

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 28013 Report

This analysis was run 04/05/24 on database version 557.

Pham number 28013 has 8 members, 0 are drafts.

Phages represented in each track:

• Track 1 : Ryan 49, Cole 45

Track 2 : Zaheer\_49

Track 3 : Elesar\_43

• Track 4: Gusanita 46

• Track 5 : Nandita 50

Track 6 : Popper\_47

• Track 7 : Maja 40

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

The start number called the most often in the published annotations is 2, it was called in 8 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Cole\_45, Elesar\_43, Gusanita\_46, Maja\_40, Nandita\_50, Popper\_47, Ryan\_49, Zaheer\_49,

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

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

# Summary by start number:

#### Start 2:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 8 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cole\_45 (FF), Elesar\_43 (FF), Gusanita\_46 (FF), Maja\_40 (FO), Nandita\_50 (FF), Popper\_47 (FF), Ryan\_49 (FF), Zaheer\_49 (FF),

### Summary by clusters:

There are 2 clusters represented in this pham: FF, FO,

Info for manual annotations of cluster FF:

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

Info for manual annotations of cluster FO:

•Start number 2 was manually annotated 1 time for cluster FO.

## Gene Information:

Gene: Cole\_45 Start: 31843, Stop: 33207, Start Num: 2

Candidate Starts for Cole\_45:

(Start: 2 @31843 has 8 MA's), (3, 31885), (8, 32074), (10, 32107), (12, 32137), (15, 32203), (16, 32206), (23, 32359), (35, 32845), (39, 32890), (43, 32950), (45, 32986),

Gene: Elesar\_43 Start: 32906, Stop: 34252, Start Num: 2

Candidate Starts for Elesar 43:

(Start: 2 @32906 has 8 MA's), (9, 33146), (10, 33170), (12, 33200), (15, 33266), (16, 33269), (17, 33293), (18, 33335), (32, 33737), (35, 33908), (39, 33953), (43, 34013), (45, 34049), (48, 34100), (51, 34205),

Gene: Gusanita\_46 Start: 32574, Stop: 33932, Start Num: 2

Candidate Starts for Gusanita 46:

(Start: 2 @32574 has 8 MA's), (8, 32805), (10, 32838), (12, 32868), (15, 32934), (16, 32937), (17, 32961), (20, 33018), (23, 33090), (36, 33582), (38, 33609), (39, 33621),

Gene: Maja\_40 Start: 28626, Stop: 29954, Start Num: 2

Candidate Starts for Maja 40:

(1, 28557), (Start: 2 @28626 has 8 MA's), (4, 28743), (5, 28755), (6, 28758), (7, 28770), (12, 28935), (14, 28974), (17, 29025), (18, 29067), (19, 29079), (22, 29151), (23, 29154), (25, 29205), (26, 29313), (27, 29322), (28, 29367), (29, 29382), (30, 29400), (33, 29628), (34, 29634), (44, 29766), (46, 29793), (47, 29799),

Gene: Nandita 50 Start: 32364, Stop: 33722, Start Num: 2

Candidate Starts for Nandita 50:

(Start: 2 @32364 has 8 MA's), (3, 32406), (8, 32595), (10, 32628), (12, 32658), (14, 32697), (15, 32724), (16, 32727), (20, 32808), (23, 32880), (24, 32886), (37, 33381), (38, 33399), (39, 33411),

Gene: Popper\_47 Start: 31973, Stop: 33337, Start Num: 2

Candidate Starts for Popper 47:

(Start: 2 @31973 has 8 MA's), (3, 32015), (10, 32237), (11, 32261), (12, 32267), (15, 32333), (16, 32336), (17, 32360), (21, 32420), (23, 32489), (36, 32981), (39, 33020), (41, 33041),

Gene: Ryan\_49 Start: 32610, Stop: 33974, Start Num: 2

Candidate Starts for Ryan\_49:

(Start: 2 @ 32610 has 8 MA's), (3, 32652), (8, 32841), (10, 32874), (12, 32904), (15, 32970), (16, 32973), (23, 33126), (35, 33612), (39, 33657), (43, 33717), (45, 33753),

Gene: Zaheer\_49 Start: 33207, Stop: 34574, Start Num: 2

Candidate Starts for Zaheer\_49:

 $\begin{array}{l} \text{(Start: 2 @33207 has 8 MA's), (3, 33249), (8, 33438), (10, 33471), (12, 33501), (13, 33525), (15, 33567), (16, 33570), (23, 33723), (31, 33996), (39, 34254), (40, 34263), (42, 34290), (49, 34455), (50, 34494), } \end{array}$