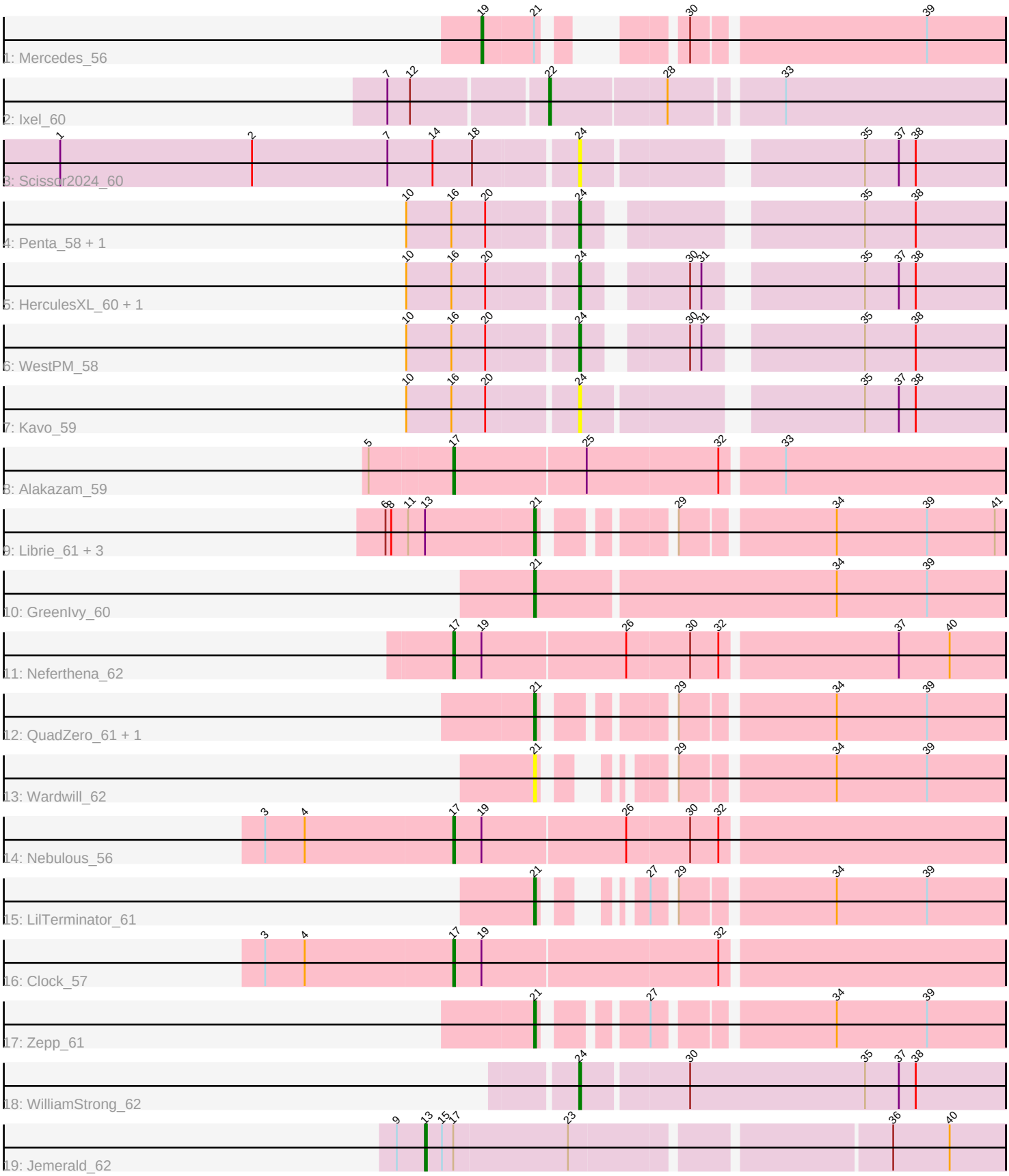
Pham 284137


1: Mercedes_56
2: Ixel_60
3: Scissor2024_60
4: Penta_58 + 1
5: HerculesXL_60 + 1
6: WestPM_58
7: Kavo_59
8: Alakazam_59
9: Librie_61 + 3
10: GreenIvy_60
11: Neferthena_62
12: QuadZero_61 + 1
13: Wardwill_62
14: Nebulous_56
15: LilTerminator_61
16: Clock_57
17: Zepp_61
18: WilliamStrong_62
19: Jemerald_62

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 284137 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284137 has 25 members, 4 are drafts.

Phages represented in each track:
- Track 1 : Mercedes_56
- Track 2 : Ixel_60
- Track 3 : Scissor2024_60
- Track 4 : Penta_58, Schimmels22_59
- Track 5 : HerculesXL_60, Tinyman4_58
- Track 6 : WestPM_58
- Track 7 : Kavo_59
- Track 8 : Alakazam_59
- Track 9 : Librie_61, Hasitha_61, CaptainRex_61, Fulton_61
- Track 10 : GreenIvy_60
- Track 11 : Neferthena_62
- Track 12 : QuadZero_61, Zayuliv_61
- Track 13 : Wardwill_62
- Track 14 : Nebulous_56
- Track 15 : LilTerminator_61
- Track 16 : Clock_57
- Track 17 : Zepp_61
- Track 18 : WilliamStrong_62
- Track 19 : Jemerald_62

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

The start number called the most often in the published annotations is 21, it was called in 9 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- CaptainRex_61, Fulton_61, GreenIvy_60, Hasitha_61, Librie_61, LilTerminator_61, QuadZero_61, Wardwill_62, 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:

• Alakazam_59, Clock_57, HerculesXL_60, Ixel_60, Jemerald_62, Kavo_59, Nebulous_56, Neferthena_62, Penta_58, Schimmels22_59, Scissor2024_60, Tinyman4_58, WestPM_58, WilliamStrong_62,

Summary by start number:

Start 13:
• Found in 5 of 25 (20.0%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Jemerald_62 (EA6),

Start 17:
• Found in 5 of 25 (20.0%) of genes in pham
• Manual Annotations of this start: 4 of 21
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Alakazam_59 (EA5), Clock_57 (EA5), Nebulous_56 (EA5), Neferthena_62 (EA5),

Start 19:
• Found in 4 of 25 (16.0%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Mercedes_56 (EA),

Start 21:
• Found in 11 of 25 (44.0%) of genes in pham
• Manual Annotations of this start: 9 of 21
• Called 90.9% of time when present
• Phage (with cluster) where this start called: CaptainRex_61 (EA5), Fulton_61 (EA5), GreenIvy_60 (EA5), Hasitha_61 (EA5), Librie_61 (EA5), LilTerminator_61 (EA5), QuadZero_61 (EA5), Wardwill_62 (EA5), Zayuliv_61 (EA5), Zepp_61 (EA5),

Start 22:
• Found in 1 of 25 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ixel_60 (EA11),

Start 24:
• Found in 8 of 25 (32.0%) of genes in pham
• Manual Annotations of this start: 5 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: HerculesXL_60 (EA11), Kavo_59 (EA11), Penta_58 (EA11), Schimmels22_59 (EA11), Scissor2024_60 (EA11), Tinyman4_58 (EA11), WestPM_58 (EA11), WilliamStrong_62 (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 19 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA11:
•Start number 22 was manually annotated 1 time for cluster EA11.
•Start number 24 was manually annotated 4 times for cluster EA11.

Info for manual annotations of cluster EA5:
•Start number 17 was manually annotated 4 times for cluster EA5.
•Start number 21 was manually annotated 9 times for cluster EA5.

Info for manual annotations of cluster EA6:
•Start number 13 was manually annotated 1 time for cluster EA6.
•Start number 24 was manually annotated 1 time for cluster EA6.

Gene Information:

Gene: Alakazam_59 Start: 40230, Stop: 40514, Start Num: 17
Candidate Starts for Alakazam_59:
(5, 40188), (Start: 17 @40230 has 4 MA's), (25, 40299), (32, 40368), (33, 40398),

Gene: CaptainRex_61 Start: 39013, Stop: 39228, Start Num: 21
Candidate Starts for CaptainRex_61:
(6, 38935), (8, 38938), (11, 38947), (Start: 13 @38956 has 1 MA's), (Start: 21 @39013 has 9 MA's), (29, 39064), (34, 39139), (39, 39187), (41, 39223),

Gene: Clock_57 Start: 40673, Stop: 40957, Start Num: 17
Candidate Starts for Clock_57:
(3, 40574), (4, 40595), (Start: 17 @40673 has 4 MA's), (Start: 19 @40688 has 1 MA's), (32, 40811),

Gene: Fulton_61 Start: 39014, Stop: 39229, Start Num: 21
Candidate Starts for Fulton_61:
(6, 38936), (8, 38939), (11, 38948), (Start: 13 @38957 has 1 MA's), (Start: 21 @39014 has 9 MA's), (29, 39065), (34, 39140), (39, 39188), (41, 39224),

Gene: GreenIvy_60 Start: 39358, Stop: 39603, Start Num: 21
Candidate Starts for GreenIvy_60:
(Start: 21 @39358 has 9 MA's), (34, 39514), (39, 39562),

Gene: Hasitha_61 Start: 39024, Stop: 39239, Start Num: 21
Candidate Starts for Hasitha_61:
(6, 38946), (8, 38949), (11, 38958), (Start: 13 @38967 has 1 MA's), (Start: 21 @39024 has 9 MA's), (29, 39075), (34, 39150), (39, 39198), (41, 39234),

Gene: HerculesXL_60 Start: 38481, Stop: 38678, Start Num: 24
Candidate Starts for HerculesXL_60:
(10, 38394), (16, 38418), (20, 38436), (Start: 24 @38481 has 5 MA's), (30, 38526), (31, 38532), (35, 38604), (37, 38622), (38, 38631),

Gene: Ixel_60 Start: 39807, Stop: 40037, Start Num: 22
Candidate Starts for Ixel_60:
(7, 39729), (12, 39741), (Start: 22 @39807 has 1 MA's), (28, 39867), (33, 39921),

Gene: Jemerald_62 Start: 40216, Stop: 40506, Start Num: 13
Candidate Starts for Jemerald_62:
(9, 40201), (Start: 13 @40216 has 1 MA's), (15, 40225), (Start: 17 @40231 has 4 MA's), (23, 40291), (36, 40447), (40, 40477),

Gene: Kavo_59 Start: 38533, Stop: 38739, Start Num: 24
Candidate Starts for Kavo_59:
(10, 38446), (16, 38470), (20, 38488), (Start: 24 @38533 has 5 MA's), (35, 38665), (37, 38683), (38, 38692),

Gene: Librie_61 Start: 39013, Stop: 39228, Start Num: 21
Candidate Starts for Librie_61:
(6, 38935), (8, 38938), (11, 38947), (Start: 13 @38956 has 1 MA's), (Start: 21 @39013 has 9 MA's), (29, 39064), (34, 39139), (39, 39187), (41, 39223),

Gene: LilTerminator_61 Start: 39040, Stop: 39240, Start Num: 21
Candidate Starts for LilTerminator_61:
(Start: 21 @39040 has 9 MA's), (27, 39067), (29, 39076), (34, 39151), (39, 39199),

Gene: Mercedes_56 Start: 39258, Stop: 39485, Start Num: 19
Candidate Starts for Mercedes_56:
(Start: 19 @39258 has 1 MA's), (Start: 21 @39285 has 9 MA's), (30, 39327), (39, 39444),

Gene: Nebulous_56 Start: 40430, Stop: 40714, Start Num: 17
Candidate Starts for Nebulous_56:
(3, 40331), (4, 40352), (Start: 17 @40430 has 4 MA's), (Start: 19 @40445 has 1 MA's), (26, 40520), (30, 40553), (32, 40568),

Gene: Neferthena_62 Start: 40624, Stop: 40908, Start Num: 17
Candidate Starts for Neferthena_62:
(Start: 17 @40624 has 4 MA's), (Start: 19 @40639 has 1 MA's), (26, 40714), (30, 40747), (32, 40762), (37, 40852), (40, 40879),

Gene: Penta_58 Start: 38690, Stop: 38887, Start Num: 24
Candidate Starts for Penta_58:
(10, 38603), (16, 38627), (20, 38645), (Start: 24 @38690 has 5 MA's), (35, 38813), (38, 38840),

Gene: QuadZero_61 Start: 39116, Stop: 39331, Start Num: 21
Candidate Starts for QuadZero_61:
(Start: 21 @39116 has 9 MA's), (29, 39167), (34, 39242), (39, 39290),

Gene: Schimmels22_59 Start: 38802, Stop: 38999, Start Num: 24
Candidate Starts for Schimmels22_59:
(10, 38715), (16, 38739), (20, 38757), (Start: 24 @38802 has 5 MA's), (35, 38925), (38, 38952),

Gene: Scissor2024_60 Start: 38444, Stop: 38650, Start Num: 24
Candidate Starts for Scissor2024_60:
(1, 38174), (2, 38276), (7, 38348), (14, 38372), (18, 38393), (Start: 24 @38444 has 5 MA's), (35, 38576), (37, 38594), (38, 38603),

Gene: Tinyman4_58 Start: 38476, Stop: 38673, Start Num: 24
Candidate Starts for Tinyman4_58:

(10, 38389), (16, 38413), (20, 38431), (Start: 24 @38476 has 5 MA's), (30, 38521), (31, 38527), (35, 38599), (37, 38617), (38, 38626),

Gene: Wardwill_62 Start: 39187, Stop: 39387, Start Num: 21
Candidate Starts for Wardwill_62:
(Start: 21 @39187 has 9 MA's), (29, 39223), (34, 39298), (39, 39346),

Gene: WestPM_58 Start: 38661, Stop: 38858, Start Num: 24
Candidate Starts for WestPM_58:
(10, 38574), (16, 38598), (20, 38616), (Start: 24 @38661 has 5 MA's), (30, 38706), (31, 38712), (35, 38784), (38, 38811),

Gene: WilliamStrong_62 Start: 39951, Stop: 40172, Start Num: 24
Candidate Starts for WilliamStrong_62:
(Start: 24 @39951 has 5 MA's), (30, 40005), (35, 40098), (37, 40116), (38, 40125),

Gene: Zayuliv_61 Start: 39687, Stop: 39902, Start Num: 21
Candidate Starts for Zayuliv_61:
(Start: 21 @39687 has 9 MA's), (29, 39738), (34, 39813), (39, 39861),

Gene: Zepp_61 Start: 39245, Stop: 39460, Start Num: 21
Candidate Starts for Zepp_61:
(Start: 21 @39245 has 9 MA's), (27, 39287), (34, 39371), (39, 39419),