

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 165198 Report

This analysis was run 07/09/24 on database version 566.

Pham number 165198 has 32 members, 7 are drafts.

Phages represented in each track:

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Track 1 : Lannister_1
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- Track 2 : Daudau 1
- Track 3: TinaBelcher\_1, Alvy\_1, Paedore\_1, Omar\_1, Thestral\_1, TrvxScott\_1,

Bowden\_1, BartholomewSD\_1, Loofah\_1

- Track 4 : Jevington 1, Paolo 1, Puginator 1
- Track 5 : Caelum\_1, ELB20\_01
- Track 6: Nishikigoi\_1, Haizum\_1, Tefunt\_1
- Track 7 : Zainub\_1, Marav\_1
- Track 8 : Issmi 1
- Track 9 : Amethyst\_1, Diane\_1
- Track 10 : SqueakyClean 1
- Track 11 : Animus\_1, Triumph\_1, GirlDinner\_1
- Track 12 : Pablito\_1
- Track 13 : Superstar\_1
- Track 14: Janus 1
- Track 15 : Hank144 1

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

The start number called the most often in the published annotations is 9, it was called in 21 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Alvy\_1, Amethyst\_1, Animus\_1, BartholomewSD\_1, Bowden\_1, Caelum\_1, Diane\_1, ELB20\_01, GirlDinner\_1, Haizum\_1, Issmi\_1, Janus\_1, Loofah\_1, Marav\_1, Nishikigoi\_1, Omar\_1, Pablito\_1, Paedore\_1, Superstar\_1, Tefunt\_1, Thestral\_1, TinaBelcher\_1, Triumph\_1, TrvxScott\_1, Zainub\_1,

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

• Daudau\_1, Hank144\_1, Jevington\_1, Paolo\_1, Puginator\_1, SqueakyClean\_1,

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

Lannister 1.

# **Summary by start number:**

#### Start 3:

- Found in 7 of 32 (21.9%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Daudau\_1 (BD2),

#### Start 4:

- Found in 5 of 32 (15.6%) of genes in pham
- No Manual Annotations of this start.
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Jevington\_1 (BD2), Paolo\_1 (BD2),
  Puginator\_1 (BD2),

#### Start 6:

- Found in 2 of 32 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SqueakyClean\_1 (BD2),

#### Start 8:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hank144\_1 (BD2),

### Start 9:

- Found in 31 of 32 (96.9%) of genes in pham
- Manual Annotations of this start: 21 of 25
- Called 80.6% of time when present
- Phage (with cluster) where this start called: Alvy\_1 (BD2), Amethyst\_1 (BD2), Animus\_1 (BD2), BartholomewSD\_1 (BD2), Bowden\_1 (BD2), Caelum\_1 (BD2), Diane\_1 (BD2), ELB20\_01 (BD2), GirlDinner\_1 (BD2), Haizum\_1 (BD2), Issmi\_1 (BD2), Janus\_1 (BD2), Loofah\_1 (BD2), Marav\_1 (BD2), Nishikigoi\_1 (BD2), Omar\_1 (BD2), Pablito\_1 (BD2), Paedore\_1 (BD2), Superstar\_1 (BD2), Tefunt\_1 (BD2), Thestral\_1 (BD2), TinaBelcher\_1 (BD2), Triumph\_1 (BD2), TrvxScott\_1 (BD2), Zainub 1 (BD2),

#### Start 10:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lannister\_1 (BD1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: BD1, BD2,

Info for manual annotations of cluster BD1:

•Start number 10 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD2:

- •Start number 3 was manually annotated 1 time for cluster BD2.
- •Start number 6 was manually annotated 1 time for cluster BD2.
- •Start number 8 was manually annotated 1 time for cluster BD2.
- •Start number 9 was manually annotated 21 times for cluster BD2.

# Gene Information:

Gene: Alvy 1 Start: 311, Stop: 120, Start Num: 9

Candidate Starts for Alvy\_1: (Start: 9 @311 has 21 MA's),

Gene: Amethyst\_1 Start: 220, Stop: 35, Start Num: 9

Candidate Starts for Amethyst\_1:

(Start: 3 @ 256 has 1 MA's), (Start: 9 @ 220 has 21 MA's), (11, 184), (16, 97),

Gene: Animus\_1 Start: 250, Stop: 74, Start Num: 9

Candidate Starts for Animus\_1:

(Start: 9 @250 has 21 MA's), (17, 118), (18, 91),

Gene: BartholomewSD\_1 Start: 311, Stop: 120, Start Num: 9

Candidate Starts for BartholomewSD\_1:

(Start: 9 @311 has 21 MA's),

Gene: Bowden\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Bowden\_1: (Start: 9 @219 has 21 MA's),

Gene: Caelum\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Caelum\_1:

(Start: 9 @ 219 has 21 MA's), (11, 183), (16, 96),

Gene: Daudau\_1 Start: 259, Stop: 35, Start Num: 3

Candidate Starts for Daudau 1:

(Start: 3 @259 has 1 MA's), (Start: 9 @223 has 21 MA's), (16, 97),

Gene: Diane\_1 Start: 220, Stop: 35, Start Num: 9

Candidate Starts for Diane\_1:

(Start: 3 @256 has 1 MA's), (Start: 9 @220 has 21 MA's), (11, 184), (16, 97),

Gene: ELB20\_01 Start: 220, Stop: 35, Start Num: 9

Candidate Starts for ELB20\_01:

(Start: 9 @ 220 has 21 MA's), (11, 184), (16, 97),

Gene: GirlDinner\_1 Start: 250, Stop: 74, Start Num: 9

Candidate Starts for GirlDinner\_1:

(Start: 9 @250 has 21 MA's), (17, 118), (18, 91),

Gene: Haizum 1 Start: 220, Stop: 35, Start Num: 9

Candidate Starts for Haizum 1:

(Start: 3 @ 256 has 1 MA's), (Start: 9 @ 220 has 21 MA's), (11, 184),

Gene: Hank144\_1 Start: 259, Stop: 74, Start Num: 8

Candidate Starts for Hank144\_1:

(Start: 8 @ 259 has 1 MA's), (Start: 9 @ 250 has 21 MA's), (17, 118),

Gene: Issmi\_1 Start: 216, Stop: 25, Start Num: 9

Candidate Starts for Issmi 1:

(Start: 3 @252 has 1 MA's), (Start: 9 @216 has 21 MA's), (11, 183), (14, 111), (16, 96),

Gene: Janus\_1 Start: 250, Stop: 74, Start Num: 9

Candidate Starts for Janus\_1:

(Start: 6 @ 274 has 1 MA's), (Start: 9 @ 250 has 21 MA's), (17, 118), (18, 91),

Gene: Jevington\_1 Start: 255, Stop: 25, Start Num: 4

Candidate Starts for Jevington\_1:

(2, 261), (4, 255), (Start: 9 @219 has 21 MA's),

Gene: Lannister 1 Start: 273, Stop: 103, Start Num: 10

Candidate Starts for Lannister\_1:

(1, 357), (7, 297), (Start: 10 @273 has 1 MA's), (12, 231), (15, 174),

Gene: Loofah\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Loofah\_1: (Start: 9 @219 has 21 MA's),

Gene: Marav\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Marav\_1:

(2, 261), (4, 255), (Start: 9 @219 has 21 MA's),

Gene: Nishikigoi\_1 Start: 220, Stop: 35, Start Num: 9

Candidate Starts for Nishikigoi\_1:

(Start: 3 @256 has 1 MA's), (Start: 9 @220 has 21 MA's), (11, 184),

Gene: Omar\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Omar\_1: (Start: 9 @219 has 21 MA's),

Gene: Pablito\_1 Start: 250, Stop: 74, Start Num: 9

Candidate Starts for Pablito\_1:

(5, 277), (Start: 9 @ 250 has 21 MA's), (17, 118), (18, 91),

Gene: Paedore\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Paedore\_1: (Start: 9 @219 has 21 MA's),

Gene: Paolo 1 Start: 255, Stop: 25, Start Num: 4

Candidate Starts for Paolo\_1:

(2, 261), (4, 255), (Start: 9 @219 has 21 MA's),

Gene: Puginator\_1 Start: 255, Stop: 25, Start Num: 4

Candidate Starts for Puginator 1:

(2, 261), (4, 255), (Start: 9 @219 has 21 MA's),

Gene: SqueakyClean\_1 Start: 274, Stop: 74, Start Num: 6

Candidate Starts for SqueakyClean\_1:

(Start: 6 @ 274 has 1 MA's), (Start: 9 @ 250 has 21 MA's), (17, 118), (18, 91),

Gene: Superstar\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Superstar\_1:

(Start: 9 @ 219 has 21 MA's), (13, 129), (16, 96),

Gene: Tefunt\_1 Start: 220, Stop: 35, Start Num: 9

Candidate Starts for Tefunt\_1:

(Start: 3 @256 has 1 MA's), (Start: 9 @220 has 21 MA's), (11, 184),

Gene: Thestral\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Thestral\_1: (Start: 9 @219 has 21 MA's),

Gene: TinaBelcher\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for TinaBelcher\_1:

(Start: 9 @219 has 21 MA's),

Gene: Triumph\_1 Start: 249, Stop: 73, Start Num: 9

Candidate Starts for Triumph\_1:

(Start: 9 @249 has 21 MA's), (17, 117), (18, 90),

Gene: TrvxScott\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for TrvxScott\_1: (Start: 9 @219 has 21 MA's),

Gene: Zainub\_1 Start: 219, Stop: 25, Start Num: 9

Candidate Starts for Zainub\_1:

(2, 261), (4, 255), (Start: 9 @219 has 21 MA's),