

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 153599 Report

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

Pham number 153599 has 14 members, 13 are drafts.

Phages represented in each track:

- Track 1 : PartyCup\_17
- Track 2 : Kaliźoi\_17
- Track 3 : AustinPowers 13
- Track 4 : PinkFriday\_13
- Track 5: Fluke 17
- Track 6 : Chickaboom 14
- Track 7: HannahPhantana 16
- Track 8: Juno112\_14, KHumphrey\_14, PhluffyCoco\_14
- Track 9 : Phisb 14
- Track 10 : Cashington\_14
- Track 11 : Bachaco\_14
- Track 12 : Loviatar\_24

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

The start number called the most often in the published annotations is 5, it was called in 1 of the 1 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AustinPowers\_13, Fluke\_17, HannahPhantana\_16, Juno112\_14, KHumphrey\_14, Kalizoi\_17, PartyCup\_17, PhluffyCoco\_14, PinkFriday\_13,

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

Chickaboom\_14,

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

Bachaco\_14, Cashington\_14, Loviatar\_24, Phisb\_14,

### Summary by start number:

#### Start 2:

- Found in 2 of 14 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present

Phage (with cluster) where this start called: Chickaboom\_14 (AS1),

#### Start 4:

- Found in 4 of 14 (28.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bachaco\_14 (EB), Cashington\_14 (EB), Loviatar\_24 (EB), Phisb\_14 (EB),

### Start 5:

- Found in 10 of 14 (71.4%) of genes in pham
- Manual Annotation's of this start: 1 of 1
- Called 90.0% of time when present
- Phage (with cluster) where this start called: AustinPowers\_13 (AK), Fluke\_17 (AK), HannahPhantana\_16 (AS2), Juno112\_14 (AS3), KHumphrey\_14 (AS3), Kalizoi\_17 (AK), PartyCup\_17 (AK), PhluffyCoco\_14 (AS3), PinkFriday\_13 (AK),

## Summary by clusters:

There are 5 clusters represented in this pham: AS3, AS2, AK, AS1, EB,

Info for manual annotations of cluster AK:

•Start number 5 was manually annotated 1 time for cluster AK.

#### Gene Information:

```
Gene: AustinPowers_13 Start: 9421, Stop: 9732, Start Num: 5
Candidate Starts for AustinPowers_13:
(Start: 5 @9421 has 1 MA's), (14, 9514), (23, 9571), (28, 9652),
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```
Gene: Bachaco_14 Start: 9488, Stop: 9847, Start Num: 4 Candidate Starts for Bachaco_14: (4, 9488), (21, 9632),
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Gene: Cashington_14 Start: 9610, Stop: 9951, Start Num: 4 Candidate Starts for Cashington_14: (4, 9610), (26, 9784),
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Gene: Chickaboom_14 Start: 9804, Stop: 10145, Start Num: 2
Candidate Starts for Chickaboom_14:
(2, 9804), (Start: 5 @9813 has 1 MA's), (7, 9849), (10, 9873), (11, 9876), (16, 9927), (19, 9954), (23, 9975), (24, 9978), (27, 10044),
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```
Gene: Fluke_17 Start: 12295, Stop: 12609, Start Num: 5
Candidate Starts for Fluke_17:
(Start: 5 @12295 has 1 MA's), (9, 12352), (12, 12373), (15, 12397), (20, 12436), (21, 12439), (22, 12445), (23, 12448), (28, 12529),
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Gene: HannahPhantana\_16 Start: 10039, Stop: 10365, Start Num: 5

Candidate Starts for HannahPhantana\_16:

(1, 9943), (Start: 5 @10039 has 1 MA's), (7, 10075), (9, 10096), (13, 10129), (23, 10201),

Gene: Juno112\_14 Start: 9453, Stop: 9785, Start Num: 5

Candidate Starts for Juno112\_14:

(1, 9357), (3, 9447), (Start: 5 @9453 has 1 MA's), (7, 9489), (9, 9510), (17, 9588), (22, 9612),

Gene: KHumphrey\_14 Start: 9450, Stop: 9782, Start Num: 5

Candidate Starts for KHumphrey 14:

(1, 9354), (3, 9444), (Start: 5 @ 9450 has 1 MA's), (7, 9486), (9, 9507), (17, 9585), (22, 9609),

Gene: Kalizoi\_17 Start: 12246, Stop: 12560, Start Num: 5

Candidate Starts for Kalizoi\_17:

(Start: 5 @12246 has 1 MA's), (9, 12303), (12, 12324), (15, 12348), (21, 12390), (22, 12396), (23, 12399), (28, 12480),

Gene: Loviatar 24 Start: 9883, Stop: 10224, Start Num: 4

Candidate Starts for Loviatar\_24: (4, 9883), (15, 9988), (18, 10015),

Gene: PartyCup 17 Start: 12324, Stop: 12638, Start Num: 5

Candidate Starts for PartyCup\_17:

(1, 12228), (Start: 5 @12324 has 1 MA's), (8, 12375), (9, 12381), (12, 12402), (15, 12426), (21, 12468), (22, 12474), (27, 12543), (28, 12558),

Gene: Phisb 14 Start: 9558, Stop: 9899, Start Num: 4

Candidate Starts for Phisb\_14:

(1, 9456), (2, 9552), (4, 9558), (26, 9732),

Gene: PhluffyCoco\_14 Start: 9452, Stop: 9784, Start Num: 5

Candidate Starts for PhluffyCoco 14:

(1, 9356), (3, 9446), (Start: 5 @9452 has 1 MA's), (7, 9488), (9, 9509), (17, 9587), (22, 9611),

Gene: PinkFriday\_13 Start: 9432, Stop: 9743, Start Num: 5

Candidate Starts for PinkFriday\_13:

(1, 9336), (Start: 5 @9432 has 1 MA's), (6, 9438), (18, 9558), (20, 9570), (25, 9591), (28, 9663),