

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 4007 Report

This analysis was run 04/28/24 on database version 559.

Pham number 4007 has 21 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Ixel 21
- Track 2 : Juicer_22, Jemerald_22
- Track 3: KatChan_22, Chepli_22, Luna18_22
- Track 4 : Morrigan_22
- Track 5: RobsFeet 42, Metamorphoo 41
- Track 6 : Fireman_41
- Track 7: Tyrumbra 39
- Track 8 : Matzah 37
- Track 9: Cinna 36
- Track 10: Cressida 38
- Track 11 : MementoMori 37
- Track 12 : Leaf 81, Dewdrop 81
- Track 13 : Huwbert_54Track 14 : Triscuit_53
- Track 15: ValentiniPuff 73
- Track 16: Magritte 40

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

The start number called the most often in the published annotations is 15, it was called in 9 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Cinna_36, Cressida_38, Dewdrop_81, Huwbert_54, Leaf_81, Matzah_37, MementoMori_37, Triscuit_53, ValentiniPuff_73,

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

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

Chepli_22, Fireman_41, Ixel_21, Jemerald_22, Juicer_22, KatChan_22, Luna18_22, Magritte 40, Metamorphoo_41, Morrigan_22, RobsFeet_42, Tyrumbra_39,

Summary by start number:

Start 11:

- Found in 2 of 21 (9.5%) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Metamorphoo_41 (EC), RobsFeet_42 (EC),

Start 12:

- Found in 3 of 21 (14.3%) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chepli_22 (EA6), KatChan_22 (EA6), Luna18_22 (EA6),

Start 13:

- Found in 8 of 21 (38.1%) of genes in pham
- Manual Annotations of this start: 6 of 21
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Fireman_41 (EC), Ixel_21 (EA11),
 Jemerald_22 (EA6), Juicer_22 (EA6), Morrigan_22 (EA6), Tyrumbra_39 (EC),

Start 14:

- Found in 1 of 21 (4.8%) 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: Magritte_40 (singleton),

Start 15:

- Found in 9 of 21 (42.9%) of genes in pham
- Manual Annotations of this start: 9 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cinna_36 (EI), Cressida_38 (EI),
 Dewdrop_81 (GC), Huwbert_54 (GG), Leaf_81 (GC), Matzah_37 (EI),
 MementoMori_37 (EI), Triscuit_53 (GG), ValentiniPuff_73 (singleton),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, EA11, EC, GG, GC, EI, EA6.

Info for manual annotations of cluster EA11:

•Start number 13 was manually annotated 1 time for cluster EA11.

Info for manual annotations of cluster EA6:

- •Start number 12 was manually annotated 3 times for cluster EA6.
- •Start number 13 was manually annotated 3 times for cluster EA6.

Info for manual annotations of cluster EC:

- •Start number 11 was manually annotated 2 times for cluster EC.
- Start number 13 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster EI:

•Start number 15 was manually annotated 4 times for cluster EI.

Info for manual annotations of cluster GC:

•Start number 15 was manually annotated 2 times for cluster GC.

Info for manual annotations of cluster GG:

•Start number 15 was manually annotated 2 times for cluster GG.

Gene Information:

Gene: Chepli 22 Start: 16919, Stop: 17239, Start Num: 12

Candidate Starts for Chepli_22:

(Start: 12 @16919 has 3 MA's), (28, 17093), (38, 17207),

Gene: Cinna_36 Start: 29597, Stop: 29944, Start Num: 15

Candidate Starts for Cinna 36:

(Start: 15 @29597 has 9 MA's), (19, 29675), (23, 29711), (28, 29774), (29, 29795), (34, 29855), (38,

29891), (41, 29909),

Gene: Cressida_38 Start: 29040, Stop: 29387, Start Num: 15

Candidate Starts for Cressida_38:

 $(1,\,28497),\,(2,\,28554),\,(3,\,28587),\,(4,\,28596),\,(5,\,28620),\,(6,\,28728),\,(7,\,28770),\,(Start:\,15\,\,@29040)$

has 9 MA's), (19, 29118), (28, 29217), (29, 29238), (34, 29298),

Gene: Dewdrop_81 Start: 52660, Stop: 52992, Start Num: 15

Candidate Starts for Dewdrop_81:

(Start: 15 @52660 has 9 MA's), (20, 52744), (22, 52765), (28, 52840), (32, 52894), (40, 52969),

Gene: Fireman_41 Start: 30657, Stop: 31007, Start Num: 13

Candidate Starts for Fireman 41:

(9, 30483), (10, 30615), (Start: 13 @ 30657 has 6 MA's), (19, 30738), (26, 30807), (28, 30837), (29,

30858), (32, 30891),

Gene: Huwbert_54 Start: 34701, Stop: 35018, Start Num: 15

Candidate Starts for Huwbert_54:

(Start: 15 @34701 has 9 MA's), (16, 34722), (18, 34776), (19, 34779), (24, 34818), (25, 34842), (33,

34938), (41, 34995),

Gene: Ixel 21 Start: 16066, Stop: 16380, Start Num: 13

Candidate Starts for Ixel 21:

(Start: 13 @ 16066 has 6 MA's), (28, 16237), (30, 16273), (34, 16315), (35, 16324),

Gene: Jemerald_22 Start: 17871, Stop: 18188, Start Num: 13

Candidate Starts for Jemerald_22:

(Start: 13 @17871 has 6 MA's), (17, 17913), (28, 18045), (38, 18159),

Gene: Juicer 22 Start: 17871, Stop: 18188, Start Num: 13

Candidate Starts for Juicer 22:

(Start: 13 @17871 has 6 MA's), (17, 17913), (28, 18045), (38, 18159),

Gene: KatChan_22 Start: 16925, Stop: 17245, Start Num: 12

Candidate Starts for KatChan 22:

(Start: 12 @16925 has 3 MA's), (28, 17099), (38, 17213),

Gene: Leaf_81 Start: 52660, Stop: 52992, Start Num: 15

Candidate Starts for Leaf_81:

(Start: 15 @52660 has 9 MA's), (20, 52744), (22, 52765), (28, 52840), (32, 52894), (40, 52969),

Gene: Luna18 22 Start: 16925, Stop: 17245, Start Num: 12

Candidate Starts for Luna18_22:

(Start: 12 @16925 has 3 MA's), (28, 17099), (38, 17213),

Gene: Magritte 40 Start: 43286, Stop: 43594, Start Num: 14

Candidate Starts for Magritte_40:

(Start: 14 @ 43286 has 1 MA's), (16, 43307), (18, 43361), (19, 43364), (24, 43403), (27, 43445), (28, 43454), (30, 43490), (34, 43532), (36, 43547), (39, 43568),

Gene: Matzah_37 Start: 29537, Stop: 29884, Start Num: 15

Candidate Starts for Matzah_37:

(8, 29369), (Start: 15 @29537 has 9 MA's), (19, 29615), (23, 29651), (28, 29714), (29, 29735), (34, 29795), (38, 29831), (41, 29849),

Gene: MementoMori_37 Start: 29285, Stop: 29632, Start Num: 15

Candidate Starts for MementoMori_37:

(Start: 15 @29285 has 9 MA's), (19, 29363), (23, 29399), (28, 29462), (29, 29483), (34, 29543), (41, 29597),

Gene: Metamorphoo_41 Start: 29916, Stop: 30269, Start Num: 11

Candidate Starts for Metamorphoo 41:

(10, 29883), (Start: 11 @29916 has 2 MA's), (Start: 13 @29919 has 6 MA's), (19, 30000), (26, 30069), (32, 30153), (42, 30252),

Gene: Morrigan_22 Start: 17824, Stop: 18141, Start Num: 13

Candidate Starts for Morrigan_22:

(Start: 13 @17824 has 6 MA's), (31, 18043), (37, 18103), (38, 18112),

Gene: RobsFeet_42 Start: 30197, Stop: 30550, Start Num: 11

Candidate Starts for RobsFeet_42:

(10, 30164), (Start: 11 @30197 has 2 MA's), (Start: 13 @30200 has 6 MA's), (19, 30281), (26, 30350), (32, 30434), (42, 30533),

Gene: Triscuit 53 Start: 34612, Stop: 34935, Start Num: 15

Candidate Starts for Triscuit_53:

(Start: 15 @34612 has 9 MA's), (16, 34633), (18, 34687), (19, 34690), (21, 34714), (24, 34729), (34, 34858),

Gene: Tyrumbra_39 Start: 30000, Stop: 30350, Start Num: 13

Candidate Starts for Tyrumbra_39:

(9, 29823), (10, 29955), (Start: 13 @30000 has 6 MA's), (19, 30081), (26, 30150), (28, 30180), (29, 30201), (32, 30234),

Gene: ValentiniPuff_73 Start: 41956, Stop: 42285, Start Num: 15

Candidate Starts for ValentiniPuff 73:

(Start: 15 @41956 has 9 MA's), (29, 42148), (34, 42208), (37, 42235),