

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 164146 Report

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

Pham number 164146 has 8 members, 2 are drafts.

Phages represented in each track:

Track 1 : EZMoney23\_18

Track 2: Jaan\_17, Landor\_15, Bactobuster\_15

Track 3 : Pukovnik\_16
Track 4 : IronMan\_16
Track 5 : Che12\_15
Track 6 : Ph8s 15

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

The start number called the most often in the published annotations is 4, it was called in 4 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Bactobuster\_15, IronMan\_16, Jaan\_17, Landor\_15, Pukovnik\_16,

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

•

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

Che12\_15, EZMoney23\_18, Ph8s\_15,

## Summary by start number:

## Start 4:

- Found in 5 of 8 (62.5%) 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: Bactobuster\_15 (A2), IronMan\_16 (A2), Jaan\_17 (A2), Landor\_15 (A2), Pukovnik\_16 (A2),

## Start 5:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 12.5% of time when present

Phage (with cluster) where this start called: Che12\_15 (A2),

#### Start 6:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Ph8s\_15 (A2),

## Start 7:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: EZMoney23\_18 (A2),

## Summary by clusters:

There is one cluster represented in this pham: A2

Info for manual annotations of cluster A2:

- •Start number 4 was manually annotated 4 times for cluster A2.
- •Start number 5 was manually annotated 1 time for cluster A2.
- Start number 6 was manually annotated 1 time for cluster A2.

## Gene Information:

Gene: Bactobuster\_15 Start: 12596, Stop: 13303, Start Num: 4

Candidate Starts for Bactobuster\_15:

(2, 12551), (3, 12554), (Start: 4 @12596 has 4 MA's), (Start: 5 @12662 has 1 MA's), (Start: 6 @12701 has 1 MA's), (7, 12722), (10, 12767), (12, 12785), (13, 12791), (15, 12899), (16, 12959), (17, 12992), (19, 13043), (22, 13091), (24, 13109), (26, 13277),

Gene: Che12 15 Start: 9730, Stop: 10350, Start Num: 5

Candidate Starts for Che12 15:

(Start: 5 @9730 has 1 MA's), (Start: 6 @9769 has 1 MA's), (7, 9790), (8, 9820), (9, 9829), (10, 9835), (11, 9844), (12, 9853), (13, 9859), (14, 9916), (15, 9970), (18, 10066), (22, 10138), (24, 10156), (26, 10324),

Gene: EZMoney23 18 Start: 12950, Stop: 13534, Start Num: 7

Candidate Starts for EZMoney23 18:

(Start: 5 @ 12890 has 1 MA's), (Start: 6 @ 12929 has 1 MA's), (7, 12950), (8, 12980), (10, 12995), (12, 13013), (13, 13019), (14, 13076), (15, 13130), (20, 13289), (26, 13508),

Gene: IronMan\_16 Start: 12560, Stop: 13267, Start Num: 4

Candidate Starts for IronMan\_16:

(2, 12515), (3, 12518), (Start: 4 @12560 has 4 MA's), (Start: 5 @12626 has 1 MA's), (Start: 6 @12665 has 1 MA's), (7, 12686), (10, 12731), (12, 12749), (13, 12755), (15, 12863), (16, 12923), (17, 12956), (22, 13055), (24, 13073), (26, 13241),

Gene: Jaan 17 Start: 12950, Stop: 13657, Start Num: 4

Candidate Starts for Jaan 17:

(2, 12905), (3, 12908), (Start: 4 @12950 has 4 MA's), (Start: 5 @13016 has 1 MA's), (Start: 6 @13055 has 1 MA's), (7, 13076), (10, 13121), (12, 13139), (13, 13145), (15, 13253), (16, 13313), (17, 13346), (19, 13397), (22, 13445), (24, 13463), (26, 13631),

Gene: Landor\_15 Start: 12602, Stop: 13309, Start Num: 4 Candidate Starts for Landor 15:

(2, 12557), (3, 12560), (Start: 4 @12602 has 4 MA's), (Start: 5 @12668 has 1 MA's), (Start: 6 @12707 has 1 MA's), (7, 12728), (10, 12773), (12, 12791), (13, 12797), (15, 12905), (16, 12965), (17, 12998), (19, 13049), (22, 13097), (24, 13115), (26, 13283),

Gene: Ph8s\_15 Start: 9776, Stop: 10357, Start Num: 6 Candidate Starts for Ph8s 15:

(1, 9620), (Start: 5 @9737 has 1 MA's), (Start: 6 @9776 has 1 MA's), (7, 9797), (8, 9827), (9, 9836), (10, 9842), (11, 9851), (12, 9860), (13, 9866), (14, 9923), (15, 9977), (21, 10142), (22, 10145), (23, 10148), (24, 10163), (25, 10274),

Gene: Pukovnik\_16 Start: 12513, Stop: 13223, Start Num: 4 Candidate Starts for Pukovnik\_16:

(Start: 4 @12513 has 4 MA's), (Start: 5 @12579 has 1 MA's), (Start: 6 @12618 has 1 MA's), (7, 12639), (10, 12684), (12, 12702), (13, 12708), (14, 12765), (15, 12819), (16, 12879), (17, 12912), (19, 12963), (22, 13011), (24, 13029), (26, 13197),