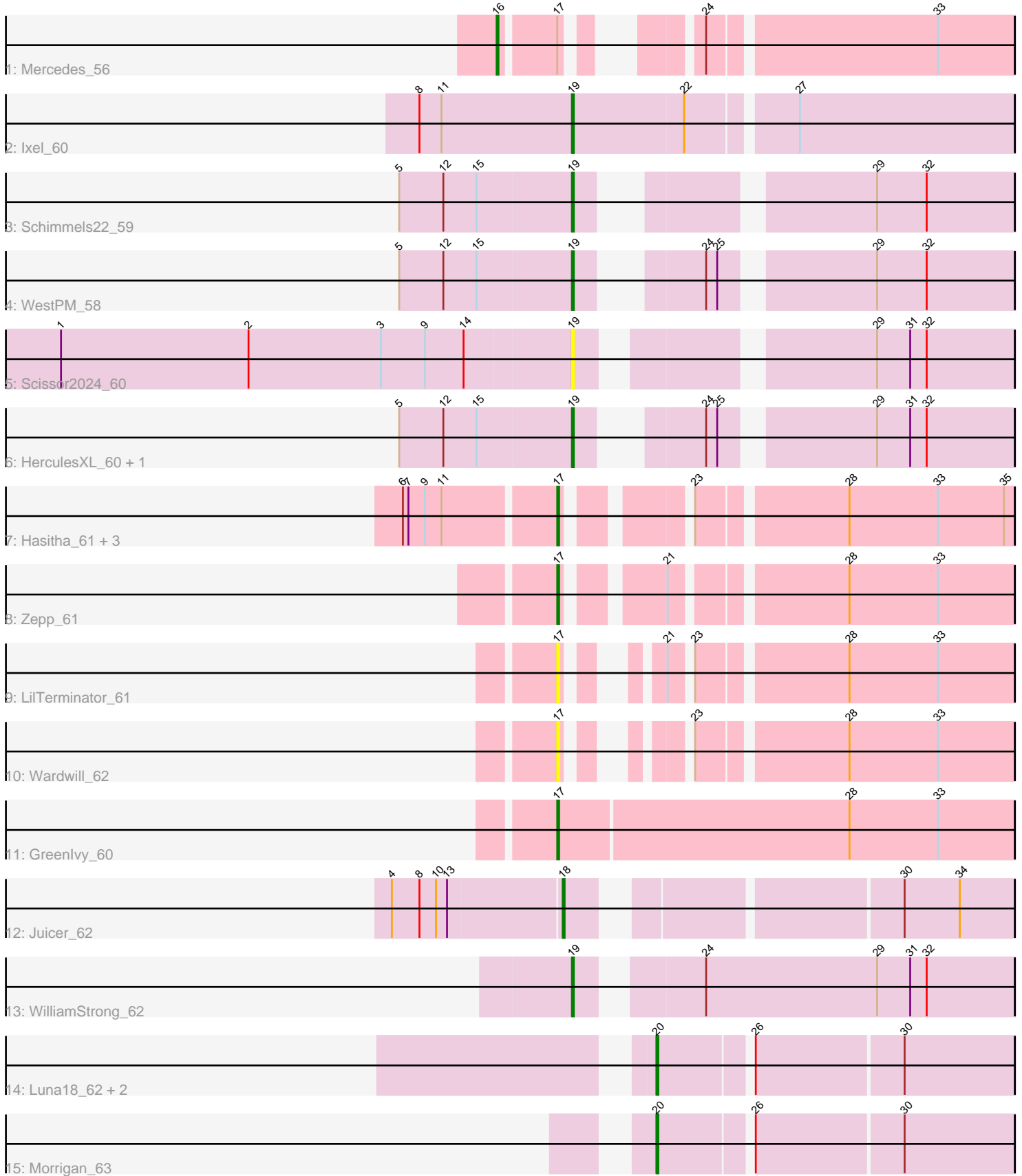


Pham 224896



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 224896 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224896 has 21 members, 3 are drafts.

Phages represented in each track:

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

### **Summary by start number:**

Start 16:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mercedes\_56 (EA),

Start 17:

- Found in 9 of 21 ( 42.9% ) of genes in pham
- Manual Annotations of this start: 6 of 18
- Called 88.9% 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), Wardwill\_62 (EA5), Zepp\_61 (EA5),

Start 18:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juicer\_62 (EA6),

Start 19:

- Found in 7 of 21 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 6 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HerculesXL\_60 (EA11), Ixel\_60 (EA11), Schimmels22\_59 (EA11), Scissor2024\_60 (EA11), Tinyman4\_58 (EA11), WestPM\_58 (EA11), WilliamStrong\_62 (EA6),

Start 20:

- Found in 4 of 21 ( 19.0% ) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chepli\_62 (EA6), KatChan\_61 (EA6), Luna18\_62 (EA6), Murrigan\_63 (EA6),

**Summary by clusters:**

There are 4 clusters represented in this pham: EA11, EA, EA5, 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 6 times for cluster EA5.

Info for manual annotations of 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 6 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 6 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 6 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 6 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:

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

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

Candidate Starts for Juicer\_62:

(4, 40201), (8, 40216), (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: 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 6 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 6 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 6 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: 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\_62 Start: 39187, Stop: 39387, Start Num: 17

Candidate Starts for Wardwill\_62:

(Start: 17 @39187 has 6 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: Zepp\_61 Start: 39245, Stop: 39460, Start Num: 17

Candidate Starts for Zepp\_61:

(Start: 17 @39245 has 6 MA's), (21, 39287), (28, 39371), (33, 39419),