

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 4707 Report

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

Pham number 4707 has 17 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Leaf_17, Dewdrop_17
- Track 2 : Finemlucis_123
- Track 3: Tourach 126
- Track 4 : Jobypre_120
- Track 5 : Whirlwind_120
- Track 6: Snenia_118, Jubie_119, Lumos_119, MsGreen_120, Clautastrophe_118
- Track 7 : Chaser 133
- Track 8 : DyoEdafos_137
- Track 9 : Douge_135
- Track 10 : Bipper_81
- Track 11 : Cracklewink_81
- Track 12 : StAugustine_154

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

The start number called the most often in the published annotations is 7, it was called in 11 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bipper_81, Chaser_133, Clautastrophe_118, Cracklewink_81, Douge_135, DyoEdafos_137, Finemlucis_123, Jubie_119, Lumos_119, MsGreen_120, Snenia_118, StAugustine_154, Tourach_126,

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

Jobypre_120, Whirlwind_120,

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

Dewdrop_17, Leaf_17,

Summary by start number:

Start 4:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 14

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Whirlwind_120 (L3),

Start 6:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dewdrop_17 (GC), Leaf_17 (GC),

Start 7:

- Found in 15 of 17 (88.2%) of genes in pham
- Manual Annotations of this start: 11 of 14
- Called 86.7% of time when present
- Phage (with cluster) where this start called: Bipper_81 (Y), Chaser_133 (L4),
 Clautastrophe_118 (L3), Cracklewink_81 (Y), Douge_135 (L4), DyoEdafos_137 (L4),
 Finemlucis_123 (L2), Jubie_119 (L3), Lumos_119 (L3), MsGreen_120 (L3),
 Snenia_118 (L3), StAugustine_154 (singleton), Tourach_126 (L2),

Start 10:

- Found in 8 of 17 (47.1%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Jobypre_120 (L3),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, L4, GC, L3, Y, L2,

Info for manual annotations of cluster GC:

•Start number 6 was manually annotated 2 times for cluster GC.

Info for manual annotations of cluster L2:

•Start number 7 was manually annotated 2 times for cluster L2.

Info for manual annotations of cluster L3:

- •Start number 4 was manually annotated 1 time for cluster L3.
- •Start number 7 was manually annotated 5 times for cluster L3.

Info for manual annotations of cluster L4:

•Start number 7 was manually annotated 2 times for cluster L4.

Info for manual annotations of cluster Y:

•Start number 7 was manually annotated 2 times for cluster Y.

Gene Information:

Gene: Bipper 81 Start: 53391, Stop: 53822, Start Num: 7

Candidate Starts for Bipper 81:

(2, 53226), (3, 53346), (Start: 7 @53391 has 11 MA's), (8, 53403), (9, 53454), (15, 53595), (17, 53637), (20, 53664), (23, 53685),

Gene: Chaser_133 Start: 68461, Stop: 68030, Start Num: 7

Candidate Starts for Chaser_133:

(Start: 7 @68461 has 11 MA's), (9, 68404), (10, 68392), (12, 68323), (25, 68116),

Gene: Clautastrophe_118 Start: 66438, Stop: 66004, Start Num: 7

Candidate Starts for Clautastrophe_118:

(Start: 7 @66438 has 11 MA's), (10, 66366), (11, 66318), (15, 66237), (18, 66189), (19, 66177), (22, 66150), (28, 66018), (29, 66012),

Gene: Cracklewink_81 Start: 52443, Stop: 52874, Start Num: 7

Candidate Starts for Cracklewink 81:

(Start: 7 @52443 has 11 MA's), (8, 52455), (9, 52506), (15, 52647), (17, 52689), (20, 52716), (23, 52737),

Gene: Dewdrop_17 Start: 8163, Stop: 8594, Start Num: 6

Candidate Starts for Dewdrop_17:

(Start: 6 @8163 has 2 MA's), (9, 8232), (13, 8325), (14, 8355), (21, 8439), (27, 8553),

Gene: Douge 135 Start: 69158, Stop: 68724, Start Num: 7

Candidate Starts for Douge_135:

(5, 69173), (Start: 7 @69158 has 11 MA's), (12, 69017), (25, 68810), (29, 68732),

Gene: DyoEdafos_137 Start: 68722, Stop: 68288, Start Num: 7

Candidate Starts for DyoEdafos_137:

(Start: 7 @68722 has 11 MA's), (9, 68662), (11, 68602), (19, 68461), (25, 68374), (29, 68296),

Gene: Finemlucis_123 Start: 67809, Stop: 67375, Start Num: 7

Candidate Starts for Finemlucis 123:

(Start: 7 @67809 has 11 MA's), (11, 67689), (15, 67608), (19, 67548), (24, 67497), (29, 67383),

Gene: Jobypre_120 Start: 66364, Stop: 66002, Start Num: 10

Candidate Starts for Jobypre_120:

(Start: 7 @66436 has 11 MA's), (10, 66364), (11, 66316), (15, 66235), (18, 66187), (19, 66175), (22, 66148), (28, 66016), (29, 66010),

Gene: Jubie_119 Start: 66571, Stop: 66137, Start Num: 7

Candidate Starts for Jubie_119:

(Start: 7 @ 66571 has 11 MA's), (10, 66499), (11, 66451), (15, 66370), (18, 66322), (19, 66310), (22, 66283), (28, 66151), (29, 66145),

Gene: Leaf 17 Start: 8163, Stop: 8594, Start Num: 6

Candidate Starts for Leaf_17:

(Start: 6 @8163 has 2 MA's), (9, 8232), (13, 8325), (14, 8355), (21, 8439), (27, 8553),

Gene: Lumos 119 Start: 66433, Stop: 65999, Start Num: 7

Candidate Starts for Lumos_119:

(Start: 7 @ 66433 has 11 MA's), (10, 66361), (11, 66313), (15, 66232), (18, 66184), (19, 66172), (22, 66145), (28, 66013), (29, 66007),

Gene: MsGreen_120 Start: 66435, Stop: 66001, Start Num: 7

Candidate Starts for MsGreen_120:

(Start: 7 @66435 has 11 MA's), (10, 66363), (11, 66315), (15, 66234), (18, 66186), (19, 66174), (22, 66147), (28, 66015), (29, 66009),

Gene: Snenia_118 Start: 66437, Stop: 66003, Start Num: 7

Candidate Starts for Snenia_118:

(Start: 7 @66437 has 11 MA's), (10, 66365), (11, 66317), (15, 66236), (18, 66188), (19, 66176), (22, 66149), (28, 66017), (29, 66011),

Gene: StAugustine_154 Start: 85832, Stop: 85404, Start Num: 7

Candidate Starts for StAugustine_154:

(1, 86042), (Start: 7 @85832 has 11 MA's), (15, 85631), (16, 85598), (25, 85490), (26, 85451), (28, 85418),

Gene: Tourach_126 Start: 68323, Stop: 67889, Start Num: 7

Candidate Starts for Tourach_126:

(Start: 7 @68323 has 11 MA's), (9, 68263), (11, 68203), (16, 68089), (19, 68062), (29, 67897),

Gene: Whirlwind_120 Start: 66784, Stop: 66335, Start Num: 4

Candidate Starts for Whirlwind 120:

(Start: 4 @66784 has 1 MA's), (Start: 7 @66769 has 11 MA's), (10, 66697), (11, 66649), (16, 66535), (18, 66520), (24, 66457), (29, 66343),