

Pham 296875



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 296875 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296875 has 26 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Mercedes\_56
- Track 2 : Ixel\_60
- Track 3 : Penta\_58, Schimmels22\_59
- Track 4 : WestPM\_58
- Track 5 : HerculesXL\_60, Tinyman4\_58
- Track 6 : Kavo\_59
- Track 7 : Scissor2024\_60
- Track 8 : Librie\_61, Hasitha\_61, CaptainRex\_61, Fulton\_61
- Track 9 : QuadZero\_61, Zayuliv\_61
- Track 10 : Wardwill\_63
- Track 11 : Greenlvy\_60
- Track 12 : LilTerminator\_61
- Track 13 : Zepp\_61
- Track 14 : WilliamStrong\_62
- Track 15 : Luna18\_62, Chepli\_62, KatChan\_61
- Track 16 : Juicer\_62
- Track 17 : Jemerald\_62
- Track 18 : Morrigan\_63

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

The start number called the most often in the published annotations is 17, it was called in 10 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- CaptainRex\_61, Fulton\_61, Greenlvy\_60, Hasitha\_61, Librie\_61, LilTerminator\_61, QuadZero\_61, Wardwill\_63, Zayuliv\_61, Zepp\_61,

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

- Mercedes\_56,

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

- Chepli\_62, HerculesXL\_60, Ixel\_60, Jemerald\_62, Juicer\_62, KatChan\_61, Kavo\_59, Luna18\_62, Morrigan\_63, Penta\_58, Schimmels22\_59, Scissor2024\_60,

Tinyman4\_58, WestPM\_58, WilliamStrong\_62,

### Summary by start number:

Start 8:

- Found in 3 of 26 ( 11.5% ) 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: Jemerald\_62 (EA6),

Start 16:

- Found in 1 of 26 ( 3.8% ) 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: Mercedes\_56 (EA),

Start 17:

- Found in 11 of 26 ( 42.3% ) of genes in pham
- Manual Annotations of this start: 10 of 23
- Called 90.9% of time when present
- Phage (with cluster) where this start called: CaptainRex\_61 (EA5), Fulton\_61 (EA5), Greenlvy\_60 (EA5), Hasitha\_61 (EA5), Librie\_61 (EA5), LilTerminator\_61 (EA5), QuadZero\_61 (EA5), Wardwill\_63 (EA5), Zayuliv\_61 (EA5), Zepp\_61 (EA5),

Start 18:

- Found in 2 of 26 ( 7.7% ) 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: Juicer\_62 (EA6),

Start 19:

- Found in 9 of 26 ( 34.6% ) of genes in pham
- Manual Annotations of this start: 6 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HerculesXL\_60 (EA11), Ixel\_60 (EA11), Kavo\_59 (EA11), Penta\_58 (EA11), Schimmels22\_59 (EA11), Scissor2024\_60 (EA11), Tinyman4\_58 (EA11), WestPM\_58 (EA11), WilliamStrong\_62 (EA6),

Start 20:

- Found in 4 of 26 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 4 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chepli\_62 (EA6), KatChan\_61 (EA6), Luna18\_62 (EA6), Morigan\_63 (EA6),

### Summary by clusters:

There are 4 clusters represented in this pham: EA11, EA5, EA, EA6,

Info for manual annotations of cluster EA:

- Start number 16 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA11:

- Start number 19 was manually annotated 5 times for cluster EA11.

Info for manual annotations of cluster EA5:

- Start number 17 was manually annotated 10 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 8 was manually annotated 1 time for cluster EA6.
- Start number 18 was manually annotated 1 time for cluster EA6.
- Start number 19 was manually annotated 1 time for cluster EA6.
- Start number 20 was manually annotated 4 times for cluster EA6.

### ***Gene Information:***

Gene: CaptainRex\_61 Start: 39013, Stop: 39228, Start Num: 17

Candidate Starts for CaptainRex\_61:

(6, 38935), (7, 38938), (9, 38947), (11, 38956), (Start: 17 @39013 has 10 MA's), (23, 39064), (28, 39139), (33, 39187), (35, 39223),

Gene: Chepli\_62 Start: 39549, Stop: 39731, Start Num: 20

Candidate Starts for Chepli\_62:

(Start: 20 @39549 has 4 MA's), (26, 39594), (30, 39672),

Gene: Fulton\_61 Start: 39014, Stop: 39229, Start Num: 17

Candidate Starts for Fulton\_61:

(6, 38936), (7, 38939), (9, 38948), (11, 38957), (Start: 17 @39014 has 10 MA's), (23, 39065), (28, 39140), (33, 39188), (35, 39224),

Gene: Greenlvy\_60 Start: 39358, Stop: 39603, Start Num: 17

Candidate Starts for Greenlvy\_60:

(Start: 17 @39358 has 10 MA's), (28, 39514), (33, 39562),

Gene: Hasitha\_61 Start: 39024, Stop: 39239, Start Num: 17

Candidate Starts for Hasitha\_61:

(6, 38946), (7, 38949), (9, 38958), (11, 38967), (Start: 17 @39024 has 10 MA's), (23, 39075), (28, 39150), (33, 39198), (35, 39234),

Gene: HerculesXL\_60 Start: 38481, Stop: 38678, Start Num: 19

Candidate Starts for HerculesXL\_60:

(5, 38394), (12, 38418), (15, 38436), (Start: 19 @38481 has 6 MA's), (24, 38526), (25, 38532), (29, 38604), (31, 38622), (32, 38631),

Gene: Ixel\_60 Start: 39807, Stop: 40037, Start Num: 19

Candidate Starts for Ixel\_60:

(Start: 8 @39729 has 1 MA's), (11, 39741), (Start: 19 @39807 has 6 MA's), (22, 39867), (27, 39921),

Gene: Jemerald\_62 Start: 40216, Stop: 40506, Start Num: 8

Candidate Starts for Jemerald\_62:

(4, 40201), (Start: 8 @40216 has 1 MA's), (10, 40225), (13, 40231), (Start: 18 @40291 has 1 MA's), (30, 40447), (34, 40477),

Gene: Juicer\_62 Start: 40291, Stop: 40506, Start Num: 18

Candidate Starts for Juicer\_62:

(4, 40201), (Start: 8 @40216 has 1 MA's), (10, 40225), (13, 40231), (Start: 18 @40291 has 1 MA's), (30, 40447), (34, 40477),

Gene: KatChan\_61 Start: 39566, Stop: 39748, Start Num: 20

Candidate Starts for KatChan\_61:

(Start: 20 @39566 has 4 MA's), (26, 39611), (30, 39689),

Gene: Kavo\_59 Start: 38533, Stop: 38739, Start Num: 19

Candidate Starts for Kavo\_59:

(5, 38446), (12, 38470), (15, 38488), (Start: 19 @38533 has 6 MA's), (29, 38665), (31, 38683), (32, 38692),

Gene: Librie\_61 Start: 39013, Stop: 39228, Start Num: 17

Candidate Starts for Librie\_61:

(6, 38935), (7, 38938), (9, 38947), (11, 38956), (Start: 17 @39013 has 10 MA's), (23, 39064), (28, 39139), (33, 39187), (35, 39223),

Gene: LilTerminator\_61 Start: 39040, Stop: 39240, Start Num: 17

Candidate Starts for LilTerminator\_61:

(Start: 17 @39040 has 10 MA's), (21, 39067), (23, 39076), (28, 39151), (33, 39199),

Gene: Luna18\_62 Start: 39566, Stop: 39748, Start Num: 20

Candidate Starts for Luna18\_62:

(Start: 20 @39566 has 4 MA's), (26, 39611), (30, 39689),

Gene: Mercedes\_56 Start: 39258, Stop: 39485, Start Num: 16

Candidate Starts for Mercedes\_56:

(Start: 16 @39258 has 1 MA's), (Start: 17 @39285 has 10 MA's), (24, 39327), (33, 39444),

Gene: Morrigan\_63 Start: 39618, Stop: 39800, Start Num: 20

Candidate Starts for Morrigan\_63:

(Start: 20 @39618 has 4 MA's), (26, 39663), (30, 39741),

Gene: Penta\_58 Start: 38690, Stop: 38887, Start Num: 19

Candidate Starts for Penta\_58:

(5, 38603), (12, 38627), (15, 38645), (Start: 19 @38690 has 6 MA's), (29, 38813), (32, 38840),

Gene: QuadZero\_61 Start: 39116, Stop: 39331, Start Num: 17

Candidate Starts for QuadZero\_61:

(Start: 17 @39116 has 10 MA's), (23, 39167), (28, 39242), (33, 39290),

Gene: Schimmels22\_59 Start: 38802, Stop: 38999, Start Num: 19

Candidate Starts for Schimmels22\_59:

(5, 38715), (12, 38739), (15, 38757), (Start: 19 @38802 has 6 MA's), (29, 38925), (32, 38952),

Gene: Scissor2024\_60 Start: 38444, Stop: 38650, Start Num: 19

Candidate Starts for Scissor2024\_60:

(1, 38174), (2, 38276), (3, 38348), (9, 38372), (14, 38393), (Start: 19 @38444 has 6 MA's), (29, 38576), (31, 38594), (32, 38603),

Gene: Tinyman4\_58 Start: 38476, Stop: 38673, Start Num: 19

Candidate Starts for Tinyman4\_58:

(5, 38389), (12, 38413), (15, 38431), (Start: 19 @38476 has 6 MA's), (24, 38521), (25, 38527), (29, 38599), (31, 38617), (32, 38626),

Gene: Wardwill\_63 Start: 39187, Stop: 39387, Start Num: 17

Candidate Starts for Wardwill\_63:

(Start: 17 @39187 has 10 MA's), (23, 39223), (28, 39298), (33, 39346),

Gene: WestPM\_58 Start: 38661, Stop: 38858, Start Num: 19

Candidate Starts for WestPM\_58:

(5, 38574), (12, 38598), (15, 38616), (Start: 19 @38661 has 6 MA's), (24, 38706), (25, 38712), (29, 38784), (32, 38811),

Gene: WilliamStrong\_62 Start: 39951, Stop: 40172, Start Num: 19

Candidate Starts for WilliamStrong\_62:

(Start: 19 @39951 has 6 MA's), (24, 40005), (29, 40098), (31, 40116), (32, 40125),

Gene: Zayuliv\_61 Start: 39687, Stop: 39902, Start Num: 17

Candidate Starts for Zayuliv\_61:

(Start: 17 @39687 has 10 MA's), (23, 39738), (28, 39813), (33, 39861),

Gene: Zepp\_61 Start: 39245, Stop: 39460, Start Num: 17

Candidate Starts for Zepp\_61:

(Start: 17 @39245 has 10 MA's), (21, 39287), (28, 39371), (33, 39419),