

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 171862 Report

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

Pham number 171862 has 15 members, 1 are drafts.

Phages represented in each track:

Track 1 : Finemlucis\_125

Track 2: Gabriela\_125, Gardann\_125, Nicholasp3\_126

Track 3 : Archie\_124

Track 4 : Tourach\_128

Track 5 : Chaser\_136

Track 6 : Douge\_137

Track 7: Ashwin\_79, Zakhe101\_77, YungJamal\_82, Smooch\_80, Dylan\_78,

Wildflower 78

Track 8 : Firecracker\_79

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

The start number called the most often in the published annotations is 4, it was called in 7 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Archie\_124, Chaser\_136, Douge\_137, Finemlucis\_125, Gabriela\_125, Gardann\_125, Nicholasp3\_126, Tourach\_128,

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

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

• Ashwin\_79, Dylan\_78, Firecracker\_79, Smooch\_80, Wildflower\_78, YungJamal\_82, Zakhe101\_77,

### Summary by start number:

#### Start 3:

- Found in 8 of 15 (53.3%) of genes in pham
- Manual Annotations of this start: 7 of 14
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Ashwin\_79 (O), Dylan\_78 (O), Firecracker\_79 (O), Smooch\_80 (O), Wildflower\_78 (O), YungJamal\_82 (O),

Zakhe101\_77 (O),

#### Start 4:

- Found in 8 of 15 (53.3%) of genes in pham
- Manual Annotations of this start: 7 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archie\_124 (L2), Chaser\_136 (L4), Douge\_137 (L4), Finemlucis\_125 (L2), Gabriela\_125 (L2), Gardann\_125 (L2), Nicholasp3 126 (L2), Tourach 128 (L2),

## **Summary by clusters:**

There are 3 clusters represented in this pham: L4, L2, O,

Info for manual annotations of cluster L2:

•Start number 4 was manually annotated 6 times for cluster L2.

Info for manual annotations of cluster L4:

•Start number 4 was manually annotated 1 time for cluster L4.

Info for manual annotations of cluster O:

•Start number 3 was manually annotated 7 times for cluster O.

### Gene Information:

Gene: Archie\_124 Start: 67505, Stop: 66975, Start Num: 4

Candidate Starts for Archie 124:

(Start: 4 @67505 has 7 MA's), (5, 67490), (18, 67100),

Gene: Ashwin 79 Start: 49062, Stop: 48352, Start Num: 3

Candidate Starts for Ashwin 79:

(1, 49173), (Start: 3 @ 49062 has 7 MA's), (6, 49029), (8, 49005), (9, 48999), (10, 48906), (16, 48729), (18, 48654), (19, 48606), (22, 48516), (24, 48444), (25, 48423), (26, 48393),

Gene: Chaser\_136 Start: 69692, Stop: 69135, Start Num: 4

Candidate Starts for Chaser\_136:

(2, 69710), (Start: 4 @ 69692 has 7 MA's), (7, 69653), (12, 69434), (18, 69287), (21, 69158),

Gene: Douge 137 Start: 70061, Stop: 69504, Start Num: 4

Candidate Starts for Douge 137:

(2, 70079), (Start: 4 @70061 has 7 MA's), (7, 70022), (11, 69812), (13, 69782), (18, 69656), (20, 69590), (21, 69527),

Gene: Dylan 78 Start: 48778, Stop: 48068, Start Num: 3

Candidate Starts for Dylan 78:

(1, 4889), (Start: 3 @48778 has 7 MA's), (6, 48745), (8, 48721), (9, 48715), (10, 48622), (16, 48445), (18, 48370), (19, 48322), (22, 48232), (24, 48160), (25, 48139), (26, 48109),

Gene: Finemlucis 125 Start: 68538, Stop: 68011, Start Num: 4

Candidate Starts for Finemlucis 125:

(Start: 4 @68538 has 7 MA's), (5, 68523), (15, 68211), (17, 68184), (18, 68133),

Gene: Firecracker\_79 Start: 48936, Stop: 48226, Start Num: 3

Candidate Starts for Firecracker 79:

(1, 49047), (Start: 3 @48936 has 7 MA's), (6, 48903), (8, 48879), (9, 48873), (10, 48780), (14, 48621), (16, 48603), (18, 48528), (19, 48480), (22, 48390), (24, 48318), (25, 48297), (26, 48267),

Gene: Gabriela\_125 Start: 66867, Stop: 66340, Start Num: 4

Candidate Starts for Gabriela 125:

(Start: 4 @66867 has 7 MA's), (18, 66462),

Gene: Gardann 125 Start: 67544, Stop: 67017, Start Num: 4

Candidate Starts for Gardann 125:

(Start: 4 @67544 has 7 MA's), (18, 67139),

Gene: Nicholasp3\_126 Start: 67544, Stop: 67017, Start Num: 4

Candidate Starts for Nicholasp3\_126:

(Start: 4 @67544 has 7 MA's), (18, 67139),

Gene: Smooch 80 Start: 50277, Stop: 49567, Start Num: 3

Candidate Starts for Smooch\_80:

(1, 50388), (Start: 3 @50277 has 7 MA's), (6, 50244), (8, 50220), (9, 50214), (10, 50121), (16, 49944), (18, 49869), (19, 49821), (22, 49731), (24, 49659), (25, 49638), (26, 49608),

Gene: Tourach\_128 Start: 69093, Stop: 68527, Start Num: 4

Candidate Starts for Tourach\_128:

(Start: 3 @69099 has 7 MA's), (Start: 4 @69093 has 7 MA's), (13, 68814), (14, 68781), (18, 68688), (23, 68544),

Gene: Wildflower\_78 Start: 48368, Stop: 47658, Start Num: 3

Candidate Starts for Wildflower\_78:

(1, 48479), (Start: 3 @48368 has 7 MA's), (6, 48335), (8, 48311), (9, 48305), (10, 48212), (16, 48035), (18, 47960), (19, 47912), (22, 47822), (24, 47750), (25, 47729), (26, 47699),

Gene: YungJamal 82 Start: 49998, Stop: 49288, Start Num: 3

Candidate Starts for YungJamal\_82:

(1, 50109), (Start: 3 @49998 has 7 MA's), (6, 49965), (8, 49941), (9, 49935), (10, 49842), (16, 49665), (18, 49590), (19, 49542), (22, 49452), (24, 49380), (25, 49359), (26, 49329),

Gene: Zakhe101\_77 Start: 48782, Stop: 48072, Start Num: 3

Candidate Starts for Zakhe101\_77:

(1, 48893), (Start: 3 @48782 has 7 MA's), (6, 48749), (8, 48725), (9, 48719), (10, 48626), (16, 48449), (18, 48374), (19, 48326), (22, 48236), (24, 48164), (25, 48143), (26, 48113),