

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 214670 Report

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

Pham number 214670 has 20 members, 3 are drafts.

Phages represented in each track:

• Track 1: LittleLaf\_21, JoieB\_22, Clarkson\_22, Beelzebub\_25, Marvin\_20, VasuNzinga\_20, Pringar\_21, FeliMaine\_22, Corazon\_20

Track 2 : Lilbit 22

• Track 3: RedRaider77\_22, Poise\_22, Blackbeetle\_22, MosMoris\_20, Caprice\_18, Huphlepuff\_23, Tesla\_21, Gattaca\_21, Raela\_22

Track 4 : GoongGoong\_20

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

The start number called the most often in the published annotations is 1, it was called in 17 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beelzebub\_25, Blackbeetle\_22, Caprice\_18, Clarkson\_22, Corazon\_20, FeliMaine\_22, Gattaca\_21, Huphlepuff\_23, JoieB\_22, LittleLaf\_21, Marvin\_20, MosMoris\_20, Poise\_22, Pringar\_21, Raela\_22, RedRaider77\_22, Tesla\_21, VasuNzinga\_20,

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

GoongGoong\_20, Lilbit\_22,

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

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## **Summary by start number:**

#### Start 1:

- Found in 20 of 20 (100.0%) of genes in pham
- Manual Annotations of this start: 17 of 17
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Beelzebub\_25 (S), Blackbeetle\_22 (S), Caprice\_18 (S), Clarkson\_22 (S), Corazon\_20 (S), FeliMaine\_22 (S), Gattaca\_21 (S), Huphlepuff\_23 (S), JoieB\_22 (S), LittleLaf\_21 (S), Marvin\_20 (S), MosMoris\_20 (S), Poise\_22 (S), Pringar\_21 (S), Raela\_22 (S), RedRaider77\_22 (S), Tesla\_21 (S),

VasuNzinga\_20 (S),

#### Start 2:

- Found in 20 of 20 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: GoongGoong\_20 (S), Lilbit\_22 (S),

### Summary by clusters:

There is one cluster represented in this pham: S

Info for manual annotations of cluster S:

•Start number 1 was manually annotated 17 times for cluster S.

#### Gene Information:

Gene: Beelzebub\_25 Start: 6549, Stop: 6704, Start Num: 1

Candidate Starts for Beelzebub\_25: (Start: 1 @6549 has 17 MA's), (2, 6588),

Gene: Blackbeetle\_22 Start: 5882, Stop: 6037, Start Num: 1

Candidate Starts for Blackbeetle\_22:

(Start: 1 @5882 has 17 MA's), (2, 5921), (3, 5960),

Gene: Caprice\_18 Start: 5113, Stop: 5268, Start Num: 1

Candidate Starts for Caprice\_18:

(Start: 1 @5113 has 17 MA's), (2, 5152), (3, 5191),

Gene: Clarkson\_22 Start: 6250, Stop: 6405, Start Num: 1

Candidate Starts for Clarkson\_22: (Start: 1 @6250 has 17 MA's), (2, 6289),

Gene: Corazon\_20 Start: 6203, Stop: 6358, Start Num: 1

Candidate Starts for Corazon\_20:

(Start: 1 @6203 has 17 MA's), (2, 6242),

Gene: FeliMaine\_22 Start: 6251, Stop: 6406, Start Num: 1

Candidate Starts for FeliMaine\_22: (Start: 1 @6251 has 17 MA's), (2, 6290),

Gene: Gattaca\_21 Start: 5771, Stop: 5926, Start Num: 1

Candidate Starts for Gattaca\_21:

(Start: 1 @5771 has 17 MA's), (2, 5810), (3, 5849),

Gene: GoongGoong\_20 Start: 5823, Stop: 5939, Start Num: 2

Candidate Starts for GoongGoong 20:

(Start: 1 @5784 has 17 MA's), (2, 5823), (3, 5862),

Gene: Huphlepuff\_23 Start: 6055, Stop: 6210, Start Num: 1

Candidate Starts for Huphlepuff\_23:

(Start: 1 @6055 has 17 MA's), (2, 6094), (3, 6133),

Gene: JoieB\_22 Start: 6274, Stop: 6429, Start Num: 1

Candidate Starts for JoieB\_22:

(Start: 1 @6274 has 17 MA's), (2, 6313),

Gene: Lilbit\_22 Start: 6290, Stop: 6406, Start Num: 2

Candidate Starts for Lilbit 22:

(Start: 1 @6251 has 17 MA's), (2, 6290),

Gene: LittleLaf\_21 Start: 5980, Stop: 6135, Start Num: 1

Candidate Starts for LittleLaf 21:

(Start: 1 @5980 has 17 MA's), (2, 6019),

Gene: Marvin\_20 Start: 6250, Stop: 6405, Start Num: 1

Candidate Starts for Marvin\_20:

(Start: 1 @6250 has 17 MA's), (2, 6289),

Gene: MosMoris\_20 Start: 5771, Stop: 5926, Start Num: 1

Candidate Starts for MosMoris\_20:

(Start: 1 @5771 has 17 MA's), (2, 5810), (3, 5849),

Gene: Poise 22 Start: 5882, Stop: 6037, Start Num: 1

Candidate Starts for Poise\_22:

(Start: 1 @5882 has 17 MA's), (2, 5921), (3, 5960),

Gene: Pringar\_21 Start: 5880, Stop: 6035, Start Num: 1

Candidate Starts for Pringar 21:

(Start: 1 @5880 has 17 MA's), (2, 5919),

Gene: Raela\_22 Start: 6437, Stop: 6592, Start Num: 1

Candidate Starts for Raela\_22:

(Start: 1 @6437 has 17 MA's), (2, 6476), (3, 6515),

Gene: RedRaider77\_22 Start: 6021, Stop: 6176, Start Num: 1

Candidate Starts for RedRaider77\_22:

(Start: 1 @6021 has 17 MA's), (2, 6060), (3, 6099),

Gene: Tesla\_21 Start: 5873, Stop: 6028, Start Num: 1

Candidate Starts for Tesla\_21:

(Start: 1 @5873 has 17 MA's), (2, 5912), (3, 5951),

Gene: VasuNzinga\_20 Start: 5457, Stop: 5612, Start Num: 1

Candidate Starts for VasuNzinga\_20: (Start: 1 @5457 has 17 MA's), (2, 5496),