

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 196902 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196902 has 17 members, 0 are drafts.

Phages represented in each track:

Track 1 : BabyRay\_92

Track 2 : AgentM\_85, Jovo\_84, Phlorence\_84, Conspiracy\_86, Aragog\_86,

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

Track 3 : Dublin\_86

Track 4 : Discoknowium\_83, Archetta\_75

• Track 5 : Bluefalcon\_81

Track 6 : Zolita\_84

Track 7 : MarysWell\_87

Track 8 : PP\_09

# 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:

•

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

• BabyRay\_92, Dublin\_86, MarysWell\_87, PP\_09, Zolita\_84,

### Summary by start number:

#### Start 3:

- Found in 1 of 17 (5.9%) 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 17 (70.6%) of genes in pham
- Manual Annotations 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 2 of 17 (11.8%) 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 6:

- Found in 3 of 17 (17.6%) 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),

#### Start 7:

- Found in 13 of 17 (76.5%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 7.7% of time when present
- Phage (with cluster) where this start called: PP 09 (A7),

### **Summary by clusters:**

There are 3 clusters represented in this pham: A3, A5, A7,

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

Info for manual annotations of cluster A7:

•Start number 7 was manually annotated 1 time for cluster A7.

#### Gene Information:

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

Candidate Starts for AgentM\_85:

(Start: 4 @48983 has 12 MA's), (Start: 7 @48965 has 1 MA's), (8, 48953), (9, 48923), (11, 48887), (13, 48830),

Gene: Aragog 86 Start: 49280, Stop: 49119, Start Num: 4

Candidate Starts for Aragog\_86:

(Start: 4 @49280 has 12 MA's), (Start: 7 @49262 has 1 MA's), (8, 49250), (9, 49220), (11, 49184), (13, 49127),

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

Candidate Starts for Archetta\_75:

(Start: 4 @45871 has 12 MA's), (Start: 7 @45853 has 1 MA's), (8, 45841), (9, 45811), (11, 45775),

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

Candidate Starts for BabyRay\_92:

(2, 49589), (Start: 3 @49565 has 1 MA's), (9, 49508), (10, 49490), (12, 49445),

Gene: Bluefalcon 81 Start: 49514, Stop: 49377, Start Num: 4

Candidate Starts for Bluefalcon\_81:

(Start: 4 @ 49514 has 12 MA's), (Start: 7 @ 49496 has 1 MA's), (9, 49454), (11, 49418),

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

Candidate Starts for Conspiracy\_86:

(Start: 4 @49223 has 12 MA's), (Start: 7 @49205 has 1 MA's), (8, 49193), (9, 49163), (11, 49127), (13, 49070),

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

Candidate Starts for Discoknowium\_83:

(Start: 4 @ 48691 has 12 MA's), (Start: 7 @ 48673 has 1 MA's), (8, 48661), (9, 48631), (11, 48595),

Gene: Dublin\_86 Start: 48520, Stop: 48392, Start Num: 5

Candidate Starts for Dublin\_86:

(Start: 5 @ 48520 has 1 MA's), (Start: 6 @ 48514 has 2 MA's), (9, 48469), (11, 48433),

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

Candidate Starts for ForGetIt\_87:

(Start: 4 @49530 has 12 MA's), (Start: 7 @49512 has 1 MA's), (8, 49500), (9, 49470), (11, 49434), (13, 49377),

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

Candidate Starts for Jovo 84:

(Start: 4 @ 49786 has 12 MA's), (Start: 7 @ 49768 has 1 MA's), (8, 49756), (9, 49726), (11, 49690), (13, 49633),

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

Candidate Starts for Lev2\_86:

(Start: 4 @49139 has 12 MA's), (Start: 7 @49121 has 1 MA's), (8, 49109), (9, 49079), (11, 49043), (13, 48986),

Gene: MarysWell\_87 Start: 49703, Stop: 49581, Start Num: 6

Candidate Starts for MarysWell 87:

(Start: 5 @49709 has 1 MA's), (Start: 6 @49703 has 2 MA's), (9, 49658), (11, 49622),

Gene: PP\_09 Start: 2269, Stop: 2150, Start Num: 7

Candidate Starts for PP\_09:

(1, 2356), (Start: 7 @ 2269 has 1 MA's), (9, 2227),

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

Candidate Starts for Phlorence\_84:

(Start: 4 @48883 has 12 MA's), (Start: 7 @48865 has 1 MA's), (8, 48853), (9, 48823), (11, 48787), (13, 48730),

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

Candidate Starts for PickleBack\_87:

(Start: 4 @49337 has 12 MA's), (Start: 7 @49319 has 1 MA's), (8, 49307), (9, 49277), (11, 49241), (13, 49184),

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

Candidate Starts for Tiger\_84:

(Start: 4 @48804 has 12 MA's), (Start: 7 @48786 has 1 MA's), (8, 48774), (9, 48744), (11, 48708), (13, 48651),

Gene: Zolita\_84 Start: 49422, Stop: 49300, Start Num: 6

Candidate Starts for Zolita\_84:

(Start: 6 @49422 has 2 MA's), (9, 49377), (11, 49341),