

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 164031 Report

This analysis was run 05/04/24 on database version 560.

Pham number 164031 has 14 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Cuke 11

Track 2 : MrMiyagi\_12, Fowlmouth\_12

Track 3: Indlulamithi 15

• Track 4 : Riparian\_18, Rope\_18, Candle\_18, MontyDev\_18, Papyrus\_18,

Send513\_18, Weiss13\_18, Yelo\_18, Zenon\_19, Nilo\_19

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

The start number called the most often in the published annotations is 2, it was called in 8 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Candle\_18, MontyDev\_18, Nilo\_19, Papyrus\_18, Riparian\_18, Rope\_18, Send513\_18, Weiss13\_18, Yelo\_18, Zenon\_19,

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:

Cuke\_11, Fowlmouth\_12, Indlulamithi\_15, MrMiyagi\_12,

### Summary by start number:

### Start 2:

- Found in 10 of 14 (71.4%) of genes in pham
- Manual Annotations of this start: 8 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Candle\_18 (R), MontyDev\_18 (R), Nilo\_19 (R), Papyrus\_18 (R), Riparian\_18 (R), Rope\_18 (R), Send513\_18 (R), Weiss13\_18 (R), Yelo\_18 (R), Zenon\_19 (R),

### Start 3:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 12

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Indlulamithi\_15 (AC),

#### Start 4:

- Found in 3 of 14 (21.4%) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cuke\_11 (AC), Fowlmouth\_12 (AC), MrMiyagi\_12 (AC),

## **Summary by clusters:**

There are 2 clusters represented in this pham: AC, R,

Info for manual annotations of cluster AC:

- Start number 3 was manually annotated 1 time for cluster AC.
- •Start number 4 was manually annotated 3 times for cluster AC.

Info for manual annotations of cluster R:

•Start number 2 was manually annotated 8 times for cluster R.

#### Gene Information:

Gene: Candle\_18 Start: 12792, Stop: 13160, Start Num: 2

Candidate Starts for Candle 18:

(1, 12735), (Start: 2 @12792 has 8 MA's), (9, 12906), (12, 12921), (13, 12939), (15, 13002), (16, 13032), (18, 13053), (19, 13077),

Gene: Cuke\_11 Start: 7988, Stop: 8332, Start Num: 4

Candidate Starts for Cuke 11:

(Start: 4 @7988 has 3 MA's), (5, 8012), (6, 8021), (7, 8027), (10, 8084), (13, 8117), (16, 8213), (17, 8231),

Gene: Fowlmouth\_12 Start: 8156, Stop: 8503, Start Num: 4

Candidate Starts for Fowlmouth\_12:

(Start: 4 @8156 has 3 MA's), (6, 8192), (8, 8213), (10, 8255), (13, 8288), (16, 8384),

Gene: Indlulamithi\_15 Start: 10237, Stop: 10599, Start Num: 3

Candidate Starts for Indlulamithi 15:

(Start: 3 @10237 has 1 MA's), (10, 10348), (11, 10357), (14, 10426), (16, 10474), (19, 10519), (20, 10558),

Gene: MontyDev\_18 Start: 12450, Stop: 12818, Start Num: 2

Candidate Starts for MontyDev\_18:

(1, 12393), (Start: 2 @12450 has 8 MA's), (9, 12564), (12, 12579), (13, 12597), (15, 12660), (16, 12690), (18, 12711), (19, 12735),

Gene: MrMiyagi 12 Start: 8156, Stop: 8503, Start Num: 4

Candidate Starts for MrMiyagi 12:

(Start: 4 @8156 has 3 MA's), (6, 8192), (8, 8213), (10, 8255), (13, 8288), (16, 8384),

Gene: Nilo\_19 Start: 12789, Stop: 13157, Start Num: 2

Candidate Starts for Nilo\_19:

(1, 12732), (Start: 2 @12789 has 8 MA's), (9, 12903), (12, 12918), (13, 12936), (15, 12999), (16, 13029), (18, 13050), (19, 13074),

Gene: Papyrus\_18 Start: 12451, Stop: 12819, Start Num: 2

Candidate Starts for Papyrus\_18:

(1, 12394), (Start: 2 @12451 has 8 MA's), (9, 12565), (12, 12580), (13, 12598), (15, 12661), (16, 12691), (18, 12712), (19, 12736),

Gene: Riparian 18 Start: 12250, Stop: 12618, Start Num: 2

Candidate Starts for Riparian 18:

(1, 12193), (Start: 2 @12250 has 8 MA's), (9, 12364), (12, 12379), (13, 12397), (15, 12460), (16, 12490), (18, 12511), (19, 12535),

Gene: Rope\_18 Start: 12442, Stop: 12810, Start Num: 2

Candidate Starts for Rope 18:

(1, 12385), (Start: 2 @12442 has 8 MA's), (9, 12556), (12, 12571), (13, 12589), (15, 12652), (16, 12682), (18, 12703), (19, 12727),

Gene: Send513\_18 Start: 12792, Stop: 13160, Start Num: 2

Candidate Starts for Send513\_18:

(1, 12735), (Start: 2 @12792 has 8 MA's), (9, 12906), (12, 12921), (13, 12939), (15, 13002), (16, 13032), (18, 13053), (19, 13077),

Gene: Weiss13\_18 Start: 12482, Stop: 12850, Start Num: 2

Candidate Starts for Weiss13\_18:

(1, 12425), (Start: 2 @12482 has 8 MA's), (9, 12596), (12, 12611), (13, 12629), (15, 12692), (16, 12722), (18, 12743), (19, 12767),

Gene: Yelo\_18 Start: 12792, Stop: 13160, Start Num: 2

Candidate Starts for Yelo\_18:

(1, 12735), (Start: 2 @12792 has 8 MA's), (9, 12906), (12, 12921), (13, 12939), (15, 13002), (16, 13032), (18, 13053), (19, 13077),

Gene: Zenon\_19 Start: 12794, Stop: 13162, Start Num: 2

Candidate Starts for Zenon\_19:

(1, 12737), (Start: 2 @12794 has 8 MA's), (9, 12908), (12, 12923), (13, 12941), (15, 13004), (16, 13034), (18, 13055), (19, 13079),