

4: MidnightRain\_39

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 88756 Report

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

Pham number 88756 has 9 members, 4 are drafts.

Phages represented in each track:

- Track 1 : YoungHarleezy\_37, Raphaella\_38, Aikyam\_34
- Track 2 : BillyTP\_38
- Track 3 : Sakai\_37, Gorpy\_38, Auxilium\_35, Richie\_37
- Track 4 : MidnightRain\_39

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

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

Genes that call this "Most Annotated" start: • Auxilium\_35, Gorpy\_38, MidnightRain\_39, Richie\_37, Sakai\_37,

Genes that have the "Most Annotated" start but do not call it: • Aikyam\_34, BillyTP\_38, Raphaella\_38, YoungHarleezy\_37,

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

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### Summary by start number:

Start 6:

- Found in 9 of 9 (100.0%) of genes in pham
- Manual Annotations of this start: 5 of 5
- Called 55.6% of time when present

• Phage (with cluster) where this start called: Auxilium\_35 (AY), Gorpy\_38 (AY), MidnightRain\_39 (AY), Richie\_37 (AY), Sakai\_37 (AY),

### Start 9:

- Found in 8 of 9 (88.9%) of genes in pham
- No Manual Annotations of this start.
- Called 37.5% of time when present

• Phage (with cluster) where this start called: Aikyam\_34 (AY), Raphaella\_38 (AY), YoungHarleezy\_37 (AY),

Start 10:

- Found in 8 of 9 (88.9%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: BillyTP\_38 (AY),

#### Summary by clusters:

There is one cluster represented in this pham: AY

Info for manual annotations of cluster AY:Start number 6 was manually annotated 5 times for cluster AY.

#### Gene Information:

Gene: Aikyam\_34 Start: 23389, Stop: 23847, Start Num: 9 Candidate Starts for Aikyam\_34: (1, 23185), (2, 23191), (3, 23203), (4, 23254), (5, 23299), (Start: 6 @23338 has 5 MA's), (7, 23356), (8, 23386), (9, 23389), (10, 23467), (11, 23530), (12, 23533), (13, 23539), (14, 23659), (15, 23662),

Gene: Auxilium\_35 Start: 23040, Stop: 23549, Start Num: 6 Candidate Starts for Auxilium\_35: (1, 22887), (2, 22893), (3, 22905), (4, 22956), (5, 23001), (Start: 6 @23040 has 5 MA's), (7, 23058), (8, 23088), (9, 23091), (10, 23169), (11, 23232), (12, 23235), (13, 23241), (14, 23361), (15, 23364),

Gene: BillyTP\_38 Start: 26365, Stop: 26745, Start Num: 10 Candidate Starts for BillyTP\_38: (1, 26083), (2, 26089), (3, 26101), (4, 26152), (Start: 6 @26236 has 5 MA's), (7, 26254), (8, 26284), (9, 26287), (10, 26365), (11, 26428), (12, 26431), (13, 26437), (14, 26557), (15, 26560),

Gene: Gorpy\_38 Start: 26732, Stop: 27241, Start Num: 6 Candidate Starts for Gorpy\_38: (1, 26579), (2, 26585), (3, 26597), (4, 26648), (5, 26693), (Start: 6 @26732 has 5 MA's), (7, 26750), (8, 26780), (9, 26783), (10, 26861), (11, 26924), (12, 26927), (13, 26933), (14, 27053), (15, 27056),

Gene: MidnightRain\_39 Start: 26311, Stop: 26814, Start Num: 6 Candidate Starts for MidnightRain\_39: (1, 26158), (2, 26164), (3, 26176), (4, 26227), (5, 26272), (Start: 6 @26311 has 5 MA's), (7, 26329), (8, 26359), (11, 26503), (13, 26512), (16, 26719),

Gene: Raphaella\_38 Start: 25485, Stop: 25943, Start Num: 9 Candidate Starts for Raphaella\_38: (1, 25281), (2, 25287), (3, 25299), (4, 25350), (5, 25395), (Start: 6 @25434 has 5 MA's), (7, 25452), (8, 25482), (9, 25485), (10, 25563), (11, 25626), (12, 25629), (13, 25635), (14, 25755), (15, 25758),

Gene: Richie\_37 Start: 25515, Stop: 26024, Start Num: 6 Candidate Starts for Richie\_37: (1, 25362), (2, 25368), (3, 25380), (4, 25431), (5, 25476), (Start: 6 @25515 has 5 MA's), (7, 25533), (8, 25563), (9, 25566), (10, 25644), (11, 25707), (12, 25710), (13, 25716), (14, 25836), (15, 25839), Gene: Sakai\_37 Start: 25443, Stop: 25952, Start Num: 6 Candidate Starts for Sakai\_37: (1, 25290), (2, 25296), (3, 25308), (4, 25359), (5, 25404), (Start: 6 @25443 has 5 MA's), (7, 25461), (8, 25491), (9, 25494), (10, 25572), (11, 25635), (12, 25638), (13, 25644), (14, 25764), (15, 25767),

Gene: YoungHarleezy\_37 Start: 25564, Stop: 26022, Start Num: 9 Candidate Starts for YoungHarleezy\_37: (1, 25360), (2, 25366), (3, 25378), (4, 25429), (5, 25474), (Start: 6 @25513 has 5 MA's), (7, 25531), (8, 25561), (9, 25564), (10, 25642), (11, 25705), (12, 25708), (13, 25714), (14, 25834), (15, 25837),