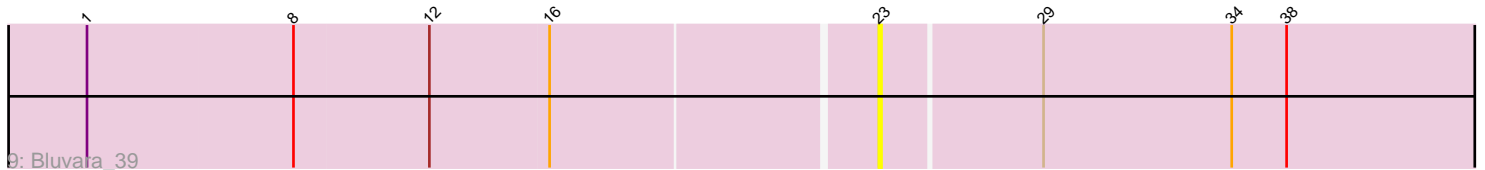
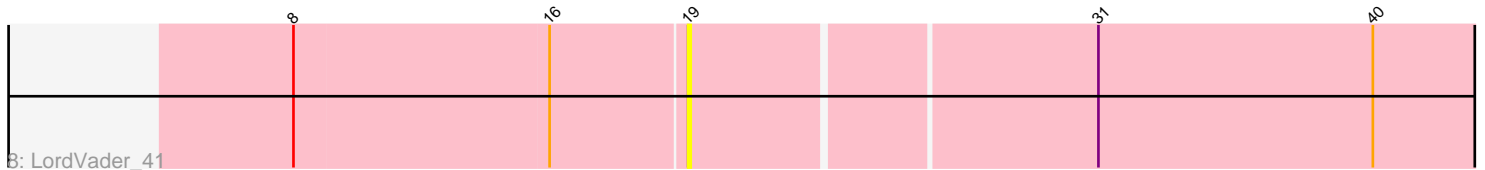
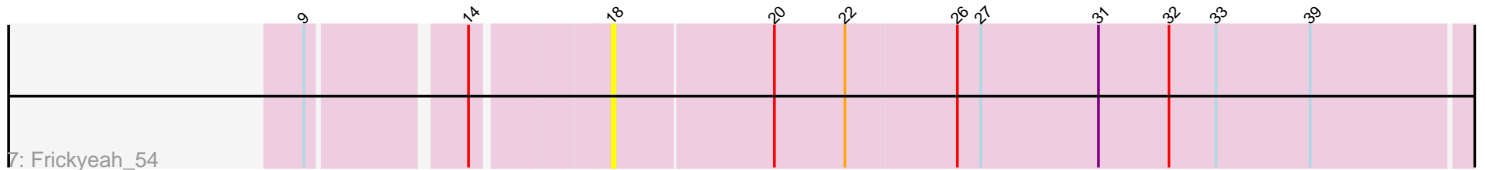
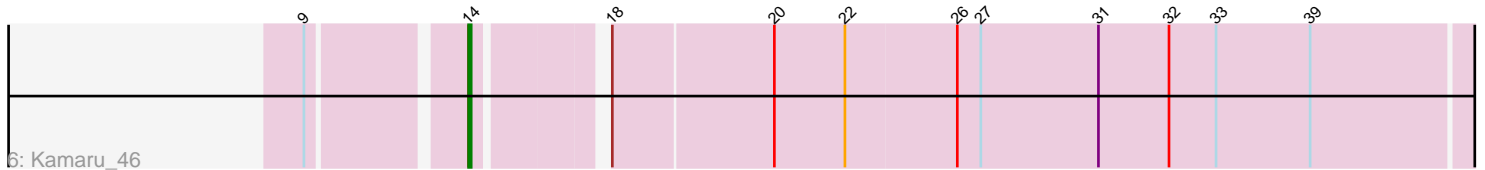
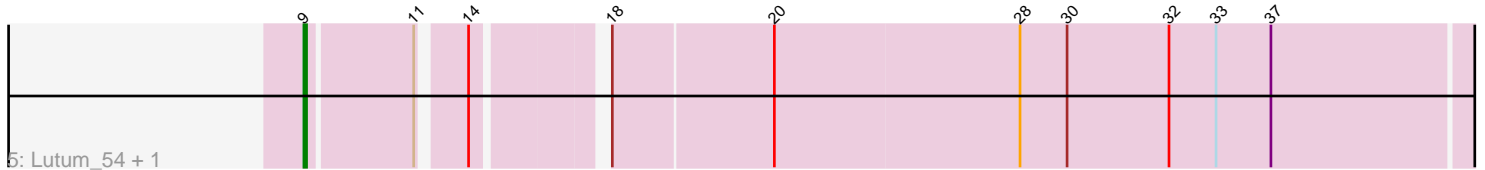
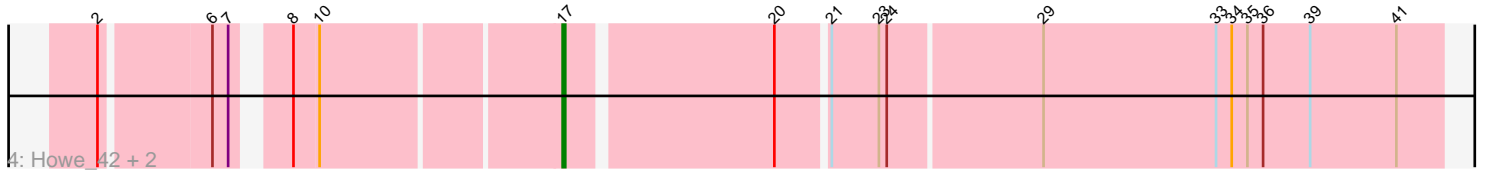
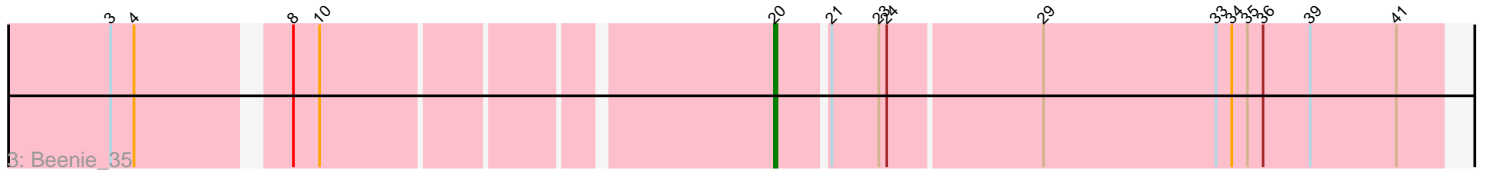
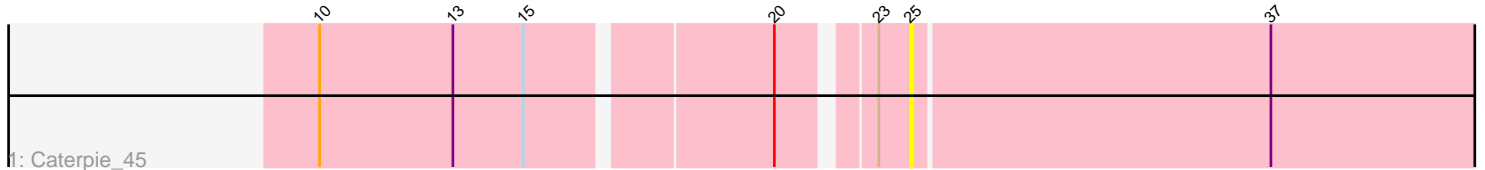


Pham 297121



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 297121 Report

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

Pham number 297121 has 12 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Caterpie_45
- Track 2 : Fenry_39
- Track 3 : Beenie_35
- Track 4 : Howe_42, Hortense_42, Twinkle_41
- Track 5 : Lutum_54, Kenna_53
- Track 6 : Kamaru_46
- Track 7 : Frickyeah_54
- Track 8 : LordVader_41
- Track 9 : Bluvara_39

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 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Fenry_39, Hortense_42, Howe_42, Twinkle_41,

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

-

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

- Beenie_35, Bluvara_39, Caterpie_45, Frickyeah_54, Kamaru_46, Kenna_53, LordVader_41, Lutum_54,

Summary by start number:

Start 9:

- Found in 4 of 12 (33.3%) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kenna_53 (DN1), Lutum_54 (DN1),

Start 14:

- Found in 4 of 12 (33.3%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Kamaru_46 (DN1),

Start 17:

- Found in 4 of 12 (33.3%) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fenry_39 (CV), Hortense_42 (CZ4), Howe_42 (CZ4), Twinkle_41 (CZ4),

Start 18:

- Found in 4 of 12 (33.3%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Frickyeah_54 (DN1),

Start 19:

- Found in 1 of 12 (8.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LordVader_41 (F),

Start 20:

- Found in 9 of 12 (75.0%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Beenie_35 (CZ4),

Start 23:

- Found in 7 of 12 (58.3%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Bluvara_39 (I3),

Start 25:

- Found in 1 of 12 (8.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caterpie_45 (AD),

Summary by clusters:

There are 6 clusters represented in this pham: AD, F, I3, CZ4, DN1, CV,

Info for manual annotations of cluster CV:

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

Info for manual annotations of cluster CZ4:

- Start number 17 was manually annotated 3 times for cluster CZ4.
- Start number 20 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DN1:

- Start number 9 was manually annotated 2 times for cluster DN1.
- Start number 14 was manually annotated 1 time for cluster DN1.

Gene Information:

Gene: Beenie_35 Start: 30755, Stop: 30507, Start Num: 20

Candidate Starts for Beenie_35:

(3, 30983), (4, 30974), (8, 30923), (10, 30914), (Start: 20 @30755 has 1 MA's), (21, 30737), (23, 30719), (24, 30716), (29, 30659), (33, 30593), (34, 30587), (35, 30581), (36, 30575), (39, 30557), (41, 30524),

Gene: Bluvara_39 Start: 32313, Stop: 32086, Start Num: 23

Candidate Starts for Bluvara_39:

(1, 32607), (8, 32529), (12, 32478), (16, 32433), (23, 32313), (29, 32253), (34, 32181), (38, 32160),

Gene: Caterpie_45 Start: 41029, Stop: 40814, Start Num: 25

Candidate Starts for Caterpie_45:

(10, 41236), (13, 41185), (15, 41158), (Start: 20 @41071 has 1 MA's), (23, 41041), (25, 41029), (37, 40894),

Gene: Fenry_39 Start: 32680, Stop: 32357, Start Num: 17

Candidate Starts for Fenry_39:

(5, 32821), (6, 32794), (7, 32788), (8, 32773), (10, 32764), (12, 32725), (Start: 17 @32680 has 4 MA's), (21, 32587), (23, 32569), (26, 32542), (33, 32443), (34, 32437), (35, 32431), (40, 32383),

Gene: Frickyeah_54 Start: 33610, Stop: 33284, Start Num: 18

Candidate Starts for Frickyeah_54:

(Start: 9 @33706 has 2 MA's), (Start: 14 @33652 has 1 MA's), (18, 33610), (Start: 20 @33550 has 1 MA's), (22, 33523), (26, 33481), (27, 33472), (31, 33427), (32, 33400), (33, 33382), (39, 33346),

Gene: Hortense_42 Start: 34200, Stop: 33877, Start Num: 17

Candidate Starts for Hortense_42:

(2, 34353), (6, 34314), (7, 34308), (8, 34293), (10, 34284), (Start: 17 @34200 has 4 MA's), (Start: 20 @34125 has 1 MA's), (21, 34107), (23, 34089), (24, 34086), (29, 34029), (33, 33963), (34, 33957), (35, 33951), (36, 33945), (39, 33927), (41, 33894),

Gene: Howe_42 Start: 34200, Stop: 33877, Start Num: 17

Candidate Starts for Howe_42:

(2, 34353), (6, 34314), (7, 34308), (8, 34293), (10, 34284), (Start: 17 @34200 has 4 MA's), (Start: 20 @34125 has 1 MA's), (21, 34107), (23, 34089), (24, 34086), (29, 34029), (33, 33963), (34, 33957), (35, 33951), (36, 33945), (39, 33927), (41, 33894),

Gene: Kamaru_46 Start: 33198, Stop: 32830, Start Num: 14

Candidate Starts for Kamaru_46:

(Start: 9 @33252 has 2 MA's), (Start: 14 @33198 has 1 MA's), (18, 33156), (Start: 20 @33096 has 1 MA's), (22, 33069), (26, 33027), (27, 33018), (31, 32973), (32, 32946), (33, 32928), (39, 32892),

Gene: Kenna_53 Start: 35132, Stop: 34710, Start Num: 9

Candidate Starts for Kenna_53:

(Start: 9 @35132 has 2 MA's), (11, 35093), (Start: 14 @35078 has 1 MA's), (18, 35036), (Start: 20 @34976 has 1 MA's), (28, 34883), (30, 34865), (32, 34826), (33, 34808), (37, 34787),

Gene: LordVader_41 Start: 28794, Stop: 28498, Start Num: 19

Candidate Starts for LordVader_41:

(8, 28941), (16, 28845), (19, 28794), (31, 28644), (40, 28539),

Gene: Lutum_54 Start: 35132, Stop: 34710, Start Num: 9

Candidate Starts for Lutum_54:

(Start: 9 @35132 has 2 MA's), (11, 35093), (Start: 14 @35078 has 1 MA's), (18, 35036), (Start: 20 @34976 has 1 MA's), (28, 34883), (30, 34865), (32, 34826), (33, 34808), (37, 34787),

Gene: Twinkle_41 Start: 35259, Stop: 34936, Start Num: 17

Candidate Starts for Twinkle_41:

(2, 35412), (6, 35373), (7, 35367), (8, 35352), (10, 35343), (Start: 17 @35259 has 4 MA's), (Start: 20 @35184 has 1 MA's), (21, 35166), (23, 35148), (24, 35145), (29, 35088), (33, 35022), (34, 35016), (35, 35010), (36, 35004), (39, 34986), (41, 34953),