



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 305268 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305268 has 25 members, 2 are drafts.

Phages represented in each track:

- Track 1 : MalagasyRose\_55
- Track 2 : NosilaM\_64
- Track 3 : IDyn\_61, HubbaBubba\_57, WhoseManz\_62
- Track 4 : Marietta\_63
- Track 5 : Sukkupi\_63, Yndexa\_63, BiPauneto\_65
- Track 6 : NadineRae\_62
- Track 7 : Pemberton\_65
- Track 8 : Scuba\_72
- Track 9 : Madi\_66, BiteSize\_67, Terapin\_68, Beyoncage\_67, Sienna\_67, Djokovic\_67
- Track 10 : Suzy\_66
- Track 11 : LilyPad\_67
- Track 12 : Apeppi\_87
- Track 13 : Phreeze\_55, Damien\_57
- Track 14 : Beckerton\_56
- Track 15 : Rando14\_49

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

The start number called the most often in the published annotations is 26, it was called in 11 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apeppi\_87, Beyoncage\_67, BiteSize\_67, Djokovic\_67, LilyPad\_67, Madi\_66, MalagasyRose\_55, Pemberton\_65, Rando14\_49, Sienna\_67, Suzy\_66, Terapin\_68,

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

- BiPauneto\_65, HubbaBubba\_57, IDyn\_61, Marietta\_63, NadineRae\_62, Sukkupi\_63, WhoseManz\_62, Yndexa\_63,

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

- Beckerton\_56, Damien\_57, NosilaM\_64, Phreeze\_55, Scuba\_72,

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

Start 16:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Scuba\_72 (CR5),

Start 19:

- Found in 9 of 25 ( 36.0% ) of genes in pham
- Manual Annotations of this start: 8 of 23
- Called 88.9% of time when present
- Phage (with cluster) where this start called: BiPauneto\_65 (CR4), HubbaBubba\_57 (CR4), IDyn\_61 (CR4), Marietta\_63 (CR4), NadineRae\_62 (CR4), Sukkupi\_63 (CR4), WhoseManz\_62 (CR4), Yndexa\_63 (CR4),

Start 24:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NosilaM\_64 (CR2),

Start 25:

- Found in 3 of 25 ( 12.0% ) of genes in pham
- Manual Annotations of this start: 3 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beckerton\_56 (H1), Damien\_57 (H1), Phreeze\_55 (H1),

Start 26:

- Found in 20 of 25 ( 80.0% ) of genes in pham
- Manual Annotations of this start: 11 of 23
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Apeppi\_87 (DV), Beyoncage\_67 (DG1), BiteSize\_67 (DG1), Djokovic\_67 (DG1), LilyPad\_67 (DG1), Madi\_66 (DG1), MalagasyRose\_55 (AG), Pemberton\_65 (CR4), Rando14\_49 (K5), Sienna\_67 (DG1), Suzy\_66 (DG1), Terapin\_68 (DG1),

**Summary by clusters:**

There are 8 clusters represented in this pham: CR2, CR4, AG, CR5, H1, DG1, K5, DV,

Info for manual annotations of cluster AG:

- Start number 26 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster CR2:

- Start number 24 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR4:

- Start number 19 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster DG1:

- Start number 26 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DV:

- Start number 26 was manually annotated 1 time for cluster DV.

Info for manual annotations of cluster H1:

- Start number 25 was manually annotated 3 times for cluster H1.

Info for manual annotations of cluster K5:

- Start number 26 was manually annotated 1 time for cluster K5.

### **Gene Information:**

Gene: Apeppi\_87 Start: 63900, Stop: 64037, Start Num: 26

Candidate Starts for Apeppi\_87:

(7, 63636), (23, 63837), (Start: 26 @63900 has 11 MA's), (28, 63936), (29, 63939), (31, 63951), (39, 64011), (42, 64026),

Gene: Beckerton\_56 Start: 44938, Stop: 45120, Start Num: 25

Candidate Starts for Beckerton\_56:

(20, 44890), (22, 44899), (Start: 25 @44938 has 3 MA's), (30, 45004),

Gene: Beyoncage\_67 Start: 50195, Stop: 50335, Start Num: 26

Candidate Starts for Beyoncage\_67:

(11, 50054), (21, 50129), (Start: 26 @50195 has 11 MA's), (38, 50288), (40, 50309),

Gene: BiPauneto\_65 Start: 48080, Stop: 47850, Start Num: 19

Candidate Starts for BiPauneto\_65:

(Start: 19 @48080 has 8 MA's), (Start: 26 @48014 has 11 MA's), (36, 47924),

Gene: BiteSize\_67 Start: 50281, Stop: 50421, Start Num: 26

Candidate Starts for BiteSize\_67:

(11, 50140), (21, 50215), (Start: 26 @50281 has 11 MA's), (38, 50374), (40, 50395),

Gene: Damien\_57 Start: 44418, Stop: 44600, Start Num: 25

Candidate Starts for Damien\_57:

(3, 44058), (4, 44067), (5, 44115), (8, 44199), (9, 44211), (10, 44238), (12, 44313), (14, 44337), (20, 44370), (22, 44379), (Start: 25 @44418 has 3 MA's), (30, 44484),

Gene: Djokovic\_67 Start: 50194, Stop: 50334, Start Num: 26

Candidate Starts for Djokovic\_67:

(11, 50053), (21, 50128), (Start: 26 @50194 has 11 MA's), (38, 50287), (40, 50308),

Gene: HubbaBubba\_57 Start: 44587, Stop: 44357, Start Num: 19

Candidate Starts for HubbaBubba\_57:

(Start: 19 @44587 has 8 MA's), (Start: 26 @44521 has 11 MA's), (36, 44431),

Gene: IDyn\_61 Start: 46010, Stop: 45780, Start Num: 19

Candidate Starts for IDyn\_61:

(Start: 19 @46010 has 8 MA's), (Start: 26 @45944 has 11 MA's), (36, 45854),

Gene: LilyPad\_67 Start: 50812, Stop: 50952, Start Num: 26  
Candidate Starts for LilyPad\_67:  
(11, 50668), (21, 50746), (Start: 26 @50812 has 11 MA's), (38, 50905),

Gene: Madi\_66 Start: 50031, Stop: 50171, Start Num: 26  
Candidate Starts for Madi\_66:  
(11, 49890), (21, 49965), (Start: 26 @50031 has 11 MA's), (38, 50124), (40, 50145),

Gene: MalagasyRose\_55 Start: 38193, Stop: 38360, Start Num: 26  
Candidate Starts for MalagasyRose\_55:  
(15, 38097), (18, 38118), (Start: 26 @38193 has 11 MA's), (35, 38271), (40, 38319), (41, 38325), (43, 38352),

Gene: Marietta\_63 Start: 46140, Stop: 45910, Start Num: 19  
Candidate Starts for Marietta\_63:  
(2, 46635), (6, 46299), (Start: 19 @46140 has 8 MA's), (Start: 26 @46074 has 11 MA's), (36, 45984),

Gene: NadineRae\_62 Start: 45743, Stop: 45513, Start Num: 19  
Candidate Starts for NadineRae\_62:  
(Start: 19 @45743 has 8 MA's), (Start: 26 @45677 has 11 MA's), (36, 45587),

Gene: NosilaM\_64 Start: 49246, Stop: 49061, Start Num: 24  
Candidate Starts for NosilaM\_64:  
(21, 49282), (Start: 24 @49246 has 1 MA's), (34, 49141), (37, 49114),

Gene: Pemberton\_65 Start: 46421, Stop: 46257, Start Num: 26  
Candidate Starts for Pemberton\_65:  
(Start: 19 @46487 has 8 MA's), (Start: 26 @46421 has 11 MA's), (36, 46331),

Gene: Phreeze\_55 Start: 44015, Stop: 44197, Start Num: 25  
Candidate Starts for Phreeze\_55:  
(3, 43655), (4, 43664), (5, 43712), (8, 43796), (9, 43808), (10, 43835), (12, 43910), (14, 43934), (20, 43967), (22, 43976), (Start: 25 @44015 has 3 MA's), (30, 44081),

Gene: Rando14\_49 Start: 35934, Stop: 36101, Start Num: 26  
Candidate Starts for Rando14\_49:  
(17, 35850), (Start: 26 @35934 has 11 MA's), (27, 35949), (32, 35988), (37, 36036),

Gene: Scuba\_72 Start: 49108, Stop: 48863, Start Num: 16  
Candidate Starts for Scuba\_72:  
(1, 49777), (16, 49108), (21, 49084), (29, 48979), (33, 48961), (37, 48916),

Gene: Sienna\_67 Start: 50272, Stop: 50412, Start Num: 26  
Candidate Starts for Sienna\_67:  
(11, 50131), (21, 50206), (Start: 26 @50272 has 11 MA's), (38, 50365), (40, 50386),

Gene: Sukkupi\_63 Start: 47971, Stop: 47741, Start Num: 19  
Candidate Starts for Sukkupi\_63:  
(Start: 19 @47971 has 8 MA's), (Start: 26 @47905 has 11 MA's), (36, 47815),

Gene: Suzy\_66 Start: 51225, Stop: 51362, Start Num: 26  
Candidate Starts for Suzy\_66:  
(13, 51108), (21, 51159), (Start: 26 @51225 has 11 MA's), (38, 51318),

Gene: Terapin\_68 Start: 50196, Stop: 50336, Start Num: 26

Candidate Starts for Terapin\_68:

(11, 50055), (21, 50130), (Start: 26 @50196 has 11 MA's), (38, 50289), (40, 50310),

Gene: WhoseManz\_62 Start: 45753, Stop: 45523, Start Num: 19

Candidate Starts for WhoseManz\_62:

(Start: 19 @45753 has 8 MA's), (Start: 26 @45687 has 11 MA's), (36, 45597),

Gene: Yndexa\_63 Start: 47971, Stop: 47741, Start Num: 19

Candidate Starts for Yndexa\_63:

(Start: 19 @47971 has 8 MA's), (Start: 26 @47905 has 11 MA's), (36, 47815),