

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 198357 Report

This analysis was run 01/18/25 on database version 583.

Pham number 198357 has 24 members, 5 are drafts.

Phages represented in each track:

• Track 1 : Eaglepride 33

Track 2 : Topanga\_32

Track 3 : RhynO\_33

• Track 4: Kristoff\_33, Rebeuca\_33, WalterMcMickey\_32, Edison31\_32, Twister\_32

Track 5 : Shapes\_36, Rowdy\_36, DustyMartin\_36
Track 6 : Phrappuccino\_196, Settecandela\_221

Track 7: MrMiyagi 4, Fowlmouth 4

Track 8: JordanFarm\_49, Waterlily\_50, Truong\_47, Ashton\_48, ShyRosie\_49,

AloeVera 48, Akoni 47 • Track 9 : Barroma 46

• Track 10 : Hum25 84

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

The start number called the most often in the published annotations is 13, it was called in 11 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 DustyMartin 36, Eaglepride 33, Edison31 32, Fowlmouth 4, Kristoff 33, MrMiyagi\_4, Phrappuccino\_196, Rebeuca\_33, RhynO\_33, Rowdy\_36, Settecandela\_221, Shapes\_36, Twister\_32, WalterMcMickey\_32,

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

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

Akoni\_47, AloeVera\_48, Ashton\_48, Barroma\_46, Hum25\_84, JordanFarm\_49, ShyRosie\_49, Topanga\_32, Truong\_47, Waterlily\_50,

### **Summary by start number:**

#### Start 11:

- Found in 8 of 24 (33.3%) of genes in pham
- Manual Annotations of this start: 6 of 19

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akoni\_47 (EK2), AloeVera\_48 (EK2), Ashton\_48 (EK2), Barroma\_46 (EK2), JordanFarm\_49 (EK2), ShyRosie\_49 (EK2), Truong\_47 (EK2), Waterlily\_50 (EK2),

#### Start 12:

- Found in 1 of 24 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25\_84 (FQ),

#### Start 13:

- Found in 14 of 24 (58.3%) of genes in pham
- Manual Annotations of this start: 11 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DustyMartin\_36 (A10), Eaglepride\_33 (A10), Edison31\_32 (A10), Fowlmouth\_4 (AC), Kristoff\_33 (A10), MrMiyagi\_4 (AC), Phrappuccino\_196 (AA), Rebeuca\_33 (A10), RhynO\_33 (A10), Rowdy\_36 (A10), Settecandela\_221 (AA), Shapes\_36 (A10), Twister\_32 (A10), WalterMcMickey\_32 (A10),

#### Start 19:

- Found in 13 of 24 (54.2%) of genes in pham
- Manual Annotation's of this start: 1 of 19
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Topanga 32 (A10),

## Summary by clusters:

There are 5 clusters represented in this pham: AA, FQ, AC, EK2, A10,

Info for manual annotations of cluster A10:

- •Start number 13 was manually annotated 7 times for cluster A10.
- •Start number 19 was manually annotated 1 time for cluster A10.

Info for manual annotations of cluster AA:

•Start number 13 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AC:

Start number 13 was manually annotated 2 times for cluster AC.

Info for manual annotations of cluster EK2:

•Start number 11 was manually annotated 6 times for cluster EK2.

Info for manual annotations of cluster FQ:

•Start number 12 was manually annotated 1 time for cluster FQ.

### Gene Information:

Gene: Akoni\_47 Start: 48233, Stop: 48451, Start Num: 11

Candidate Starts for Akoni\_47:

(10, 48230), (Start: 11 @48233 has 6 MA's), (15, 48272), (16, 48275),

Gene: AloeVera\_48 Start: 48446, Stop: 48664, Start Num: 11

Candidate Starts for AloeVera\_48:

(10, 48443), (Start: 11 @48446 has 6 MA's), (15, 48485), (16, 48488),

Gene: Ashton\_48 Start: 48445, Stop: 48663, Start Num: 11

Candidate Starts for Ashton 48:

(10, 48442), (Start: 11 @48445 has 6 MA's), (15, 48484), (16, 48487),

Gene: Barroma 46 Start: 48235, Stop: 48453, Start Num: 11

Candidate Starts for Barroma 46:

(Start: 11 @48235 has 6 MA's), (15, 48274), (16, 48277),

Gene: DustyMartin\_36 Start: 23349, Stop: 23537, Start Num: 13

Candidate Starts for DustyMartin\_36:

(6, 23265), (Start: 13 @23349 has 11 MA's), (17, 23376), (Start: 19 @23382 has 1 MA's), (21, 23400), (25, 23439), (26, 23448),

Gene: Eaglepride\_33 Start: 23262, Stop: 23453, Start Num: 13

Candidate Starts for Eaglepride\_33:

(4, 23118), (5, 23139), (9, 23223), (Start: 13 @23262 has 11 MA's), (18, 23295), (Start: 19 @23298 has 1 MA's), (20, 23313), (22, 23319),

Gene: Edison31\_32 Start: 23292, Stop: 23486, Start Num: 13

Candidate Starts for Edison31\_32:

(Start: 13 @23292 has 11 MA's), (17, 23322), (18, 23325), (Start: 19 @23328 has 1 MA's), (25, 23385), (26, 23394),

Gene: Fowlmouth\_4 Start: 3411, Stop: 3611, Start Num: 13

Candidate Starts for Fowlmouth\_4:

(Start: 13 @3411 has 11 MA's), (14, 3423), (22, 3468), (23, 3474), (27, 3519), (28, 3522), (29, 3540),

Gene: Hum25 84 Start: 41844, Stop: 42065, Start Num: 12

Candidate Starts for Hum25 84:

(7, 41805), (Start: 12 @41844 has 1 MA's), (24, 41940), (25, 41958), (28, 41976),

Gene: JordanFarm\_49 Start: 48446, Stop: 48664, Start Num: 11

Candidate Starts for JordanFarm\_49:

(10, 48443), (Start: 11 @48446 has 6 MA's), (15, 48485), (16, 48488),

Gene: Kristoff\_33 Start: 23456, Stop: 23650, Start Num: 13

Candidate Starts for Kristoff 33:

(Start: 13 @23456 has 11 MA's), (17, 23486), (18, 23489), (Start: 19 @23492 has 1 MA's), (25, 23549), (26, 23558),

Gene: MrMiyagi\_4 Start: 3411, Stop: 3611, Start Num: 13

Candidate Starts for MrMiyagi\_4:

(Start: 13 @3411 has 11 MA's), (14, 3423), (22, 3468), (23, 3474), (27, 3519), (28, 3522), (29, 3540),

Gene: Phrappuccino\_196 Start: 132446, Stop: 132622, Start Num: 13

Candidate Starts for Phrappuccino\_196:

(8, 132395), (Start: 13 @132446 has 11 MA's), (Start: 19 @132482 has 1 MA's), (20, 132497), (28, 132557), (30, 132605),

Gene: Rebeuca\_33 Start: 23457, Stop: 23651, Start Num: 13

Candidate Starts for Rebeuca\_33:

(Start: 13 @23457 has 11 MA's), (17, 23487), (18, 23490), (Start: 19 @23493 has 1 MA's), (25, 23550), (26, 23559),

Gene: RhynO\_33 Start: 23438, Stop: 23626, Start Num: 13

Candidate Starts for RhynO 33:

(Start: 13 @23438 has 11 MA's), (17, 23465), (Start: 19 @23471 has 1 MA's), (21, 23489), (25, 23528), (26, 23537),

Gene: Rowdy\_36 Start: 23349, Stop: 23537, Start Num: 13

Candidate Starts for Rowdy\_36:

(6, 23265), (Start: 13 @23349 has 11 MA's), (17, 23376), (Start: 19 @23382 has 1 MA's), (21, 23400), (25, 23439), (26, 23448),

Gene: Settecandela\_221 Start: 141293, Stop: 141469, Start Num: 13

Candidate Starts for Settecandela\_221:

(8, 141242), (Start: 13 @141293 has 11 MA's), (Start: 19 @141329 has 1 MA's), (20, 141344), (28, 141404), (30, 141452),

Gene: Shapes\_36 Start: 23349, Stop: 23537, Start Num: 13

Candidate Starts for Shapes\_36:

(6, 23265), (Start: 13 @23349 has 11 MA's), (17, 23376), (Start: 19 @23382 has 1 MA's), (21, 23400), (25, 23439), (26, 23448),

Gene: ShyRosie\_49 Start: 48455, Stop: 48673, Start Num: 11

Candidate Starts for ShyRosie\_49:

(10, 48452), (Start: 11 @ 48455 has 6 MA's), (15, 48494), (16, 48497),

Gene: Topanga\_32 Start: 23414, Stop: 23569, Start Num: 19

Candidate Starts for Topanga 32:

(1, 22988), (2, 23087), (3, 23090), (4, 23237), (5, 23258), (9, 23342), (18, 23411), (Start: 19 @23414 has 1 MA's), (25, 23471), (26, 23480),

Gene: Truong\_47 Start: 48235, Stop: 48453, Start Num: 11

Candidate Starts for Truong\_47:

(10, 48232), (Start: 11 @48235 has 6 MA's), (15, 48274), (16, 48277),

Gene: Twister\_32 Start: 23290, Stop: 23484, Start Num: 13

Candidate Starts for Twister 32:

(Start: 13 @23290 has 11 MA's), (17, 23320), (18, 23323), (Start: 19 @23326 has 1 MA's), (25, 23383), (26, 23392),

Gene: WalterMcMickey\_32 Start: 23290, Stop: 23484, Start Num: 13

Candidate Starts for WalterMcMickey\_32:

(Start: 13 @23290 has 11 MA's), (17, 23320), (18, 23323), (Start: 19 @23326 has 1 MA's), (25, 23383), (26, 23392),

Gene: Waterlily 50 Start: 48486, Stop: 48704, Start Num: 11

Candidate Starts for Waterlily\_50:

(10, 48483), (Start: 11 @48486 has 6 MA's), (15, 48525), (16, 48528),