

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 216617 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216617 has 18 members, 1 are drafts.

Phages represented in each track:

• Track 1 : Tristan 91

Track 2 : XianYue\_92

Track 3 : BabyRay\_92

• Track 4 : AgentM\_85, Jovo\_84, Phlorence\_84, Conspiracy\_86, Aragog\_86,

Tiger\_84, ForGetlt\_87, PickleBack\_87, Lev2\_86

• Track 5 : Dublin\_86

Track 6: Discoknowium 83, Archetta 75

• Track 7 : Bluefalcon\_81

• Track 8 : Zolita 84

Track 9 : MarysWell\_87

## 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 12 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 AgentM\_85, Aragog\_86, Archetta\_75, Bluefalcon\_81, Conspiracy\_86, Discoknowium\_83, ForGetIt\_87, Jovo\_84, Lev2\_86, Phlorence\_84, PickleBack\_87, Tiger\_84,

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:

BabyRay\_92, Dublin\_86, MarysWell\_87, Tristan\_91, XianYue\_92, Zolita\_84,

## **Summary by start number:**

#### Start 2:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: XianYue 92 (A2).

#### Start 3:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyRay\_92 (A3),

## Start 4:

- Found in 12 of 18 (66.7%) of genes in pham
- Manual Annotation's of this start: 12 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AgentM\_85 (A5), Aragog\_86 (A5), Archetta\_75 (A5), Bluefalcon\_81 (A5), Conspiracy\_86 (A5), Discoknowium\_83 (A5), ForGetIt\_87 (A5), Jovo\_84 (A5), Lev2\_86 (A5), Phlorence\_84 (A5), PickleBack\_87 (A5), Tiger\_84 (A5),

#### Start 5:

- Found in 1 of 18 (5.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tristan 91 (A2),

### Start 6:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dublin\_86 (A5),

#### Start 7:

- Found in 3 of 18 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 66.7% of time when present
- Phage (with cluster) where this start called: MarysWell 87 (A5), Zolita 84 (A5),

## **Summary by clusters:**

There are 3 clusters represented in this pham: A3, A2, A5,

Info for manual annotations of cluster A2:

•Start number 2 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A3:

•Start number 3 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster A5:

- •Start number 4 was manually annotated 12 times for cluster A5.
- •Start number 6 was manually annotated 1 time for cluster A5.
- •Start number 7 was manually annotated 2 times for cluster A5.

## Gene Information:

Gene: AgentM\_85 Start: 48983, Stop: 48822, Start Num: 4

Candidate Starts for AgentM\_85:

(Start: 4 @48983 has 12 MA's), (8, 48965), (9, 48953), (10, 48923), (12, 48887), (16, 48830),

Gene: Aragog\_86 Start: 49280, Stop: 49119, Start Num: 4

Candidate Starts for Aragog\_86:

(Start: 4 @ 49280 has 12 MA's), (8, 49262), (9, 49250), (10, 49220), (12, 49184), (16, 49127),

Gene: Archetta\_75 Start: 45871, Stop: 45734, Start Num: 4

Candidate Starts for Archetta\_75:

(Start: 4 @45871 has 12 MA's), (8, 45853), (9, 45841), (10, 45811), (12, 45775),

Gene: BabyRay\_92 Start: 49565, Stop: 49431, Start Num: 3

Candidate Starts for BabyRay\_92:

(1, 49589), (Start: 3 @ 49565 has 1 MA's), (10, 49508), (11, 49490), (14, 49445),

Gene: Bluefalcon\_81 Start: 49514, Stop: 49377, Start Num: 4

Candidate Starts for Bluefalcon\_81:

(Start: 4 @ 49514 has 12 MA's), (8, 49496), (10, 49454), (12, 49418),

Gene: Conspiracy\_86 Start: 49223, Stop: 49062, Start Num: 4

Candidate Starts for Conspiracy\_86:

(Start: 4 @ 49223 has 12 MA's), (8, 49205), (9, 49193), (10, 49163), (12, 49127), (16, 49070),

Gene: Discoknowium\_83 Start: 48691, Stop: 48554, Start Num: 4

Candidate Starts for Discoknowium\_83:

(Start: 4 @48691 has 12 MA's), (8, 48673), (9, 48661), (10, 48631), (12, 48595),

Gene: Dublin\_86 Start: 48520, Stop: 48392, Start Num: 6

Candidate Starts for Dublin\_86:

(Start: 6 @48520 has 1 MA's), (Start: 7 @48514 has 2 MA's), (10, 48469), (12, 48433),

Gene: ForGetlt\_87 Start: 49530, Stop: 49369, Start Num: 4

Candidate Starts for ForGetIt 87:

(Start: 4 @ 49530 has 12 MA's), (8, 49512), (9, 49500), (10, 49470), (12, 49434), (16, 49377),

Gene: Jovo\_84 Start: 49786, Stop: 49625, Start Num: 4

Candidate Starts for Jovo\_84:

(Start: 4 @ 49786 has 12 MA's), (8, 49768), (9, 49756), (10, 49726), (12, 49690), (16, 49633),

Gene: Lev2\_86 Start: 49139, Stop: 48978, Start Num: 4

Candidate Starts for Lev2\_86:

(Start: 4 @ 49139 has 12 MA's), (8, 49121), (9, 49109), (10, 49079), (12, 49043), (16, 48986),

Gene: MarysWell\_87 Start: 49703, Stop: 49581, Start Num: 7

Candidate Starts for MarysWell\_87:

(Start: 6 @ 49709 has 1 MA's), (Start: 7 @ 49703 has 2 MA's), (10, 49658), (12, 49622),

Gene: Phlorence\_84 Start: 48883, Stop: 48722, Start Num: 4

Candidate Starts for Phlorence 84:

(Start: 4 @ 48883 has 12 MA's), (8, 48865), (9, 48853), (10, 48823), (12, 48787), (16, 48730),

Gene: PickleBack\_87 Start: 49337, Stop: 49176, Start Num: 4

Candidate Starts for PickleBack\_87:

(Start: 4 @49337 has 12 MA's), (8, 49319), (9, 49307), (10, 49277), (12, 49241), (16, 49184),

Gene: Tiger\_84 Start: 48804, Stop: 48643, Start Num: 4

Candidate Starts for Tiger\_84:

(Start: 4 @48804 has 12 MA's), (8, 48786), (9, 48774), (10, 48744), (12, 48708), (16, 48651),

Gene: Tristan\_91 Start: 52008, Stop: 51880, Start Num: 5

Candidate Starts for Tristan\_91:

(5, 52008), (9, 51981), (10, 51957), (11, 51939), (13, 51915),

Gene: XianYue\_92 Start: 51428, Stop: 51279, Start Num: 2

Candidate Starts for XianYue\_92:

(Start: 2 @51428 has 1 MA's), (10, 51356), (11, 51338), (14, 51293), (15, 51287),

Gene: Zolita\_84 Start: 49422, Stop: 49300, Start Num: 7

Candidate Starts for Zolita\_84:

(Start: 7 @49422 has 2 MA's), (10, 49377), (12, 49341),