

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 88063 Report

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

Pham number 88063 has 8 members, 1 are drafts.

Phages represented in each track:

• Track 1 : Pipp\_71

Track 2 : Hyzer\_78

Track 3 : BetterKatz\_69Track 4 : Cambiare 1

• Track 5 : Purky\_59

Track 6: Bipper\_78, Cracklewink\_78

Track 7: ValentiniPuff 28

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

The start number called the most often in the published annotations is 11, it was called in 4 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bipper\_78, Cambiare\_1, Cracklewink\_78, Purky\_59,

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:

• BetterKatz\_69, Hyzer\_78, Pipp\_71, ValentiniPuff\_28,

### Summary by start number:

#### Start 11:

- Found in 4 of 8 (50.0%) of genes in pham
- Manual Annotations of this start: 4 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipper\_78 (Y), Cambiare\_1 (G2), Cracklewink\_78 (Y), Purky\_59 (P6),

#### Start 12:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 7

- Called 100.0% of time when present
- Phage (with cluster) where this start called: ValentiniPuff\_28 (singleton),

### Start 13:

- Found in 3 of 8 ( 37.5% ) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BetterKatz\_69 (DI), Hyzer\_78 (CZ1), Pipp\_71 (CV),

### **Summary by clusters:**

There are 7 clusters represented in this pham: singleton, P6, G2, DI, CZ1, Y, CV,

Info for manual annotations of cluster CV:

•Start number 13 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DI:

•Start number 13 was manually annotated 1 time for cluster DI.

Info for manual annotations of cluster G2:

•Start number 11 was manually annotated 1 time for cluster G2.

Info for manual annotations of cluster P6:

•Start number 11 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster Y:

•Start number 11 was manually annotated 2 times for cluster Y.

#### Gene Information:

Gene: BetterKatz 69 Start: 43944, Stop: 44435, Start Num: 13

Candidate Starts for BetterKatz\_69:

(Start: 13 @43944 has 2 MA's), (17, 44040), (18, 44043), (22, 44139), (23, 44142), (30, 44325),

Gene: Bipper 78 Start: 51528, Stop: 52016, Start Num: 11

Candidate Starts for Bipper 78:

(Start: 11 @51528 has 4 MA's), (17, 51624), (18, 51627), (21, 51720), (22, 51723), (24, 51762), (25, 51765), (33, 51975),

Gene: Cambiare\_1 Start: 46, Stop: 537, Start Num: 11

Candidate Starts for Cambiare\_1:

(Start: 11 @46 has 4 MA's), (18, 169), (19, 223), (22, 265), (25, 307), (27, 367), (29, 403), (31, 463),

Gene: Cracklewink\_78 Start: 50562, Stop: 51050, Start Num: 11

Candidate Starts for Cracklewink 78:

(Start: 11 @50562 has 4 MA's), (17, 50658), (18, 50661), (21, 50754), (22, 50757), (24, 50796), (25, 50799), (33, 51009),

Gene: Hyzer\_78 Start: 52247, Stop: 52741, Start Num: 13

Candidate Starts for Hyzer\_78:

(Start: 13 @52247 has 2 MA's), (18, 52361), (26, 52520),

Gene: Pipp\_71 Start: 43913, Stop: 44407, Start Num: 13

Candidate Starts for Pipp\_71:

(7, 43838), (Start: 13 @43913 has 2 MA's), (18, 44027), (30, 44294),

Gene: Purky\_59 Start: 39914, Stop: 40426, Start Num: 11

Candidate Starts for Purky\_59:

(1, 39500), (2, 39533), (3, 39644), (6, 39812), (9, 39893), (10, 39902), (Start: 11 @39914 has 4 MA's),

(16, 39998), (18, 40034), (21, 40127), (22, 40130), (24, 40169), (28, 40244), (32, 40364),

Gene: ValentiniPuff\_28 Start: 17500, Stop: 18006, Start Num: 12

Candidate Starts for ValentiniPuff\_28:

(4, 17338), (5, 17356), (8, 17437), (Start: 12 @17500 has 1 MA's), (14, 17512), (15, 17527), (18,

17608), (20, 17665), (23, 17707), (34, 17992),