

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 194524 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194524 has 11 members, 3 are drafts.

Phages represented in each track:

Track 1 : Sashimi\_24

• Track 2 : EvePickles 23

• Track 3 : Faja\_23

• Track 4 : Cole\_22

Track 5 : QuinnAvery\_23

• Track 6 : Elesar\_23

Track 7 : Kukla\_21

• Track 8 : Maja\_21

• Track 9 : Hum25\_22

• Track 10 : Pitbull\_21

• Track 11 : ArV2\_20

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

The start number called the most often in the published annotations is 3, it was called in 5 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

ArV2\_20, Cole\_22, Elesar\_23, EvePickles\_23, Faja\_23, Maja\_21, QuinnAvery\_23,

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:

Hum25\_22, Kukla\_21, Pitbull\_21, Sashimi\_24,

### Summary by start number:

### Start 1:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25 22 (FQ), Pitbull 21 (FQ).

#### Start 2:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kukla\_21 (FJ), Sashimi\_24 (AY),

#### Start 3:

- Found in 7 of 11 (63.6%) of genes in pham
- Manual Annotations of this start: 5 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArV2\_20 (singleton), Cole\_22 (FF), Elesar\_23 (FF), EvePickles\_23 (AY), Faja\_23 (AY), Maja\_21 (FO), QuinnAvery\_23 (FF),

## Summary by clusters:

There are 6 clusters represented in this pham: FQ, singleton, FF, AY, FJ, FO,

Info for manual annotations of cluster AY:

•Start number 3 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster FF:

•Start number 3 was manually annotated 2 times for cluster FF.

Info for manual annotations of cluster FJ:

•Start number 2 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FO:

•Start number 3 was manually annotated 1 time for cluster FO.

Info for manual annotations of cluster FQ:

•Start number 1 was manually annotated 2 times for cluster FQ.

#### Gene Information:

Gene: ArV2 20 Start: 16169, Stop: 16945, Start Num: 3

Candidate Starts for ArV2 20:

(Start: 3 @16169 has 5 MA's), (15, 16310), (17, 16343), (27, 16517), (36, 16625), (40, 16670), (43, 16763),

Gene: Cole 22 Start: 17696, Stop: 18433, Start Num: 3

Candidate Starts for Cole\_22:

(Start: 3 @17696 has 5 MA's), (4, 17741), (7, 17759), (10, 17777), (19, 17906), (39, 18146), (45, 18329), (46, 18410),

Gene: Elesar\_23 Start: 18090, Stop: 18818, Start Num: 3

Candidate Starts for Elesar 23:

(Start: 3 @18090 has 5 MA's), (4, 18135), (10, 18171), (18, 18273), (21, 18336),

Gene: EvePickles 23 Start: 17293, Stop: 18039, Start Num: 3

Candidate Starts for EvePickles\_23:

(Start: 3 @17293 has 5 MA's), (4, 17338), (7, 17356), (14, 17407), (19, 17503), (20, 17518), (25, 17617), (28, 17647), (30, 17680), (31, 17689), (42, 17842),

Gene: Faja\_23 Start: 17189, Stop: 17932, Start Num: 3

Candidate Starts for Faja\_23:

(Start: 3 @17189 has 5 MA's), (4, 17234), (7, 17252), (18, 17372), (19, 17399), (21, 17435), (22, 17504), (31, 17579), (34, 17606), (35, 17612),

Gene: Hum25\_22 Start: 16282, Stop: 17019, Start Num: 1

Candidate Starts for Hum25\_22:

(Start: 1 @16282 has 2 MA's), (5, 16354), (6, 16360), (12, 16399), (19, 16504), (20, 16519), (23, 16612), (24, 16618), (30, 16690), (32, 16708), (36, 16735), (37, 16738),

Gene: Kukla\_21 Start: 16686, Stop: 17423, Start Num: 2

Candidate Starts for Kukla\_21:

(Start: 2 @16686 has 1 MA's), (4, 16731), (8, 16752), (11, 16779), (13, 16785), (16, 16839), (18, 16860), (20, 16902), (21, 16923), (26, 17004), (29, 17055), (34, 17106), (38, 17121).

Gene: Maja 21 Start: 16955, Stop: 17737, Start Num: 3

Candidate Starts for Maja\_21:

(Start: 3 @16955 has 5 MA's), (4, 17000), (7, 17018), (18, 17138), (19, 17165), (21, 17201), (43, 17534),

Gene: Pitbull\_21 Start: 15912, Stop: 16649, Start Num: 1

Candidate Starts for Pitbull\_21:

(Start: 1 @15912 has 2 MA's), (5, 15984), (6, 15990), (12, 16029), (19, 16134), (20, 16149), (23, 16242), (24, 16248), (30, 16320), (31, 16329), (36, 16365), (37, 16368),

Gene: QuinnAvery\_23 Start: 18034, Stop: 18780, Start Num: 3

Candidate Starts for QuinnAvery\_23:

 $(Start: 3 @18034 \ has 5 \ MA's), (4, 18079), (7, 18097), (9, 18112), (18, 18217), (19, 18244), (33, 18445), (34, 18454), (44, 18607), (46, 18757), \\$ 

Gene: Sashimi 24 Start: 17313, Stop: 18059, Start Num: 2

Candidate Starts for Sashimi 24:

(Start: 2 @17313 has 1 MA's), (4, 17358), (7, 17376), (8, 17379), (11, 17406), (16, 17466), (18, 17487), (20, 17529), (21, 17550), (29, 17682), (34, 17733), (38, 17748), (41, 17787),