



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 4213 Report

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

Pham number 4213 has 18 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Caprice\_67
- Track 2 : MosMoris\_69, LittleLaf\_72, Tesla\_69, JoieB\_74, Lilbit\_72, Gattaca\_70, Raela\_73, Poise\_73, RedRaider77\_72, Blackbeetle\_73
- Track 3 : Huphlebuff\_75, Corazon\_70, Clarkson\_74
- Track 4 : VasuNzinga\_71
- Track 5 : Marvin\_68, Pringar\_71
- Track 6 : Beelzebub\_77

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

The start number called the most often in the published annotations is 5, it was called in 10 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Blackbeetle\_73, Caprice\_67, Gattaca\_70, JoieB\_74, Lilbit\_72, LittleLaf\_72, MosMoris\_69, Poise\_73, Raela\_73, RedRaider77\_72, Tesla\_69, VasuNzinga\_71,

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

- Beelzebub\_77, Clarkson\_74, Corazon\_70, Huphlebuff\_75, Marvin\_68, Pringar\_71,

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

- 

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

Start 3:

- Found in 1 of 18 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beelzebub\_77 (S),

Start 4:

- Found in 6 of 18 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 5 of 16

- Called 83.3% of time when present
- Phage (with cluster) where this start called: Clarkson\_74 (S), Corazon\_70 (S), Huphlebuff\_75 (S), Marvin\_68 (S), Pringar\_71 (S),

Start 5:

- Found in 18 of 18 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 10 of 16
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Blackbeetle\_73 (S), Caprice\_67 (S), Gattaca\_70 (S), JoieB\_74 (S), Lilbit\_72 (S), LittleLaf\_72 (S), MosMoris\_69 (S), Poise\_73 (S), Raela\_73 (S), RedRaider77\_72 (S), Tesla\_69 (S), VasuNzinga\_71 (S),

### **Summary by clusters:**

There is one cluster represented in this pham: S

Info for manual annotations of cluster S:

- Start number 3 was manually annotated 1 time for cluster S.
- Start number 4 was manually annotated 5 times for cluster S.
- Start number 5 was manually annotated 10 times for cluster S.

### **Gene Information:**

Gene: Beelzebub\_77 Start: 41378, Stop: 41689, Start Num: 3

Candidate Starts for Beelzebub\_77:

(1, 41081), (2, 41168), (Start: 3 @41378 has 1 MA's), (Start: 4 @41426 has 5 MA's), (Start: 5 @41474 has 10 MA's), (6, 41612),

Gene: Blackbeetle\_73 Start: 40390, Stop: 40605, Start Num: 5

Candidate Starts for Blackbeetle\_73:

(Start: 5 @40390 has 10 MA's), (6, 40528),

Gene: Caprice\_67 Start: 40704, Stop: 40919, Start Num: 5

Candidate Starts for Caprice\_67:

(1, 40407), (2, 40494), (Start: 5 @40704 has 10 MA's), (6, 40842),

Gene: Clarkson\_74 Start: 41106, Stop: 41369, Start Num: 4

Candidate Starts for Clarkson\_74:

(Start: 4 @41106 has 5 MA's), (Start: 5 @41154 has 10 MA's), (6, 41292),

Gene: Corazon\_70 Start: 41300, Stop: 41563, Start Num: 4

Candidate Starts for Corazon\_70:

(Start: 4 @41300 has 5 MA's), (Start: 5 @41348 has 10 MA's), (6, 41486),

Gene: Gattaca\_70 Start: 40494, Stop: 40709, Start Num: 5

Candidate Starts for Gattaca\_70:

(Start: 5 @40494 has 10 MA's), (6, 40632),

Gene: Huphlebuff\_75 Start: 40911, Stop: 41174, Start Num: 4

Candidate Starts for Huphlebuff\_75:

(Start: 4 @40911 has 5 MA's), (Start: 5 @40959 has 10 MA's), (6, 41097),

Gene: JoieB\_74 Start: 41344, Stop: 41559, Start Num: 5

Candidate Starts for JoieB\_74:

(Start: 5 @41344 has 10 MA's), (6, 41482),

Gene: Lilbit\_72 Start: 41074, Stop: 41289, Start Num: 5

Candidate Starts for Lilbit\_72:

(Start: 5 @41074 has 10 MA's), (6, 41212),

Gene: LittleLaf\_72 Start: 40803, Stop: 41018, Start Num: 5

Candidate Starts for LittleLaf\_72:

(Start: 5 @40803 has 10 MA's), (6, 40941),

Gene: Marvin\_68 Start: 40564, Stop: 40827, Start Num: 4

Candidate Starts for Marvin\_68:

(1, 40267), (2, 40354), (Start: 4 @40564 has 5 MA's), (Start: 5 @40612 has 10 MA's), (6, 40750),

Gene: MosMoris\_69 Start: 40494, Stop: 40709, Start Num: 5

Candidate Starts for MosMoris\_69:

(Start: 5 @40494 has 10 MA's), (6, 40632),

Gene: Poise\_73 Start: 40390, Stop: 40605, Start Num: 5

Candidate Starts for Poise\_73:

(Start: 5 @40390 has 10 MA's), (6, 40528),

Gene: Pringar\_71 Start: 40712, Stop: 40975, Start Num: 4

Candidate Starts for Pringar\_71:

(1, 40415), (2, 40502), (Start: 4 @40712 has 5 MA's), (Start: 5 @40760 has 10 MA's), (6, 40898),

Gene: Raela\_73 Start: 40947, Stop: 41162, Start Num: 5

Candidate Starts for Raela\_73:

(Start: 5 @40947 has 10 MA's), (6, 41085),

Gene: RedRaider77\_72 Start: 40335, Stop: 40550, Start Num: 5

Candidate Starts for RedRaider77\_72:

(Start: 5 @40335 has 10 MA's), (6, 40473),

Gene: Tesla\_69 Start: 40184, Stop: 40399, Start Num: 5

Candidate Starts for Tesla\_69:

(Start: 5 @40184 has 10 MA's), (6, 40322),

Gene: VasuNzinga\_71 Start: 40286, Stop: 40501, Start Num: 5

Candidate Starts for VasuNzinga\_71:

(1, 39989), (2, 40076), (Start: 5 @40286 has 10 MA's), (6, 40424),