

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 87065 Report

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

Pham number 87065 has 15 members, 0 are drafts.

Phages represented in each track:

- Track 1: James\_97, Brocalys\_85, ByChance\_84, ShiLan\_96, Pippy\_91, Gorge\_92
- Track 2: BigPhil\_90, Mandlovu\_93, Batiatus\_93, Mozy\_100
- Track 3: Cerasum\_92, Whatsapiecost\_89
- Track 4: FreddyB\_103, Clifton\_85
- Track 5 : Latretium\_96

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

The start number called the most often in the published annotations is 1, it was called in 8 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Brocalys\_85, ByChance\_84, Cerasum\_92, Gorge\_92, James\_97, Pippy\_91, ShiLan\_96, Whatsapiecost\_89,

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

• Batiatus\_93, BigPhil\_90, Clifton\_85, FreddyB\_103, Latretium\_96, Mandlovu\_93, Mozy\_100,

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

Summary by start number:

#### Start 1:

- Found in 15 of 15 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 8 of 15
- Called 53.3% of time when present
- Phage (with cluster) where this start called: Brocalys\_85 (F1), ByChance\_84 (F1), Cerasum\_92 (F1), Gorge\_92 (F1), James\_97 (F1), Pippy\_91 (F1), ShiLan\_96 (F1), Whatsapiecost\_89 (F1),

#### Start 2:

• Found in 15 of 15 (100.0%) of genes in pham

- Manual Annotations of this start: 6 of 15
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Batiatus\_93 (F1), BigPhil\_90 (F1), Clifton\_85 (F1), FreddyB\_103 (F1), Mandlovu\_93 (F1), Mozy\_100 (F1),

### Start 4:

- Found in 15 of 15 (100.0%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Latretium\_96 (F1),

### Summary by clusters:

There is one cluster represented in this pham: F1

Info for manual annotations of cluster F1:

- •Start number 1 was manually annotated 8 times for cluster F1.
- •Start number 2 was manually annotated 6 times for cluster F1.
- •Start number 4 was manually annotated 1 time for cluster F1.

#### Gene Information:

Gene: Batiatus\_93 Start: 52765, Stop: 53022, Start Num: 2

Candidate Starts for Batiatus 93:

(Start: 1 @52753 has 8 MA's), (Start: 2 @52765 has 6 MA's), (3, 52774), (Start: 4 @52786 has 1 MA's), (5, 52855), (6, 52981),

Gene: BigPhil\_90 Start: 49557, Stop: 49814, Start Num: 2

Candidate Starts for BigPhil\_90:

(Start: 1 @49545 has 8 MA's), (Start: 2 @49557 has 6 MA's), (3, 49566), (Start: 4 @49578 has 1 MA's), (5, 49647), (6, 49773),

Gene: Brocalys 85 Start: 50042, Stop: 50290, Start Num: 1

Candidate Starts for Brocalys\_85:

(Start: 1 @50042 has 8 MA's), (Start: 2 @50054 has 6 MA's), (3, 50063), (Start: 4 @50075 has 1 MA's), (5, 50144),

Gene: ByChance 84 Start: 48400, Stop: 48648, Start Num: 1

Candidate Starts for ByChance 84:

(Start: 1 @48400 has 8 MA's), (Start: 2 @48412 has 6 MA's), (3, 48421), (Start: 4 @48433 has 1 MA's), (5, 48502),

Gene: Cerasum\_92 Start: 49563, Stop: 49832, Start Num: 1

Candidate Starts for Cerasum\_92:

(Start: 1 @49563 has 8 MA's), (Start: 2 @49575 has 6 MA's), (3, 49584), (Start: 4 @49596 has 1 MA's), (5, 49665), (6, 49791),

Gene: Clifton 85 Start: 51029, Stop: 51265, Start Num: 2

Candidate Starts for Clifton 85:

(Start: 1 @51017 has 8 MA's), (Start: 2 @51029 has 6 MA's), (3, 51038), (Start: 4 @51050 has 1 MA's), (5, 51119),

Gene: FreddyB\_103 Start: 53621, Stop: 53857, Start Num: 2

Candidate Starts for FreddyB\_103:

(Start: 1 @53609 has 8 MA's), (Start: 2 @53621 has 6 MA's), (3, 53630), (Start: 4 @53642 has 1 MA's), (5, 53711),

Gene: Gorge\_92 Start: 53236, Stop: 53484, Start Num: 1

Candidate Starts for Gorge 92:

(Start: 1 @53236 has 8 MA's), (Start: 2 @53248 has 6 MA's), (3, 53257), (Start: 4 @53269 has 1 MA's), (5, 53338),

Gene: James 97 Start: 54618, Stop: 54866, Start Num: 1

Candidate Starts for James\_97:

(Start: 1 @54618 has 8 MA's), (Start: 2 @54630 has 6 MA's), (3, 54639), (Start: 4 @54651 has 1 MA's), (5, 54720),

Gene: Latretium\_96 Start: 53516, Stop: 53731, Start Num: 4

Candidate Starts for Latretium\_96:

(Start: 1 @53483 has 8 MA's), (Start: 2 @53495 has 6 MA's), (3, 53504), (Start: 4 @53516 has 1 MA's), (5, 53585),

Gene: Mandlovu\_93 Start: 51177, Stop: 51434, Start Num: 2

Candidate Starts for Mandlovu 93:

(Start: 1 @51165 has 8 MA's), (Start: 2 @51177 has 6 MA's), (3, 51186), (Start: 4 @51198 has 1 MA's), (5, 51267), (6, 51393),

Gene: Mozy\_100 Start: 53134, Stop: 53388, Start Num: 2

Candidate Starts for Mozy 100:

(Start: 1 @53122 has 8 MA's), (Start: 2 @53134 has 6 MA's), (3, 53143), (Start: 4 @53155 has 1 MA's), (5, 53224), (6, 53350),

Gene: Pippy\_91 Start: 51665, Stop: 51913, Start Num: 1

Candidate Starts for Pippy 91:

(Start: 1 @51665 has 8 MA's), (Start: 2 @51677 has 6 MA's), (3, 51686), (Start: 4 @51698 has 1 MA's), (5, 51767),

Gene: ShiLan\_96 Start: 55073, Stop: 55321, Start Num: 1

Candidate Starts for ShiLan\_96:

(Start: 1 @55073 has 8 MA's), (Start: 2 @55085 has 6 MA's), (3, 55094), (Start: 4 @55106 has 1 MA's), (5, 55175),

Gene: Whatsapiecost\_89 Start: 48106, Stop: 48375, Start Num: 1

Candidate Starts for Whatsapiecost 89:

(Start: 1 @48106 has 8 MA's), (Start: 2 @48118 has 6 MA's), (3, 48127), (Start: 4 @48139 has 1 MA's), (5, 48208), (6, 48334),