Pham 87664


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 87664 Report

This analysis was run 04/05/24 on database version 557.
Pham number 87664 has 11 members, 1 are drafts.
Phages represented in each track:

- Track 1 : Basilisk_61, Ruchi_60
- Track 2 : Galaxy-61
- Track 3 : Coral_69, Cote_71
- Track 4 : HannāhPhantaña_76
- Track 5 : Kepler_70
- Track 6 : Amelia 68
- Track 7 : Daob_69
- Track 8 : Kuleana 73
- Track 9 : Polka_67


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

The start number called the most often in the published annotations is 15 , it was called in 5 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Coral_69, Cote_71, Galaxy_61, Kepler_70, Polka_67,

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

- Daob_69,

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

- Amelia_68, Basilisk_61, HannahPhantana_76, Kuleana_73, Ruchi_60,


## Summary by start number:

Start 11:

- Found in 8 of 11 ( $72.7 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $12.5 \%$ of time when present
- Phage (with cluster) where this start called: HannahPhantana_76 (AS2),

Start 14:

- Found in 5 of 11 ( $45.5 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 20.0\% of time when present
- Phage (with cluster) where this start called: Daob_69 (AS2),

Start 15:

- Found in 6 of 11 ( $54.5 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 10
- Called $83.3 \%$ of time when present
- Phage (with cluster) where this start called: Coral_69 (AS2), Cote_71 (AS2),

Galaxy_61 (AS1), Kepler_70 (AS2), Polka_67 (AS2̄),
Start 16:

- Found in 2 of 11 ( 18.2\% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0\% of time when present
- Phage (with cluster) where this start called: Basilisk_61 (AS1), Ruchi_60 (AS1),

Start 17:

- Found in 2 of 11 ( $18.2 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Amelia_68 (AS2),

Start 18:

- Found in 3 of 11 ( $27.3 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called $33.3 \%$ of time when present
- Phage (with cluster) where this start called: Kuleana_73 (AS2),


## Summary by clusters:

There are 2 clusters represented in this pham: AS2, AS1,
Info for manual annotations of cluster AS1:

- Start number 15 was manually annotated 1 time for cluster AS1.
-Start number 16 was manually annotated 2 times for cluster AS1.
Info for manual annotations of cluster AS2:
- Start number 14 was manually annotated 1 time for cluster AS2.
- Start number 15 was manually annotated 4 times for cluster AS2.
- Start number 17 was manually annotated 1 time for cluster AS2.
- Start number 18 was manually annotated 1 time for cluster AS2.


## Gene Information:

Gene: Amelia_68 Start: 36968, Stop: 37153, Start Num: 17
Candidate Starts for Amelia_68:
(7, 36887), (8, 36896), (10, 36926), (11, 36932), (12, 36938), (13, 36947), (Start: 17 @36968 has 1
MA's), (Start: 18 @36971 has 1 MA's), (22, 37013), (27, 37067),
Gene: Basilisk_61 Start: 37058, Stop: 37255, Start Num: 16

Candidate Starts for Basilisk_61:
$(5,36956),(6,36959),(9,37001)$, (Start: 16 @37058 has 2 MA's), (21, 37100), (23, 37118), (25, 37139), (26, 37151), (31, 37184), (32, 37196),

Gene: Coral_69 Start: 37151, Stop: 37345, Start Num: 15
Candidate Starts for Coral_69:
$(5,37052),(7,37073),(8,37082),(10,37112),(11,37118),(12,37124),(13,37133),(S t a r t: 14$ @37145 has 1 MA's), (Start: 15 @37151 has 5 MA's), (22, 37199),

Gene: Cote_71 Start: 37603, Stop: 37797, Start Num: 15
Candidate Starts for Cote_71:
(5, 37504), (7, 37525), (8, 37534), (10, 37564), (11, 37570), (12, 37576), (13, 37585), (Start: 14 @37597 has 1 MA's), (Start: 15 @37603 has 5 MA's), (22, 37651),

Gene: Daob_69 Start: 36940, Stop: 37140, Start Num: 14
Candidate Starts for Daob_69:
( 5,36847 ), (7, 36868), (8, 36877), (10, 36907), (11, 36913), (12, 36919), (13, 36928), (Start: 14 @36940 has 1 MA's), (Start: 15 @36946 has 5 MA's), (22, 36994),

Gene: Galaxy_61 Start: 36357, Stop: 36563, Start Num: 15
Candidate Starts for Galaxy_61:
(1, 36147), (4, 36249), (6, 36258), (7, 36276), (10, 36318), (11, 36324), (Start: 15 @36357 has 5 MA's), (19, 36378), (20, 36393), (23, 36426), (24, 36432), (26, 36459), (30, 36483),

Gene: HannahPhantana_76 Start: 36927, Stop: 37148, Start Num: 11
Candidate Starts for HannahPhantana_76:
(7, 36882), (8, 36891), (10, 36921), (11, 36927), (12, 36933), (13, 36942), (Start: 17 @36963 has 1 MA's), (Start: 18 @36966 has 1 MA's), (22, 37008), (27, 37062),

Gene: Kepler_70 Start: 36934, Stop: 37122, Start Num: 15
Candidate Starts for Kepler_70:
(2, 36826), (5, 36835), (7, 36856), (8, 36865), (10, 36895), (11, 36901), (12, 36907), (13, 36916), (Start: 14 @36928 has 1 MA's), (Start: 15 @36934 has 5 MA's), (22, 36982),

Gene: Kuleana_73 Start: 37808, Stop: 37984, Start Num: 18
Candidate Starts for Kuleana_73:
(10, 37766), (Start: 18 @37808 has 1 MA's), (20, 37832), (22, 37850), (27, 37904), (28, 37910), (29, 37913),

Gene: Polka_67 Start: 36693, Stop: 36881, Start Num: 15
Candidate Starts for Polka_67:
(3, 36588), (5, 36594), (7, 36615), (8, 36624), (10, 36654), (11, 36660), (12, 36666), (13, 36675), (Start: 14 @36687 has 1 MA's), (Start: 15 @36693 has 5 MA's), (22, 36741), (27, 36795),

Gene: Ruchi_60 Start: 36980, Stop: 37177, Start Num: 16
Candidate Starts for Ruchi_60:
(5, 36878), (6, 36881), (9, 36923), (Start: 16 @36980 has 2 MA's), (21, 37022), (23, 37040), (25, 37061), (26, 37073), (31, 37106), (32, 37118),

