

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 200935 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200935 has 8 members, 2 are drafts.

Phages represented in each track:

• Track 1: Wilkos 70

Track 2: Lizz 68, ShakeNBake 68, PHTowN 68

Track 3 : Greenbelt\_103

• Track 4 : Yara 64

• Track 5 : Wentworth\_68

• Track 6 : Wollypog\_45

## 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 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Lizz\_68, PHTowN\_68, ShakeNBake\_68, Yara\_64,

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:

Greenbelt\_103, Wentworth\_68, Wilkos\_70, Wollypog\_45,

# Summary by start number:

#### Start 10:

- Found in 3 of 8 ( 37.5% ) 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: Greenbelt\_103 (BN), Wentworth\_68 (BN), Wilkos\_70 (BN),

#### Start 11:

- Found in 4 of 8 (50.0%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Lizz\_68 (BN), PHTowN\_68 (BN), ShakeNBake\_68 (BN), Yara\_64 (BN),

#### Start 12:

- Found in 1 of 8 (12.5%) 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: Wollypog\_45 (singleton),

### **Summary by clusters:**

There are 2 clusters represented in this pham: BN, singleton,

Info for manual annotations of cluster BN:

- •Start number 10 was manually annotated 1 time for cluster BN.
- •Start number 11 was manually annotated 4 times for cluster BN.

### Gene Information:

Gene: Greenbelt\_103 Start: 44319, Stop: 43777, Start Num: 10

Candidate Starts for Greenbelt 103:

(Start: 10 @44319 has 1 MA's), (13, 44262),

Gene: Lizz\_68 Start: 48031, Stop: 47468, Start Num: 11

Candidate Starts for Lizz 68:

(6, 48070), (7, 48064), (8, 48046), (Start: 11 @48031 has 4 MA's), (15, 47926), (16, 47905), (18, 47854),

Gene: PHTowN\_68 Start: 48029, Stop: 47466, Start Num: 11

Candidate Starts for PHTowN 68:

(6, 48068), (7, 48062), (8, 48044), (Start: 11 @48029 has 4 MA's), (15, 47924), (16, 47903), (18, 47852).

Gene: ShakeNBake\_68 Start: 48056, Stop: 47493, Start Num: 11

Candidate Starts for ShakeNBake\_68:

(6, 48095), (7, 48089), (8, 48071), (Start: 11 @48056 has 4 MA's), (15, 47951), (16, 47930), (18, 47879),

Gene: Wentworth 68 Start: 48157, Stop: 47597, Start Num: 10

Candidate Starts for Wentworth 68:

(6, 48193), (7, 48187), (Start: 10 @48157 has 1 MA's), (22, 47632),

Gene: Wilkos\_70 Start: 48319, Stop: 47750, Start Num: 10

Candidate Starts for Wilkos\_70:

(5, 48367), (Start: 10 @48319 has 1 MA's), (22, 47785),

Gene: Wollypog 45 Start: 32939, Stop: 33472, Start Num: 12

Candidate Starts for Wollypog 45:

(Start: 12 @32939 has 1 MA's), (14, 33008), (17, 33068), (19, 33332), (20, 33347), (21, 33365),

Gene: Yara\_64 Start: 46991, Stop: 46455, Start Num: 11

Candidate Starts for Yara\_64: (1, 47177), (2, 47099), (3, 47093), (4, 47066), (9, 47006), (Start: 11 @46991 has 4 MA's),