

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 155350 Report

This analysis was run 04/28/24 on database version 559.

Pham number 155350 has 6 members, 0 are drafts.

Phages represented in each track:

Track 1 : Gustav\_4Track 2 : Trine 4

Track 3: Widow\_4, Puppers\_4

Track 4 : Mahdia\_4Track 5 : Morrissey\_4

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

The start number called the most often in the published annotations is 12, it was called in 5 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Gustav\_4, Mahdia\_4, Morrissey\_4, Puppers\_4, Widow\_4,

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:

• Trine 4.

## Summary by start number:

#### Start 11:

- Found in 1 of 6 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine\_4 (CD),

### Start 12:

- Found in 5 of 6 (83.3%) of genes in pham
- Manual Annotations of this start: 5 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gustav\_4 (CD), Mahdia\_4 (CD), Morrissey 4 (CD), Puppers 4 (CD), Widow 4 (CD),

### Summary by clusters:

There is one cluster represented in this pham: CD

Info for manual annotations of cluster CD:

- •Start number 11 was manually annotated 1 time for cluster CD.
- •Start number 12 was manually annotated 5 times for cluster CD.

### Gene Information:

Gene: Gustav\_4 Start: 3513, Stop: 4499, Start Num: 12

Candidate Starts for Gustav\_4:

(2, 3300), (4, 3399), (8, 3459), (Start: 12 @3513 has 5 MA's), (13, 3543), (14, 3597), (15, 3600), (16, 3615), (17, 3627), (18, 3645), (19, 3648), (21, 3732), (22, 3747), (23, 3753), (26, 3825), (27, 3837), (31, 3975), (32, 3978), (37, 4038), (39, 4047), (42, 4143), (44, 4152), (49, 4359), (52, 4449), (53, 4452),

Gene: Mahdia\_4 Start: 3528, Stop: 4496, Start Num: 12

Candidate Starts for Mahdia 4:

(Start: 12 @3528 has 5 MA's), (13, 3558), (14, 3612), (15, 3615), (16, 3630), (17, 3642), (18, 3660), (19, 3663), (21, 3747), (29, 3879), (31, 3990), (36, 4047), (37, 4053), (39, 4062), (40, 4092), (47, 4350), (49, 4359), (51, 4401), (52, 4449), (53, 4452), (54, 4473),

Gene: Morrissey\_4 Start: 3526, Stop: 4506, Start Num: 12

Candidate Starts for Morrissey\_4:

(1, 3289), (5, 3415), (6, 3451), (8, 3472), (Start: 12 @ 3526 has 5 MA's), (14, 3595), (16, 3613), (17, 3625), (20, 3709), (21, 3727), (22, 3742), (24, 3757), (26, 3820), (31, 3970), (32, 3973), (37, 4033), (39, 4042), (43, 4144), (46, 4315), (48, 4366), (50, 4390), (53, 4462), (55, 4489),

Gene: Puppers 4 Start: 3441, Stop: 4391, Start Num: 12

Candidate Starts for Puppers 4:

(9, 3408), (10, 3426), (Start: 12 @3441 has 5 MA's), (14, 3510), (17, 3540), (19, 3561), (21, 3654), (22, 3669), (24, 3684), (25, 3696), (26, 3747), (30, 3816), (32, 3900), (38, 3963), (41, 4035), (45, 4218),

Gene: Trine\_4 Start: 3516, Stop: 4445, Start Num: 11

Candidate Starts for Trine\_4:

(2, 3300), (3, 3348), (7, 3447), (Start: 11 @3516 has 1 MA's), (14, 3588), (16, 3606), (17, 3618), (21, 3720), (22, 3735), (23, 3741), (24, 3750), (28, 3837), (31, 3975), (33, 4008), (34, 4011), (35, 4035), (44, 4164), (49, 4308), (52, 4398), (53, 4401),

Gene: Widow\_4 Start: 3441, Stop: 4388, Start Num: 12

Candidate Starts for Widow\_4:

(9, 3408), (10, 3426), (Start: 12 @3441 has 5 MA's), (14, 3510), (17, 3540), (19, 3561), (21, 3654), (22, 3669), (24, 3684), (25, 3696), (26, 3747), (30, 3816), (32, 3900), (38, 3963), (41, 4035), (45, 4215),