) of genes in pham
- Manual Annotations of this start: 10 of 23
- Called 92.3% of time when present
- Phage (with cluster) where this start called: AnClar\_58 (DR), Axumite\_62 (DR), BiggityBass\_60 (DR), CharlottesWeb\_58 (DR), Fresco\_62 (DR), JellyBelly\_57 (DR), Ligma\_62 (DR), LittleMunchkin\_63 (DR), Shatter\_62 (DR), Sisko\_60 (DR), Sour\_62 (DR), Yago84\_59 (DR),

Start 19:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobRoss2024\_65 (DR),

Start 22:

- Found in 2 of 36 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Coldpizza\_60 (DR),

Start 23:

- Found in 3 of 36 ( 8.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: TraderJ\_62 (DR),

Start 24:

- Found in 7 of 36 ( 19.4% ) of genes in pham

- Manual Annotations of this start: 3 of 23
- Called 57.1% of time when present
- Phage (with cluster) where this start called: AksarBAT\_65 (DR), AnarQue\_64 (DR), CloverMinnie\_61 (DR), Yeshua\_62 (DR),

#### Start 25:

- Found in 9 of 36 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 4 of 23
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Blackpen\_61 (DR), CaiB\_62 (DR), FelixTres\_63 (DR), MakoManhole\_59 (DR), Wooper\_63 (DR),

#### Start 27:

- Found in 3 of 36 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 33.3% of time when present
- Phage (with cluster) where this start called: UAch1\_68 (B1),

#### Start 28:

- Found in 8 of 36 ( 22.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 62.5% of time when present
- Phage (with cluster) where this start called: DigitDog\_67 (B5), KarasumaRum\_66 (B5), Nangang\_66 (B5), Shenyu\_67 (B5), StinkyVeggy\_66 (B5),

#### Start 31:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morty007\_67 (B3),

#### Start 32:

- Found in 5 of 36 ( 13.9% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Eugenia\_68 (B1), HogWash\_68 (B1),

#### Start 33:

- Found in 3 of 36 ( 8.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Nehemiah\_65 (B5),

### **Summary by clusters:**

There are 4 clusters represented in this pham: B5, DR, B1, B3,

Info for manual annotations of cluster B1:

- Start number 27 was manually annotated 1 time for cluster B1.
- Start number 32 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster B3:

- Start number 31 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster DR:

- Start number 12 was manually annotated 1 time for cluster DR.
- Start number 15 was manually annotated 1 time for cluster DR.
- Start number 16 was manually annotated 10 times for cluster DR.
- Start number 22 was manually annotated 1 time for cluster DR.
- Start number 24 was manually annotated 3 times for cluster DR.
- Start number 25 was manually annotated 4 times for cluster DR.

**Gene Information:**

Gene: AksarBAT\_65 Start: 51976, Stop: 52173, Start Num: 24

Candidate Starts for AksarBAT\_65:

(21, 51946), (23, 51955), (Start: 24 @51976 has 3 MA's), (26, 51985), (42, 52105), (43, 52114),

Gene: AnClar\_58 Start: 51779, Stop: 51976, Start Num: 16

Candidate Starts for AnClar\_58:

(Start: 12 @51743 has 1 MA's), (Start: 16 @51779 has 10 MA's), (34, 51857), (36, 51878), (43, 51938), (47, 51965),

Gene: AnarQue\_64 Start: 52219, Stop: 52398, Start Num: 24

Candidate Starts for AnarQue\_64:

(Start: 24 @52219 has 3 MA's), (Start: 25 @52228 has 4 MA's), (43, 52360), (47, 52387),

Gene: Axumite\_62 Start: 50626, Stop: 50826, Start Num: 16

Candidate Starts for Axumite\_62:

(Start: 12 @50590 has 1 MA's), (Start: 16 @50626 has 10 MA's), (36, 50728), (43, 50788), (47, 50815),

Gene: BiggityBass\_60 Start: 52323, Stop: 52532, Start Num: 16

Candidate Starts for BiggityBass\_60:

(Start: 16 @52323 has 10 MA's), (34, 52413), (43, 52494), (47, 52521),

Gene: Blackpen\_61 Start: 50667, Stop: 50837, Start Num: 25

Candidate Starts for Blackpen\_61:

(Start: 24 @50658 has 3 MA's), (Start: 25 @50667 has 4 MA's), (43, 50799), (47, 50826),

Gene: BobRoss2024\_65 Start: 51837, Stop: 52049, Start Num: 19

Candidate Starts for BobRoss2024\_65:

(19, 51837), (28, 51882), (36, 51948), (40, 51975), (43, 52008), (48, 52041),

Gene: CaiB\_62 Start: 52012, Stop: 52182, Start Num: 25

Candidate Starts for CaiB\_62:

(Start: 25 @52012 has 4 MA's), (43, 52144), (47, 52171),

Gene: CharlottesWeb\_58 Start: 49213, Stop: 49410, Start Num: 16

Candidate Starts for CharlottesWeb\_58:

(Start: 12 @49177 has 1 MA's), (Start: 16 @49213 has 10 MA's), (36, 49315), (43, 49375),

Gene: CloverMinnie\_61 Start: 51166, Stop: 51345, Start Num: 24

Candidate Starts for CloverMinnie\_61:

(Start: 24 @51166 has 3 MA's), (Start: 25 @51175 has 4 MA's), (43, 51307),

Gene: Coldpizza\_60 Start: 52423, Stop: 52629, Start Num: 22

Candidate Starts for Coldpizza\_60:

(9, 52342), (10, 52351), (14, 52390), (Start: 22 @52423 has 1 MA's), (29, 52468), (30, 52471), (Start: 32 @52492 has 1 MA's), (37, 52546), (39, 52555),

Gene: DigitDog\_67 Start: 58467, Stop: 58649, Start Num: 28

Candidate Starts for DigitDog\_67:

(10, 58365), (13, 58392), (14, 58401), (28, 58467), (38, 58548), (44, 58599), (46, 58614), (49, 58623), (50, 58635),

Gene: Eugenia\_68 Start: 57577, Stop: 57729, Start Num: 32

Candidate Starts for Eugenia\_68:

(11, 57457), (13, 57478), (14, 57487), (Start: 27 @57550 has 1 MA's), (Start: 32 @57577 has 1 MA's), (46, 57700),

Gene: Evaa\_60 Start: 49769, Stop: 50017, Start Num: 15

Candidate Starts for Evaa\_60:

(Start: 15 @49769 has 1 MA's), (17, 49775), (20, 49784), (Start: 22 @49793 has 1 MA's), (28, 49835), (33, 49874), (35, 49883), (39, 49925), (40, 49928),

Gene: FelixTres\_63 Start: 51482, Stop: 51652, Start Num: 25

Candidate Starts for FelixTres\_63:

(Start: 24 @51473 has 3 MA's), (Start: 25 @51482 has 4 MA's), (43, 51614), (47, 51641),

Gene: Fresco\_62 Start: 50626, Stop: 50826, Start Num: 16

Candidate Starts for Fresco\_62:

(Start: 12 @50590 has 1 MA's), (Start: 16 @50626 has 10 MA's), (36, 50728), (43, 50788), (47, 50815),

Gene: HogWash\_68 Start: 57799, Stop: 57951, Start Num: 32

Candidate Starts for HogWash\_68:

(11, 57679), (13, 57700), (14, 57709), (Start: 27 @57772 has 1 MA's), (Start: 32 @57799 has 1 MA's), (46, 57922),

Gene: JellyBelly\_57 Start: 49210, Stop: 49407, Start Num: 16

Candidate Starts for JellyBelly\_57:

(Start: 12 @49174 has 1 MA's), (Start: 16 @49210 has 10 MA's), (36, 49312), (43, 49372),

Gene: KarasumaRum\_66 Start: 58294, Stop: 58476, Start Num: 28

Candidate Starts for KarasumaRum\_66:

(10, 58192), (13, 58219), (14, 58228), (28, 58294), (38, 58375), (44, 58426), (46, 58441), (49, 58450), (50, 58462),

Gene: Ligma\_62 Start: 50626, Stop: 50826, Start Num: 16

Candidate Starts for Ligma\_62:

(Start: 12 @50590 has 1 MA's), (Start: 16 @50626 has 10 MA's), (36, 50728), (43, 50788), (47, 50815),

Gene: LittleMunchkin\_63 Start: 53357, Stop: 53581, Start Num: 16

Candidate Starts for LittleMunchkin\_63:

(Start: 16 @53357 has 10 MA's), (33, 53456), (36, 53483), (41, 53531), (43, 53543), (47, 53570),

Gene: MakoManhole\_59 Start: 50530, Stop: 50700, Start Num: 25

Candidate Starts for MakoManhole\_59:  
(Start: 25 @50530 has 4 MA's), (43, 50662), (47, 50689),

Gene: Mariokart\_58 Start: 49462, Stop: 49695, Start Num: 12  
Candidate Starts for Mariokart\_58:  
(Start: 12 @49462 has 1 MA's), (Start: 16 @49498 has 10 MA's), (36, 49600), (43, 49660),

Gene: Morty007\_67 Start: 58277, Stop: 58441, Start Num: 31  
Candidate Starts for Morty007\_67:  
(4, 58082), (18, 58208), (21, 58217), (23, 58226), (Start: 31 @58277 has 1 MA's), (45, 58403),

Gene: Nangang\_66 Start: 58493, Stop: 58675, Start Num: 28  
Candidate Starts for Nangang\_66:  
(10, 58391), (13, 58418), (14, 58427), (28, 58493), (38, 58574), (44, 58625), (46, 58640), (49, 58649),  
(50, 58661),

Gene: Nehemiah\_65 Start: 58285, Stop: 58431, Start Num: 33  
Candidate Starts for Nehemiah\_65:  
(10, 58147), (13, 58174), (14, 58183), (26, 58243), (28, 58249), (33, 58285), (37, 58327), (44, 58381),

Gene: Shatter\_62 Start: 50626, Stop: 50826, Start Num: 16  
Candidate Starts for Shatter\_62:  
(Start: 12 @50590 has 1 MA's), (Start: 16 @50626 has 10 MA's), (36, 50728), (43, 50788), (47, 50815),

Gene: Shenyu\_67 Start: 58862, Stop: 59044, Start Num: 28  
Candidate Starts for Shenyu\_67:  
(10, 58760), (13, 58787), (14, 58796), (28, 58862), (38, 58943), (44, 58994), (46, 59009), (49, 59018),  
(50, 59030),

Gene: Sisko\_60 Start: 50847, Stop: 51044, Start Num: 16  
Candidate Starts for Sisko\_60:  
(Start: 16 @50847 has 10 MA's), (34, 50925), (36, 50946), (43, 51006), (47, 51033),

Gene: Sour\_62 Start: 53064, Stop: 53273, Start Num: 16  
Candidate Starts for Sour\_62:  
(Start: 12 @53028 has 1 MA's), (Start: 16 @53064 has 10 MA's), (34, 53154), (43, 53235), (47, 53262),

Gene: StinkyVeggy\_66 Start: 58294, Stop: 58476, Start Num: 28  
Candidate Starts for StinkyVeggy\_66:  
(10, 58192), (13, 58219), (14, 58228), (28, 58294), (38, 58375), (44, 58426), (46, 58441), (49, 58450),  
(50, 58462),

Gene: TraderJ\_62 Start: 51541, Stop: 51786, Start Num: 23  
Candidate Starts for TraderJ\_62:  
(1, 51304), (2, 51370), (3, 51376), (5, 51412), (6, 51424), (7, 51436), (8, 51448), (21, 51532), (23,  
51541), (Start: 25 @51571 has 4 MA's), (26, 51574), (Start: 32 @51604 has 1 MA's), (36, 51643), (43,  
51703), (51, 51769), (52, 51775),

Gene: UAch1\_68 Start: 57127, Stop: 57306, Start Num: 27  
Candidate Starts for UAch1\_68:  
(11, 57034), (13, 57055), (14, 57064), (Start: 27 @57127 has 1 MA's), (Start: 32 @57154 has 1 MA's),  
(46, 57277),

Gene: Wooper\_63 Start: 51561, Stop: 51731, Start Num: 25

Candidate Starts for Wooper\_63:

(Start: 24 @51552 has 3 MA's), (Start: 25 @51561 has 4 MA's), (43, 51693), (47, 51720),

Gene: Yago84\_59 Start: 50332, Stop: 50529, Start Num: 16

Candidate Starts for Yago84\_59:

(Start: 16 @50332 has 10 MA's), (34, 50410), (36, 50431), (43, 50491), (47, 50518),

Gene: Yeshua\_62 Start: 51529, Stop: 51708, Start Num: 24

Candidate Starts for Yeshua\_62:

(Start: 24 @51529 has 3 MA's), (Start: 25 @51538 has 4 MA's), (43, 51670), (47, 51697),