Pham 164146


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, Lañdor_15, Bactobuster_15
- Track 3 : Pukō̄nik_16
- Track 4 : IronMan 16
- Track 5 : Che12 $\overline{15}$
- 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), $(26,13197)$,

