

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 168668 Report

This analysis was run 07/09/24 on database version 566.

Pham number 168668 has 13 members, 0 are drafts.

Phages represented in each track:

- Track 1: GenevaB15_17, GardenSalsa_17, Estes_18, MrMagoo_17, Aziz_17
- Track 2 : Rey 17
- Track 3 : Nanosmite_17
- Track 4: Azrael100_24, EniyanLRS_22, Cosmo_25, Wildcat_25, MaryV_25
- Track 5 : Kumao_12

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 7 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aziz_17, Estes_18, GardenSalsa_17, GenevaB15_17, MrMagoo_17, Nanosmite_17, Rey_17,

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

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

Azrael100_24, Cosmo_25, EniyanLRS_22, Kumao_12, MaryV_25, Wildcat_25,

Summary by start number:

Start 5:

- Found in 5 of 13 (38.5%) of genes in pham
- Manual Annotations of this start: 5 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100_24 (V), Cosmo_25 (V), EniyanLRS_22 (V), MaryV_25 (V), Wildcat_25 (V),

Start 7:

- Found in 7 of 13 (53.8%) of genes in pham
- Manual Annotations of this start: 7 of 13
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Aziz_17 (M2), Estes_18 (M2), GardenSalsa_17 (M2), GenevaB15_17 (M2), MrMagoo_17 (M2), Nanosmite_17 (M3), Rey 17 (M2),

Start 8:

- Found in 6 of 13 (46.2%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Kumao_12 (singleton),

Summary by clusters:

There are 4 clusters represented in this pham: singleton, V, M3, M2,

Info for manual annotations of cluster M2:

•Start number 7 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

•Start number 7 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

•Start number 5 was manually annotated 5 times for cluster V.

Gene Information:

Gene: Aziz_17 Start: 4947, Stop: 5294, Start Num: 7

Candidate Starts for Aziz_17:

(3, 4899), (Start: 7 @4947 has 7 MA's), (11, 5076), (12, 5082), (13, 5121), (16, 5145), (21, 5265), (22, 5268),

Gene: Azrael100 24 Start: 7714, Stop: 8103, Start Num: 5

Candidate Starts for Azrael100 24:

(Start: 5 @7714 has 5 MA's), (Start: 8 @7765 has 1 MA's), (9, 7837), (10, 7846), (11, 7882), (12, 7888), (13, 7921), (15, 7933), (16, 7936), (17, 7951), (18, 7990), (19, 8002), (23, 8068), (24, 8086),

Gene: Cosmo_25 Start: 7720, Stop: 8109, Start Num: 5

Candidate Starts for Cosmo 25:

(Start: 5 @7720 has 5 MA's), (Start: 8 @7771 has 1 MA's), (9, 7843), (10, 7852), (11, 7888), (12, 7894), (13, 7927), (15, 7939), (16, 7942), (17, 7957), (18, 7996), (19, 8008), (23, 8074), (24, 8092),

Gene: EniyanLRS 22 Start: 7412, Stop: 7801, Start Num: 5

Candidate Starts for EniyanLRS_22:

(Start: 5 @7412 has 5 MA's), (Start: 8 @7463 has 1 MA's), (9, 7535), (10, 7544), (11, 7580), (12, 7586), (13, 7619), (15, 7631), (16, 7634), (17, 7649), (18, 7688), (19, 7700), (23, 7766), (24, 7784),

Gene: Estes_18 Start: 5092, Stop: 5439, Start Num: 7

Candidate Starts for Estes 18:

(3, 5044), (Start: 7 @5092 has 7 MA's), (11, 5221), (12, 5227), (13, 5266), (16, 5290), (21, 5410), (22, 5413),

Gene: GardenSalsa_17 Start: 4926, Stop: 5273, Start Num: 7

Candidate Starts for GardenSalsa_17:

(3, 4878), (Start: 7 @4926 has 7 MA's), (11, 5055), (12, 5061), (13, 5100), (16, 5124), (21, 5244), (22, 5247),

Gene: GenevaB15_17 Start: 4947, Stop: 5294, Start Num: 7

Candidate Starts for GenevaB15 17:

(3, 4899), (Start: 7 @4947 has 7 MA's), (11, 5076), (12, 5082), (13, 5121), (16, 5145), (21, 5265), (22, 5268),

Gene: Kumao_12 Start: 3923, Stop: 4243, Start Num: 8

Candidate Starts for Kumao 12:

(4, 3869), (6, 3890), (Start: 8 @3923 has 1 MA's), (19, 4163), (20, 4205), (22, 4220),

Gene: MaryV_25 Start: 7684, Stop: 8073, Start Num: 5

Candidate Starts for MaryV_25:

(Start: 5 @7684 has 5 MA's), (Start: 8 @7735 has 1 MA's), (9, 7807), (10, 7816), (11, 7852), (12, 7858), (13, 7891), (15, 7903), (16, 7906), (17, 7921), (18, 7960), (19, 7972), (23, 8038), (24, 8056),

Gene: MrMagoo 17 Start: 4926, Stop: 5273, Start Num: 7

Candidate Starts for MrMagoo_17:

(3, 4878), (Start: 7 @4926 has 7 MA's), (11, 5055), (12, 5061), (13, 5100), (16, 5124), (21, 5244), (22, 5247),

Gene: Nanosmite_17 Start: 5093, Stop: 5440, Start Num: 7

Candidate Starts for Nanosmite 17:

(1, 4883), (3, 5045), (Start: 7 @ 5093 has 7 MA's), (14, 5273), (21, 5411), (22, 5414),

Gene: Rev 17 Start: 5157, Stop: 5504, Start Num: 7

Candidate Starts for Rey_17:

(1, 4950), (2, 4965), (3, 5109), (Start: 7 @5157 has 7 MA's), (11, 5286), (13, 5331), (16, 5355), (21, 5475), (22, 5478),

Gene: Wildcat 25 Start: 7694, Stop: 8083, Start Num: 5

Candidate Starts for Wildcat 25:

(Start: 5 @7694 has 5 MA's), (Start: 8 @7745 has 1 MA's), (9, 7817), (10, 7826), (11, 7862), (12, 7868), (13, 7901), (15, 7913), (16, 7916), (17, 7931), (18, 7970), (19, 7982), (23, 8048), (24, 8066),