

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 224976 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224976 has 16 members, 4 are drafts.

Phages represented in each track:

Track 1 : MiniBagel\_4, CapnMurica\_4, Tenno\_4

• Track 2 : Teacup\_4, Issa\_3, Nightmare\_3, LucySwiss\_3

Track 3: Rainydai\_4, CricKo\_4, Thiqqums\_4

Track 4: Miek\_4, FromIndy\_4, SendItCS\_4, Regigigas\_4

• Track 5 : Kardashian 4

• Track 6 : ClubPenguin 3

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

The start number called the most often in the published annotations is 3, it was called in 6 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 CricKo\_4, FromIndy\_4, Kardashian\_4, Miek\_4, Rainydai\_4, Regigigas\_4, SendItCS\_4, Thiqqums\_4,

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:

• CapnMurica\_4, ClubPenguin\_3, Issa\_3, LucySwiss\_3, MiniBagel\_4, Nightmare\_3, Teacup\_4, Tenno\_4,

## Summary by start number:

#### Start 1:

- Found in 3 of 16 (18.8%) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CapnMurica\_4 (AU1), MiniBagel\_4 (AU1), Tenno\_4 (AU1),

#### Start 2:

• Found in 4 of 16 (25.0%) of genes in pham

- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Issa\_3 (AU1), LucySwiss\_3 (AU1), Nightmare\_3 (AU1), Teacup\_4 (AU1),

#### Start 3:

- Found in 8 of 16 (50.0%) of genes in pham
- Manual Annotations of this start: 6 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CricKo\_4 (BI4), FromIndy\_4 (BI4), Kardashian\_4 (BI6), Miek\_4 (BI4), Rainydai\_4 (BI4), Regigigas\_4 (BI4), SendItCS\_4 (BI4), Thiqqums\_4 (BI4),

#### Start 4:

- Found in 1 of 16 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ClubPenguin\_3 (BI7),

### **Summary by clusters:**

There are 4 clusters represented in this pham: AU1, BI7, BI4, BI6,

Info for manual annotations of cluster AU1:

- •Start number 1 was manually annotated 3 times for cluster AU1.
- •Start number 2 was manually annotated 2 times for cluster AU1.

Info for manual annotations of cluster BI4:

•Start number 3 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI6:

•Start number 3 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

•Start number 4 was manually annotated 1 time for cluster BI7.

#### Gene Information:

Gene: CapnMurica 4 Start: 2789, Stop: 3742, Start Num: 1

Candidate Starts for CapnMurica 4:

(Start: 1 @2789 has 3 MA's), (8, 3149), (10, 3209), (12, 3281), (14, 3344), (21, 3599), (22, 3632), (23, 3647),

Gene: ClubPenguin\_3 Start: 874, Stop: 1728, Start Num: 4

Candidate Starts for ClubPenguin\_3:

(Start: 4 @874 has 1 MA's), (9, 1156), (11, 1246), (13, 1276), (15, 1324), (18, 1555),

Gene: CricKo 4 Start: 1128, Stop: 1970, Start Num: 3

Candidate Starts for CricKo 4:

(Start: 3 @1128 has 6 MA's), (5, 1134), (9, 1413), (15, 1581), (16, 1602), (20, 1806),

Gene: FromIndy\_4 Start: 1128, Stop: 1970, Start Num: 3

Candidate Starts for FromIndy\_4:

(Start: 3 @1128 has 6 MA's), (9, 1413), (15, 1581), (16, 1602), (20, 1806),

Gene: Issa\_3 Start: 1538, Stop: 2491, Start Num: 2

Candidate Starts for Issa\_3:

(Start: 2 @1538 has 2 MA's), (6, 1664), (17, 2243),

Gene: Kardashian\_4 Start: 1143, Stop: 2003, Start Num: 3

Candidate Starts for Kardashian\_4:

(Start: 3 @1143 has 6 MA's), (7, 1212), (9, 1428), (15, 1596), (19, 1836),

Gene: LucySwiss\_3 Start: 1557, Stop: 2510, Start Num: 2

Candidate Starts for LucySwiss\_3:

(Start: 2 @1557 has 2 MA's), (6, 1683), (17, 2262),

Gene: Miek 4 Start: 1128, Stop: 1970, Start Num: 3

Candidate Starts for Miek\_4:

(Start: 3 @1128 has 6 MA's), (9, 1413), (15, 1581), (16, 1602), (20, 1806),

Gene: MiniBagel\_4 Start: 2789, Stop: 3742, Start Num: 1

Candidate Starts for MiniBagel\_4:

(Start: 1 @2789 has 3 MA's), (8, 3149), (10, 3209), (12, 3281), (14, 3344), (21, 3599), (22, 3632), (23, 3647),

Gene: Nightmare\_3 Start: 1557, Stop: 2510, Start Num: 2

Candidate Starts for Nightmare\_3:

(Start: 2 @ 1557 has 2 MA's), (6, 1683), (17, 2262),

Gene: Rainydai\_4 Start: 1128, Stop: 1970, Start Num: 3

Candidate Starts for Rainydai\_4:

(Start: 3 @1128 has 6 MA's), (5, 1134), (9, 1413), (15, 1581), (16, 1602), (20, 1806),

Gene: Regigigas\_4 Start: 1128, Stop: 1970, Start Num: 3

Candidate Starts for Regigigas\_4:

(Start: 3 @1128 has 6 MA's), (9, 1413), (15, 1581), (16, 1602), (20, 1806),

Gene: SendItCS\_4 Start: 1128, Stop: 1970, Start Num: 3

Candidate Starts for SendItCS\_4:

(Start: 3 @1128 has 6 MA's), (9, 1413), (15, 1581), (16, 1602), (20, 1806),

Gene: Teacup\_4 Start: 1538, Stop: 2491, Start Num: 2

Candidate Starts for Teacup\_4:

(Start: 2 @ 1538 has 2 MA's), (6, 1664), (17, 2243),

Gene: Tenno\_4 Start: 2789, Stop: 3742, Start Num: 1

Candidate Starts for Tenno\_4:

(Start: 1 @2789 has 3 MA's), (8, 3149), (10, 3209), (12, 3281), (14, 3344), (21, 3599), (22, 3632), (23, 3647),

Gene: Thiqqums\_4 Start: 1128, Stop: 1970, Start Num: 3

Candidate Starts for Thiggums 4:

(Start: 3 @1128 has 6 MA's), (5, 1134), (9, 1413), (15, 1581), (16, 1602), (20, 1806),