

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 156799 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156799 has 12 members, 1 are drafts.

Phages represented in each track:

Track 1 : Sarge_8

Track 2 : Kumotta_9

Track 3 : Shoya_7

Track 4 : MargaretKali_9

Track 5 : BrayBeast_8

Track 6 : Aoka_9

Track 7 : Maja_8

Track 8 : JanetJ 9

Track 9: Hilltopfarm_15, Typha_15

Track 10 : Cracklewink_15, Bipper_15

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 5 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bipper_15, Cracklewink_15, Hilltopfarm_15, MargaretKali_9, Typha_15,

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

BrayBeast_8, Kumotta_9, Sarge_8, Shoya_7,

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

Aoka_9, JanetJ_9, Maja_8,

Summary by start number:

Start A

- Found in 4 of 12 (33.3%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sarge_8 (FB), Shoya_7 (FB),

Start 5:

- Found in 6 of 12 (50.0%) of genes in pham
- Manual Annotations of this start: 3 of 11
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Aoka_9 (FO), BrayBeast_8 (FB), JanetJ_9 (FO), Maja_8 (FO),

Start 6:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumotta_9 (FB),

Start 7:

- Found in 9 of 12 (75.0%) of genes in pham
- Manual Annotations of this start: 5 of 11
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Bipper_15 (Y), Cracklewink_15 (Y),
 Hilltopfarm_15 (Y), MargaretKali_9 (FB), Typha_15 (Y),

Summary by clusters:

There are 3 clusters represented in this pham: Y, FB, FO,

Info for manual annotations of cluster FB:

- •Start number 4 was manually annotated 2 times for cluster FB.
- •Start number 5 was manually annotated 1 time for cluster FB.
- Start number 6 was manually annotated 1 time for cluster FB.
- •Start number 7 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FO:

•Start number 5 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster Y:

•Start number 7 was manually annotated 4 times for cluster Y.

Gene Information:

Gene: Aoka 9 Start: 7589, Stop: 8104, Start Num: 5

Candidate Starts for Aoka_9: (Start: 5 @7589 has 3 MA's),

Gene: Bipper_15 Start: 10931, Stop: 11461, Start Num: 7

Candidate Starts for Bipper_15:

(Start: 7 @10931 has 5 MA's), (8, 10937), (24, 11117), (26, 11132), (27, 11141), (29, 11147), (32, 11198), (34, 11240), (35, 11246), (38, 11285), (39, 11291), (40, 11294), (41, 11297), (42, 11300), (44, 11327), (47, 11351), (49, 11372), (51, 11402), (53, 11441),

Gene: BrayBeast 8 Start: 6486, Stop: 7001, Start Num: 5

Candidate Starts for BrayBeast 8:

(Start: 4 @6483 has 2 MA's), (Start: 5 @6486 has 3 MA's), (Start: 7 @6516 has 5 MA's), (9, 6525), (10, 6528), (11, 6534), (18, 6648), (19, 6651), (30, 6750), (35, 6810), (37, 6834), (41, 6861), (45,

6897), (52, 6966),

Gene: Cracklewink_15 Start: 10931, Stop: 11461, Start Num: 7

Candidate Starts for Cracklewink_15:

(Start: 7 @10931 has 5 MA's), (8, 10937), (24, 11117), (26, 11132), (27, 11141), (29, 11147), (32, 11198), (34, 11240), (35, 11246), (38, 11285), (39, 11291), (40, 11294), (41, 11297), (42, 11300), (44, 11327), (47, 11351), (49, 11372), (51, 11402), (53, 11441),

Gene: Hilltopfarm_15 Start: 10863, Stop: 11405, Start Num: 7

Candidate Starts for Hilltopfarm_15:

(Start: 7 @ 10863 has 5 MA's), (14, 10932), (15, 10953), (17, 10995), (21, 11013), (24, 11046), (27, 11070), (28, 11073), (29, 11076), (35, 11181), (38, 11220), (39, 11226), (40, 11229), (41, 11232), (44, 11262), (47, 11286), (49, 11307), (53, 11376), (54, 11397),

Gene: JanetJ_9 Start: 7405, Stop: 7920, Start Num: 5

Candidate Starts for JanetJ_9: (Start: 5 @7405 has 3 MA's),

Gene: Kumotta 9 Start: 7342, Stop: 7839, Start Num: 6

Candidate Starts for Kumotta_9:

(Start: 6 @7342 has 1 MA's), (Start: 7 @7345 has 5 MA's), (9, 7357), (12, 7375), (13, 7411), (23, 7510), (26, 7543), (31, 7591), (32, 7606), (40, 7696), (41, 7699), (45, 7735), (48, 7765),

Gene: Maja_8 Start: 6915, Stop: 7427, Start Num: 5

Candidate Starts for Maja 8:

(1, 6702), (Start: 4 @6912 has 2 MA's), (Start: 5 @6915 has 3 MA's), (9, 6954), (16, 7065), (19, 7080), (22, 7104), (25, 7131), (30, 7179), (33, 7233), (35, 7239), (36, 7248), (50, 7383),

Gene: MargaretKali_9 Start: 6988, Stop: 7473, Start Num: 7

Candidate Starts for MargaretKali_9:

(Start: 7 @ 6988 has 5 MA's), (9, 6997), (15, 7075), (16, 7108), (20, 7129), (22, 7147), (27, 7189), (38, 7321), (43, 7348),

Gene: Sarge 8 Start: 6394, Stop: 6912, Start Num: 4

Candidate Starts for Sarge 8:

(Start: 4 @6394 has 2 MA's), (Start: 5 @6397 has 3 MA's), (Start: 7 @6427 has 5 MA's), (9, 6436), (10, 6439), (11, 6445), (18, 6559), (19, 6562), (22, 6586), (33, 6715), (37, 6745), (41, 6772), (52, 6877),

Gene: Shoya_7 Start: 6030, Stop: 6548, Start Num: 4

Candidate Starts for Shoya 7:

(2, 5991), (3, 6009), (Start: 4 @6030 has 2 MA's), (Start: 5 @6033 has 3 MA's), (Start: 7 @6063 has 5 MA's), (9, 6072), (10, 6075), (11, 6081), (18, 6195), (19, 6198), (22, 6222), (30, 6297), (35, 6357), (37, 6381), (41, 6408), (46, 6459), (50, 6501),

Gene: Typha_15 Start: 10833, Stop: 11375, Start Num: 7

Candidate Starts for Typha_15:

(Start: 7 @10833 has 5 MA's), (14, 10902), (15, 10923), (17, 10965), (21, 10983), (24, 11016), (27, 11040), (28, 11043), (29, 11046), (35, 11151), (38, 11190), (39, 11196), (40, 11199), (41, 11202), (44, 11232), (47, 11256), (49, 11277), (53, 11346), (54, 11367),