

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 8965 Report

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

Pham number 8965 has 6 members, 0 are drafts.

Phages represented in each track:

Track 1 : KappaFarmDelta\_35, GEazy\_32

Track 2 : WelcomeAyanna\_32, ThankyouJordi\_32

Track 3: Budski\_36, Matteo\_27

## 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 2 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Budski\_36, Matteo\_27,

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

• GEazy\_32, KappaFarmDelta\_35, ThankyouJordi\_32, WelcomeAyanna\_32,

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

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# Summary by start number:

#### Start 6:

- Found in 2 of 6 (33.3%) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GEazy\_32 (DB), KappaFarmDelta\_35 (CV),

## Start 7:

- Found in 6 of 6 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Budski\_36 (DN), Matteo\_27 (CZ2),

#### Start 8:

- Found in 2 of 6 (33.3%) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ThankyouJordi\_32 (CZ1),
  WelcomeAyanna\_32 (CZ1),

## **Summary by clusters:**

There are 5 clusters represented in this pham: DN, CZ2, CZ1, DB, CV,

Info for manual annotations of cluster CV:

Start number 6 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ1:

•Start number 8 was manually annotated 2 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

•Start number 7 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster DB:

•Start number 6 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DN:

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

#### Gene Information:

Gene: Budski\_36 Start: 29371, Stop: 29802, Start Num: 7

Candidate Starts for Budski\_36:

(Start: 7 @29371 has 2 MA's), (9, 29440), (11, 29449), (15, 29617), (19, 29659), (21, 29677), (26, 29749),

Gene: GEazy 32 Start: 26466, Stop: 26918, Start Num: 6

Candidate Starts for GEazy\_32:

(4, 26445), (Start: 6 @26466 has 2 MA's), (Start: 7 @26487 has 2 MA's), (10, 26562), (11, 26565), (12, 26667), (16, 26736), (17, 26748), (22, 26817), (26, 26865),

Gene: KappaFarmDelta 35 Start: 27440, Stop: 27892, Start Num: 6

Candidate Starts for KappaFarmDelta 35:

(4, 27419), (Start: 6 @27440 has 2 MA's), (Start: 7 @27461 has 2 MA's), (10, 27536), (11, 27539), (12, 27641), (16, 27710), (17, 27722), (22, 27791), (26, 27839),

Gene: Matteo\_27 Start: 23790, Stop: 24221, Start Num: 7

Candidate Starts for Matteo\_27:

(Start: 7 @23790 has 2 MA's), (9, 23859), (11, 23868), (15, 24036), (19, 24078), (21, 24096), (26, 24168),

Gene: ThankyouJordi 32 Start: 28491, Stop: 28913, Start Num: 8

Candidate Starts for ThankyouJordi 32:

(1, 28293), (2, 28326), (3, 28338), (5, 28455), (Start: 7 @28479 has 2 MA's), (Start: 8 @28491 has 2 MA's), (9, 28548), (13, 28683), (14, 28707), (18, 28752), (20, 28767), (23, 28833), (24, 28836), (25,

28842), (27, 28884),

Gene: WelcomeAyanna\_32 Start: 28638, Stop: 29060, Start Num: 8 Candidate Starts for WelcomeAyanna\_32:

(1, 28440), (2, 28473), (3, 28485), (5, 28602), (Start: 7 @28626 has 2 MA's), (Start: 8 @28638 has 2 MA's), (9, 28695), (13, 28830), (14, 28854), (18, 28899), (20, 28914), (23, 28980), (24, 28983), (25, 28989), (27, 29031),