



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 4108 Report

This analysis was run 04/28/24 on database version 559.

Pham number 4108 has 18 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Clarkson\_38, MosMoris\_35, Gattaca\_36, JoieB\_38, Tesla\_36, Blackbeetle\_37, RedRaider77\_37, Marvin\_35, Raela\_37, Beelzebub\_41, Lilbit\_38, Poise\_37, LittleLaf\_37, Caprice\_34, Corazon\_35, Huphlebuff\_39, Pringar\_37
- Track 2 : VasuNzinga\_37

### ***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 16 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beelzebub\_41, Blackbeetle\_37, Caprice\_34, Clarkson\_38, Corazon\_35, Gattaca\_36, Huphlebuff\_39, JoieB\_38, Lilbit\_38, LittleLaf\_37, Marvin\_35, MosMoris\_35, Poise\_37, Pringar\_37, Raela\_37, RedRaider77\_37, Tesla\_36, VasuNzinga\_37,

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

- 

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

- 

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

Start 1:

- Found in 18 of 18 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 16 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beelzebub\_41 (S), Blackbeetle\_37 (S), Caprice\_34 (S), Clarkson\_38 (S), Corazon\_35 (S), Gattaca\_36 (S), Huphlebuff\_39 (S), JoieB\_38 (S), Lilbit\_38 (S), LittleLaf\_37 (S), Marvin\_35 (S), MosMoris\_35 (S), Poise\_37 (S), Pringar\_37 (S), Raela\_37 (S), RedRaider77\_37 (S), Tesla\_36 (S), VasuNzinga\_37 (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 16 times for cluster S.

### **Gene Information:**

Gene: Beelzebub\_41 Start: 14720, Stop: 15364, Start Num: 1

Candidate Starts for Beelzebub\_41:

(Start: 1 @14720 has 16 MA's), (2, 14792), (3, 14816), (4, 14846), (5, 14873), (6, 14942), (7, 14945), (8, 14981), (9, 15047), (10, 15050),

Gene: Blackbeetle\_37 Start: 13739, Stop: 14383, Start Num: 1

Candidate Starts for Blackbeetle\_37:

(Start: 1 @13739 has 16 MA's), (2, 13811), (3, 13835), (4, 13865), (5, 13892), (6, 13961), (7, 13964), (8, 14000), (9, 14066), (10, 14069),

Gene: Caprice\_34 Start: 13809, Stop: 14453, Start Num: 1

Candidate Starts for Caprice\_34:

(Start: 1 @13809 has 16 MA's), (2, 13881), (3, 13905), (4, 13935), (5, 13962), (6, 14031), (7, 14034), (8, 14070), (9, 14136), (10, 14139),

Gene: Clarkson\_38 Start: 14421, Stop: 15065, Start Num: 1

Candidate Starts for Clarkson\_38:

(Start: 1 @14421 has 16 MA's), (2, 14493), (3, 14517), (4, 14547), (5, 14574), (6, 14643), (7, 14646), (8, 14682), (9, 14748), (10, 14751),

Gene: Corazon\_35 Start: 14374, Stop: 15018, Start Num: 1

Candidate Starts for Corazon\_35:

(Start: 1 @14374 has 16 MA's), (2, 14446), (3, 14470), (4, 14500), (5, 14527), (6, 14596), (7, 14599), (8, 14635), (9, 14701), (10, 14704),

Gene: Gattaca\_36 Start: 13601, Stop: 14245, Start Num: 1

Candidate Starts for Gattaca\_36:

(Start: 1 @13601 has 16 MA's), (2, 13673), (3, 13697), (4, 13727), (5, 13754), (6, 13823), (7, 13826), (8, 13862), (9, 13928), (10, 13931),

Gene: Huphlebuff\_39 Start: 14226, Stop: 14870, Start Num: 1

Candidate Starts for Huphlebuff\_39:

(Start: 1 @14226 has 16 MA's), (2, 14298), (3, 14322), (4, 14352), (5, 14379), (6, 14448), (7, 14451), (8, 14487), (9, 14553), (10, 14556),

Gene: JoieB\_38 Start: 14445, Stop: 15089, Start Num: 1

Candidate Starts for JoieB\_38:

(Start: 1 @14445 has 16 MA's), (2, 14517), (3, 14541), (4, 14571), (5, 14598), (6, 14667), (7, 14670), (8, 14706), (9, 14772), (10, 14775),

Gene: Lilbit\_38 Start: 14422, Stop: 15066, Start Num: 1

Candidate Starts for Lilbit\_38:

(Start: 1 @14422 has 16 MA's), (2, 14494), (3, 14518), (4, 14548), (5, 14575), (6, 14644), (7, 14647), (8, 14683), (9, 14749), (10, 14752),

Gene: LittleLaf\_37 Start: 14151, Stop: 14795, Start Num: 1

Candidate Starts for LittleLaf\_37:

(Start: 1 @14151 has 16 MA's), (2, 14223), (3, 14247), (4, 14277), (5, 14304), (6, 14373), (7, 14376), (8, 14412), (9, 14478), (10, 14481),

Gene: Marvin\_35 Start: 14421, Stop: 15065, Start Num: 1

Candidate Starts for Marvin\_35:

(Start: 1 @14421 has 16 MA's), (2, 14493), (3, 14517), (4, 14547), (5, 14574), (6, 14643), (7, 14646), (8, 14682), (9, 14748), (10, 14751),

Gene: MosMoris\_35 Start: 13601, Stop: 14245, Start Num: 1

Candidate Starts for MosMoris\_35:

(Start: 1 @13601 has 16 MA's), (2, 13673), (3, 13697), (4, 13727), (5, 13754), (6, 13823), (7, 13826), (8, 13862), (9, 13928), (10, 13931),

Gene: Poise\_37 Start: 13739, Stop: 14383, Start Num: 1

Candidate Starts for Poise\_37:

(Start: 1 @13739 has 16 MA's), (2, 13811), (3, 13835), (4, 13865), (5, 13892), (6, 13961), (7, 13964), (8, 14000), (9, 14066), (10, 14069),

Gene: Pringar\_37 Start: 14051, Stop: 14695, Start Num: 1

Candidate Starts for Pringar\_37:

(Start: 1 @14051 has 16 MA's), (2, 14123), (3, 14147), (4, 14177), (5, 14204), (6, 14273), (7, 14276), (8, 14312), (9, 14378), (10, 14381),

Gene: Raela\_37 Start: 14294, Stop: 14938, Start Num: 1

Candidate Starts for Raela\_37:

(Start: 1 @14294 has 16 MA's), (2, 14366), (3, 14390), (4, 14420), (5, 14447), (6, 14516), (7, 14519), (8, 14555), (9, 14621), (10, 14624),

Gene: RedRaider77\_37 Start: 14195, Stop: 14839, Start Num: 1

Candidate Starts for RedRaider77\_37:

(Start: 1 @14195 has 16 MA's), (2, 14267), (3, 14291), (4, 14321), (5, 14348), (6, 14417), (7, 14420), (8, 14456), (9, 14522), (10, 14525),

Gene: Tesla\_36 Start: 14044, Stop: 14688, Start Num: 1

Candidate Starts for Tesla\_36:

(Start: 1 @14044 has 16 MA's), (2, 14116), (3, 14140), (4, 14170), (5, 14197), (6, 14266), (7, 14269), (8, 14305), (9, 14371), (10, 14374),

Gene: VasuNzinga\_37 Start: 13628, Stop: 14272, Start Num: 1

Candidate Starts for VasuNzinga\_37:

(Start: 1 @13628 has 16 MA's), (2, 13700), (3, 13724), (4, 13754), (6, 13850), (8, 13889), (9, 13955), (10, 13958),