

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 87254 Report

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

Pham number 87254 has 12 members, 2 are drafts.

Phages represented in each track:

Track 1 : Huphlepuff\_84, Clarkson\_83, Beelzebub\_86

• Track 2: LittleLaf 80, Blackbeetle 82, JoieB 82, RedRaider77 81, Caprice 74,

Poise\_82, Raela\_83, Lilbit\_80

Track 3 : Gattaca\_79

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

The start number called the most often in the published annotations is 9, it was called in 9 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beelzebub\_86, Blackbeetle\_82, Caprice\_74, Clarkson\_83, Huphlepuff\_84, JoieB\_82, Lilbit\_80, LittleLaf\_80, Poise\_82, Raela\_83, RedRaider77\_81,

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

Gattaca\_79,

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

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## Summary by start number:

#### Start 9:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 9 of 10
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Beelzebub\_86 (S), Blackbeetle\_82 (S), Caprice\_74 (S), Clarkson\_83 (S), Huphlepuff\_84 (S), JoieB\_82 (S), Lilbit\_80 (S), LittleLaf\_80 (S), Poise\_82 (S), Raela\_83 (S), RedRaider77\_81 (S),

### Start 10:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 8.3% of time when present

Phage (with cluster) where this start called: Gattaca\_79 (S),

### **Summary by clusters:**

There is one cluster represented in this pham: S

Info for manual annotations of cluster S:

- •Start number 9 was manually annotated 9 times for cluster S.
- Start number 10 was manually annotated 1 time for cluster S.

### Gene Information:

Gene: Beelzebub\_86 Start: 44630, Stop: 44785, Start Num: 9

Candidate Starts for Beelzebub 86:

(1, 44333), (2, 44366), (3, 44408), (4, 44417), (5, 44429), (6, 44525), (7, 44549), (8, 44588), (Start: 9 @44630 has 9 MA's), (Start: 10 @44639 has 1 MA's), (11, 44657), (12, 44663), (13, 44690), (14, 44720),

Gene: Blackbeetle\_82 Start: 43991, Stop: 44146, Start Num: 9

Candidate Starts for Blackbeetle 82:

(3, 43769), (4, 43778), (5, 43790), (6, 43886), (7, 43910), (8, 43949), (Start: 9 @43991 has 9 MA's), (Start: 10 @44000 has 1 MA's), (11, 44018), (12, 44024), (13, 44051), (14, 44081),

Gene: Caprice\_74 Start: 43929, Stop: 44084, Start Num: 9

Candidate Starts for Caprice 74:

(3, 43707), (4, 43716), (5, 43728), (6, 43824), (7, 43848), (8, 43887), (Start: 9 @43929 has 9 MA's), (Start: 10 @43938 has 1 MA's), (11, 43956), (12, 43962), (13, 43989), (14, 44019),

Gene: Clarkson\_83 Start: 44310, Stop: 44465, Start Num: 9

Candidate Starts for Clarkson 83:

(1, 44013), (2, 44046), (3, 44088), (4, 44097), (5, 44109), (6, 44205), (7, 44229), (8, 44268), (Start: 9 @44310 has 9 MA's), (Start: 10 @44319 has 1 MA's), (11, 44337), (12, 44343), (13, 44370), (14, 44400),

Gene: Gattaca\_79 Start: 44098, Stop: 44244, Start Num: 10

Candidate Starts for Gattaca 79:

(3, 43867), (4, 43876), (5, 43888), (6, 43984), (7, 44008), (8, 44047), (Start: 9 @44089 has 9 MA's), (Start: 10 @44098 has 1 MA's), (11, 44116), (12, 44122), (13, 44149), (14, 44179),

Gene: Huphlepuff\_84 Start: 44115, Stop: 44270, Start Num: 9

Candidate Starts for Huphlepuff 84:

(1, 43818), (2, 43851), (3, 43893), (4, 43902), (5, 43914), (6, 44010), (7, 44034), (8, 44073), (Start: 9 @44115 has 9 MA's), (Start: 10 @44124 has 1 MA's), (11, 44142), (12, 44148), (13, 44175), (14, 44205),

Gene: JoieB\_82 Start: 44578, Stop: 44733, Start Num: 9

Candidate Starts for JoieB 82:

(3, 44356), (4, 44365), (5, 44377), (6, 44473), (7, 44497), (8, 44536), (Start: 9 @ 44578 has 9 MA's), (Start: 10 @ 44587 has 1 MA's), (11, 44605), (12, 44611), (13, 44638), (14, 44668),

Gene: Lilbit\_80 Start: 44675, Stop: 44830, Start Num: 9

Candidate Starts for Lilbit 80:

(3, 44453), (4, 44462), (5, 44474), (6, 44570), (7, 44594), (8, 44633), (Start: 9 @ 44675 has 9 MA's), (Start: 10 @ 44684 has 1 MA's), (11, 44702), (12, 44708), (13, 44735), (14, 44765),

Gene: LittleLaf\_80 Start: 44404, Stop: 44559, Start Num: 9

Candidate Starts for LittleLaf 80:

(3, 44182), (4, 44191), (5, 44203), (6, 44299), (7, 44323), (8, 44362), (Start: 9 @44404 has 9 MA's), (Start: 10 @44413 has 1 MA's), (11, 44431), (12, 44437), (13, 44464), (14, 44494),

Gene: Poise\_82 Start: 43991, Stop: 44146, Start Num: 9

Candidate Starts for Poise 82:

(3, 43769), (4, 43778), (5, 43790), (6, 43886), (7, 43910), (8, 43949), (Start: 9 @43991 has 9 MA's), (Start: 10 @44000 has 1 MA's), (11, 44018), (12, 44024), (13, 44051), (14, 44081),

Gene: Raela\_83 Start: 44542, Stop: 44697, Start Num: 9

Candidate Starts for Raela\_83:

(3, 44320), (4, 44329), (5, 44341), (6, 44437), (7, 44461), (8, 44500), (Start: 9 @44542 has 9 MA's), (Start: 10 @44551 has 1 MA's), (11, 44569), (12, 44575), (13, 44602), (14, 44632),

Gene: RedRaider77\_81 Start: 43936, Stop: 44091, Start Num: 9

Candidate Starts for RedRaider77\_81:

(3, 43714), (4, 43723), (5, 43735), (6, 43831), (7, 43855), (8, 43894), (Start: 9 @43936 has 9 MA's), (Start: 10 @43945 has 1 MA's), (11, 43963), (12, 43969), (13, 43996), (14, 44026),