

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 216643 Report

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

Pham number 216643 has 16 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Commandaria 93
- Track 2 : IDyn 89
- Track 3: HubbaBubba 86
- Track 4: BiPauneto 94, WhoseManz 91
- Track 5 : Yndexa\_92, Sukkupi\_92
- Track 6 : Marietta\_91
- Track 7 : NadineRae 91
- Track 8 : GMA7 84
- Track 9 : Amore2 97
- Track 10 : Austin\_95, HayZem\_97
- Track 11 : GTE7 86
- Track 12 : RobinSparkles\_119
- Track 13 : Jumbo\_98

# 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 8 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BiPauneto\_94, HubbaBubba\_86, IDyn\_89, Marietta\_91, NadineRae\_91, Sukkupi\_92, WhoseManz\_91, Yndexa\_92,

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

•

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

• Amore2\_97, Austin\_95, Commandaria\_93, GMA7\_84, GTE7\_86, HayZem\_97, Jumbo\_98, RobinSparkles\_119,

# Summary by start number:

### Start 1:

• Found in 1 of 16 (6.2%) of genes in pham

- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commandaria\_93 (CR2),

### Start 2:

- Found in 1 of 16 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jumbo\_98 (DF3),

## Start 3:

- Found in 5 of 16 (31.2%) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Amore2\_97 (CS1), Austin\_95 (CS1), GTE7\_86 (CS1), HayZem\_97 (CS1),

#### Start 4:

- Found in 8 of 16 (50.0%) of genes in pham
- Manual Annotations of this start: 8 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BiPauneto\_94 (CR4), HubbaBubba\_86 (CR4), IDyn\_89 (CR4), Marietta\_91 (CR4), NadineRae\_91 (CR4), Sukkupi\_92 (CR4), WhoseManz\_91 (CR4), Yndexa\_92 (CR4),

### Start 5:

- Found in 5 of 16 (31.2%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: GMA7\_84 (CS1),

#### Start 6:

- Found in 1 of 16 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RobinSparkles\_119 (CX),

## Summary by clusters:

There are 5 clusters represented in this pham: CR2, CX, CS1, DF3, CR4,

Info for manual annotations of cluster CR2:

•Start number 1 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR4:

•Start number 4 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CS1:

•Start number 3 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CX:

•Start number 6 was manually annotated 1 time for cluster CX.

Info for manual annotations of cluster DF3:

•Start number 2 was manually annotated 1 time for cluster DF3.

## Gene Information:

Gene: Amore2\_97 Start: 71099, Stop: 70830, Start Num: 3

Candidate Starts for Amore2 97:

(Start: 3 @71099 has 3 MA's), (5, 71081), (8, 71057), (10, 71045), (15, 70997), (17, 70961), (18, 70937), (22, 70841),

Gene: Austin 95 Start: 70932, Stop: 70663, Start Num: 3

Candidate Starts for Austin\_95:

(Start: 3 @70932 has 3 MA's), (5, 70914), (8, 70890), (10, 70878), (15, 70830), (17, 70794), (18, 70770), (22, 70674),

Gene: BiPauneto\_94 Start: 65422, Stop: 65700, Start Num: 4

Candidate Starts for BiPauneto 94:

(Start: 4 @65422 has 8 MA's), (13, 65488), (16, 65539),

Gene: Commandaria 93 Start: 66901, Stop: 67203, Start Num: 1

Candidate Starts for Commandaria\_93:

(Start: 1 @66901 has 1 MA's), (9, 66973), (11, 66982), (12, 66991), (14, 66997),

Gene: GMA7 84 Start: 64843, Stop: 64592, Start Num: 5

Candidate Starts for GMA7 84:

(Start: 3 @64861 has 3 MA's), (5, 64843), (8, 64819), (10, 64807), (15, 64759), (17, 64723), (18, 64699), (22, 64603),

Gene: GTE7\_86 Start: 65768, Stop: 65499, Start Num: 3

Candidate Starts for GTE7 86:

(Start: 3 @65768 has 3 MA's), (5, 65750), (8, 65726), (10, 65714), (15, 65666), (17, 65630), (18, 65606), (22, 65510),

Gene: HayZem\_97 Start: 70939, Stop: 70670, Start Num: 3

Candidate Starts for HayZem\_97:

(Start: 3 @ 70939 has 3 MA's), (5, 70921), (8, 70897), (10, 70885), (15, 70837), (17, 70801), (18, 70777), (22, 70681),

Gene: HubbaBubba 86 Start: 62424, Stop: 62702, Start Num: 4

Candidate Starts for HubbaBubba 86:

(Start: 4 @62424 has 8 MA's), (7, 62460), (14, 62496), (15, 62520), (16, 62541),

Gene: IDyn\_89 Start: 63577, Stop: 63855, Start Num: 4

Candidate Starts for IDyn\_89:

(Start: 4 @63577 has 8 MA's), (7, 63613), (14, 63649),

Gene: Jumbo 98 Start: 76302, Stop: 76030, Start Num: 2

Candidate Starts for Jumbo 98:

(Start: 2 @76302 has 1 MA's), (20, 76098),

Gene: Marietta\_91 Start: 63120, Stop: 63398, Start Num: 4

Candidate Starts for Marietta\_91:

(Start: 4 @63120 has 8 MA's), (13, 63186), (21, 63372),

Gene: NadineRae\_91 Start: 63050, Stop: 63328, Start Num: 4

Candidate Starts for NadineRae\_91:

(Start: 4 @63050 has 8 MA's), (7, 63086), (13, 63116), (15, 63146), (16, 63167), (17, 63185), (21, 63302),

Gene: RobinSparkles\_119 Start: 77236, Stop: 77000, Start Num: 6

Candidate Starts for RobinSparkles\_119: (Start: 6 @77236 has 1 MA's), (19, 77077),

Gene: Sukkupi\_92 Start: 64820, Stop: 65098, Start Num: 4

Candidate Starts for Sukkupi\_92:

(Start: 4 @64820 has 8 MA's), (13, 64886), (14, 64892), (16, 64937),

Gene: WhoseManz\_91 Start: 62783, Stop: 63061, Start Num: 4

Candidate Starts for WhoseManz\_91:

(Start: 4 @62783 has 8 MA's), (13, 62849), (16, 62900),

Gene: Yndexa\_92 Start: 64820, Stop: 65098, Start Num: 4

Candidate Starts for Yndexa\_92:

(Start: 4 @64820 has 8 MA's), (13, 64886), (14, 64892), (16, 64937),