



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 312044 Report

This analysis was run 06/27/26 on database version 652.

Pham number 312044 has 20 members, 1 are drafts.

Phages represented in each track:

- Track 1 : MosMoris\_59, VasuNzinga\_61, Caprice\_58, Blackbeetle\_62, Corazon\_60, Beelzebub\_66, Lilbit\_60, JoieB\_63, Tesla\_59, GoongGoong\_61, LittleLaf\_62, Gattaca\_60, RedRaider77\_61, Poise\_62, Clarkson\_63, Pringar\_61, Raela\_62
- Track 2 : Huphlebuff\_64, FeliMaine\_64, Marvin\_58

### ***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 19 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beelzebub\_66, Blackbeetle\_62, Caprice\_58, Clarkson\_63, Corazon\_60, FeliMaine\_64, Gattaca\_60, GoongGoong\_61, Huphlebuff\_64, JoieB\_63, Lilbit\_60, LittleLaf\_62, Marvin\_58, MosMoris\_59, Poise\_62, Pringar\_61, Raela\_62, RedRaider77\_61, Tesla\_59, VasuNzinga\_61,

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 20 of 20 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 19 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beelzebub\_66 (S), Blackbeetle\_62 (S), Caprice\_58 (S), Clarkson\_63 (S), Corazon\_60 (S), FeliMaine\_64 (S), Gattaca\_60 (S), GoongGoong\_61 (S), Huphlebuff\_64 (S), JoieB\_63 (S), Lilbit\_60 (S), LittleLaf\_62 (S), Marvin\_58 (S), MosMoris\_59 (S), Poise\_62 (S), Pringar\_61 (S), Raela\_62 (S), RedRaider77\_61 (S), Tesla\_59 (S), VasuNzinga\_61 (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 19 times for cluster S.

### **Gene Information:**

Gene: Beelzebub\_66 Start: 36362, Stop: 36655, Start Num: 1

Candidate Starts for Beelzebub\_66:

(Start: 1 @36362 has 19 MA's), (2, 36446), (3, 36458), (4, 36473), (5, 36488), (6, 36500), (7, 36536),

Gene: Blackbeetle\_62 Start: 35407, Stop: 35700, Start Num: 1

Candidate Starts for Blackbeetle\_62:

(Start: 1 @35407 has 19 MA's), (2, 35491), (3, 35503), (4, 35518), (5, 35533), (6, 35545), (7, 35581),

Gene: Caprice\_58 Start: 35721, Stop: 36014, Start Num: 1

Candidate Starts for Caprice\_58:

(Start: 1 @35721 has 19 MA's), (2, 35805), (3, 35817), (4, 35832), (5, 35847), (6, 35859), (7, 35895),

Gene: Clarkson\_63 Start: 36090, Stop: 36383, Start Num: 1

Candidate Starts for Clarkson\_63:

(Start: 1 @36090 has 19 MA's), (2, 36174), (3, 36186), (4, 36201), (5, 36216), (6, 36228), (7, 36264),

Gene: Corazon\_60 Start: 36284, Stop: 36577, Start Num: 1

Candidate Starts for Corazon\_60:

(Start: 1 @36284 has 19 MA's), (2, 36368), (3, 36380), (4, 36395), (5, 36410), (6, 36422), (7, 36458),

Gene: FeliMaine\_64 Start: 36332, Stop: 36625, Start Num: 1

Candidate Starts for FeliMaine\_64:

(Start: 1 @36332 has 19 MA's), (2, 36416), (3, 36428), (4, 36443), (5, 36458), (6, 36470), (7, 36506), (8, 36566),

Gene: Gattaca\_60 Start: 35511, Stop: 35804, Start Num: 1

Candidate Starts for Gattaca\_60:

(Start: 1 @35511 has 19 MA's), (2, 35595), (3, 35607), (4, 35622), (5, 35637), (6, 35649), (7, 35685),

Gene: GoongGoong\_61 Start: 35310, Stop: 35603, Start Num: 1

Candidate Starts for GoongGoong\_61:

(Start: 1 @35310 has 19 MA's), (2, 35394), (3, 35406), (4, 35421), (5, 35436), (6, 35448), (7, 35484),

Gene: Huphlepuuff\_64 Start: 35895, Stop: 36188, Start Num: 1

Candidate Starts for Huphlepuuff\_64:

(Start: 1 @35895 has 19 MA's), (2, 35979), (3, 35991), (4, 36006), (5, 36021), (6, 36033), (7, 36069), (8, 36129),

Gene: JoieB\_63 Start: 36328, Stop: 36621, Start Num: 1

Candidate Starts for JoieB\_63:

(Start: 1 @36328 has 19 MA's), (2, 36412), (3, 36424), (4, 36439), (5, 36454), (6, 36466), (7, 36502),

Gene: Lilbit\_60 Start: 36091, Stop: 36384, Start Num: 1  
Candidate Starts for Lilbit\_60:  
(Start: 1 @36091 has 19 MA's), (2, 36175), (3, 36187), (4, 36202), (5, 36217), (6, 36229), (7, 36265),

Gene: LittleLaf\_62 Start: 35820, Stop: 36113, Start Num: 1  
Candidate Starts for LittleLaf\_62:  
(Start: 1 @35820 has 19 MA's), (2, 35904), (3, 35916), (4, 35931), (5, 35946), (6, 35958), (7, 35994),

Gene: Marvin\_58 Start: 35578, Stop: 35871, Start Num: 1  
Candidate Starts for Marvin\_58:  
(Start: 1 @35578 has 19 MA's), (2, 35662), (3, 35674), (4, 35689), (5, 35704), (6, 35716), (7, 35752),  
(8, 35812),

Gene: MosMoris\_59 Start: 35511, Stop: 35804, Start Num: 1  
Candidate Starts for MosMoris\_59:  
(Start: 1 @35511 has 19 MA's), (2, 35595), (3, 35607), (4, 35622), (5, 35637), (6, 35649), (7, 35685),

Gene: Poise\_62 Start: 35407, Stop: 35700, Start Num: 1  
Candidate Starts for Poise\_62:  
(Start: 1 @35407 has 19 MA's), (2, 35491), (3, 35503), (4, 35518), (5, 35533), (6, 35545), (7, 35581),

Gene: Pringar\_61 Start: 35696, Stop: 35989, Start Num: 1  
Candidate Starts for Pringar\_61:  
(Start: 1 @35696 has 19 MA's), (2, 35780), (3, 35792), (4, 35807), (5, 35822), (6, 35834), (7, 35870),

Gene: Raela\_62 Start: 35964, Stop: 36257, Start Num: 1  
Candidate Starts for Raela\_62:  
(Start: 1 @35964 has 19 MA's), (2, 36048), (3, 36060), (4, 36075), (5, 36090), (6, 36102), (7, 36138),

Gene: RedRaider77\_61 Start: 35352, Stop: 35645, Start Num: 1  
Candidate Starts for RedRaider77\_61:  
(Start: 1 @35352 has 19 MA's), (2, 35436), (3, 35448), (4, 35463), (5, 35478), (6, 35490), (7, 35526),

Gene: Tesla\_59 Start: 35201, Stop: 35494, Start Num: 1  
Candidate Starts for Tesla\_59:  
(Start: 1 @35201 has 19 MA's), (2, 35285), (3, 35297), (4, 35312), (5, 35327), (6, 35339), (7, 35375),

Gene: VasuNzinga\_61 Start: 35270, Stop: 35563, Start Num: 1  
Candidate Starts for VasuNzinga\_61:  
(Start: 1 @35270 has 19 MA's), (2, 35354), (3, 35366), (4, 35381), (5, 35396), (6, 35408), (7, 35444),