

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 172124 Report

This analysis was run 07/10/24 on database version 566.

Pham number 172124 has 5 members, 0 are drafts.

Phages represented in each track:

• Track 1 : Paito 32

Track 2 : Cracklewink_50

Track 3 : Bipper_50

Track 4 : Hilltopfarm_52, Typha_52

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

Genes that call this "Most Annotated" start:

Bipper_50, Hilltopfarm_52, Typha_52,

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

Cracklewink 50,

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

• Paito 32,

Summary by start number:

Start 1:

- Found in 3 of 5 (60.0%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Paito_32 (G1),

Start 2

- Found in 4 of 5 (80.0%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Cracklewink_50 (Y),

Start 17:

- Found in 4 of 5 (80.0%) of genes in pham
- Manual Annotations of this start: 3 of 5
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Bipper_50 (Y), Hilltopfarm_52 (Y), Typha_52 (Y),

Summary by clusters:

There are 2 clusters represented in this pham: Y, G1,

Info for manual annotations of cluster G1:

Start number 1 was manually annotated 1 time for cluster G1.

Info for manual annotations of cluster Y:

- Start number 2 was manually annotated 1 time for cluster Y.
- Start number 17 was manually annotated 3 times for cluster Y.

Gene Information:

Gene: Bipper_50 Start: 39303, Stop: 38347, Start Num: 17 Candidate Starts for Bipper_50: (Start: 1 @39591 has 1 MA's), (Start: 2 @39579 has 1 MA's), (5, 39549), (6, 39537), (10, 39453), (11, 39444), (12, 39408), (13, 39393), (16, 39363), (Start: 17 @39303 has 3 MA's), (27, 39030), (28, 39027), (29, 39021), (30, 39009), (31, 38988), (32, 38982), (34, 38901), (36, 38838), (38, 38760), (39, 38745), (40, 38727), (42, 38664), (47, 38610), (49, 38583), (54, 38532), (56, 38520), (57, 38517), (58, 38499), (59, 38490), (60, 38487), (61, 38478), (62, 38475), (65, 38442), (68, 38433), (69, 38421), (70, 38403), (71, 38400),

Gene: Cracklewink_50 Start: 39572, Stop: 38340, Start Num: 2 Candidate Starts for Cracklewink 50:

(Start: 1 @39584 has 1 MA's), (Start: 2 @39572 has 1 MA's), (5, 39542), (6, 39530), (10, 39446), (11, 39437), (12, 39401), (13, 39386), (16, 39356), (Start: 17 @39296 has 3 MA's), (27, 39023), (28, 39020), (29, 39014), (30, 39002), (31, 38981), (32, 38975), (34, 38894), (36, 38831), (38, 38753), (39, 38738), (40, 38720), (42, 38657), (47, 38603), (49, 38576), (54, 38525), (56, 38513), (57, 38510), (58, 38492), (59, 38483), (60, 38480), (61, 38471), (62, 38468), (65, 38435), (68, 38426), (69, 38414), (70, 38396), (71, 38393),

Gene: Hilltopfarm_52 Start: 40199, Stop: 39105, Start Num: 17 Candidate Starts for Hilltopfarm 52:

 $\begin{array}{l} (Start:\ 2\ @40487\ has\ 1\ MA's),\ (5,\ 40457),\ (8,\ 40370),\ (9,\ 40367),\ (10,\ 40349),\ (15,\ 40265),\ (16,\ 40259),\ (Start:\ 17\ @40199\ has\ 3\ MA's),\ (19,\ 40166),\ (22,\ 39971),\ (25,\ 39935),\ (27,\ 39926),\ (28,\ 39923),\ (36,\ 39734),\ (37,\ 39665),\ (39,\ 39641),\ (40,\ 39623),\ (42,\ 39560),\ (45,\ 39527),\ (49,\ 39479),\ (51,\ 39440),\ (52,\ 39434),\ (53,\ 39431),\ (55,\ 39419),\ (56,\ 39410),\ (57,\ 39407),\ (63,\ 39335),\ (64,\ 39332),\ (66,\ 39326),\ (67,\ 39323),\ (72,\ 39146), \end{array}$

Gene: Paito_32 Start: 29040, Stop: 27946, Start Num: 1 Candidate Starts for Paito_32: (Start: 1 @29040 has 1 MA's), (3, 29013), (4, 29007), (7, 28971), (10, 28899), (14, 28821), (18, 28734), (20, 28635), (21, 28536), (23, 28509), (24, 28506), (26, 28485), (27, 28479), (28, 28476), (31, 28437), (33, 28380), (35, 28320), (40, 28185), (41, 28176), (43, 28113), (44, 28095), (46, 28074), (48, 28044), (49, 28041), (50, 28038), (55, 27984),

Gene: Typha_52 Start: 40512, Stop: 39421, Start Num: 17

Candidate Starts for Typha_52:

(Start: 2 @40800 has 1 MA's), (5, 40770), (8, 40683), (9, 40680), (10, 40662), (15, 40578), (16, 40572), (Start: 17 @40512 has 3 MA's), (19, 40479), (22, 40284), (25, 40248), (27, 40239), (28, 40236), (36, 40047), (37, 39978), (39, 39954), (40, 39936), (42, 39873), (45, 39840), (49, 39792), (51, 39756), (52, 39750), (53, 39747), (55, 39735), (56, 39726), (57, 39723), (63, 39651), (64, 39648), (66, 39642), (67, 39639), (72, 39462),