



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 163894 Report

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

Pham number 163894 has 24 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Stanimal\_37, BoomerJR\_37, Yaboi\_38, Sollertia\_37, Genie2\_37
- Track 2 : KentuckyRacer\_40, Bordeaux\_35, Battuta\_35, MindFlayer\_35, Jollison\_40, TomSawyer\_35, Starbow\_35, Quaran19\_37, Birchlyn\_34, Spelly\_37, Spilled\_37, Karimac\_36, Amabiko\_37, PumpkinSpice\_36, JimJam\_37, SaltySpitooon\_37
- Track 3 : Enygma\_34
- Track 4 : LukeCage\_36
- Track 5 : StarPlatinum\_35

### ***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 22 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko\_37, Battuta\_35, Birchlyn\_34, BoomerJR\_37, Bordeaux\_35, Enygma\_34, Genie2\_37, JimJam\_37, Jollison\_40, Karimac\_36, KentuckyRacer\_40, LukeCage\_36, MindFlayer\_35, PumpkinSpice\_36, Quaran19\_37, SaltySpitooon\_37, Sollertia\_37, Spelly\_37, Spilled\_37, Stanimal\_37, StarPlatinum\_35, Starbow\_35, TomSawyer\_35, Yaboi\_38,

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 24 of 24 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 22 of 22
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Amabiko\_37 (BE2), Battuta\_35 (BE2), Birchlyn\_34 (BE2), BoomerJR\_37 (BE2), Bordeaux\_35 (BE2), Enygma\_34 (BE2), Genie2\_37 (BE2), JimJam\_37 (BE2), Jollison\_40 (BE2), Karimac\_36 (BE2), KentuckyRacer\_40 (BE2), LukeCage\_36 (BE2), MindFlayer\_35 (BE2), PumpkinSpice\_36 (BE2), Quaran19\_37 (BE2), SaltySpittoon\_37 (BE2), Sollertia\_37 (BE2), Spelly\_37 (BE2), Spilled\_37 (BE2), Stanimal\_37 (BE2), StarPlatinum\_35 (BE2), Starbow\_35 (BE2), TomSawyer\_35 (BE2), Yaboi\_38 (BE2),

### **Summary by clusters:**

There is one cluster represented in this pham: BE2

Info for manual annotations of cluster BE2:

•Start number 1 was manually annotated 22 times for cluster BE2.

### **Gene Information:**

Gene: Amabiko\_37 Start: 16384, Stop: 16223, Start Num: 1

Candidate Starts for Amabiko\_37:

(Start: 1 @16384 has 22 MA's), (2, 16360), (3, 16342), (5, 16327), (7, 16306), (8, 16297), (10, 16276), (11, 16273), (12, 16267),

Gene: Battuta\_35 Start: 16360, Stop: 16199, Start Num: 1

Candidate Starts for Battuta\_35:

(Start: 1 @16360 has 22 MA's), (2, 16336), (3, 16318), (5, 16303), (7, 16282), (8, 16273), (10, 16252), (11, 16249), (12, 16243),

Gene: Birchlyn\_34 Start: 14241, Stop: 14080, Start Num: 1

Candidate Starts for Birchlyn\_34:

(Start: 1 @14241 has 22 MA's), (2, 14217), (3, 14199), (5, 14184), (7, 14163), (8, 14154), (10, 14133), (11, 14130), (12, 14124),

Gene: BoomerJR\_37 Start: 16193, Stop: 16032, Start Num: 1

Candidate Starts for BoomerJR\_37:

(Start: 1 @16193 has 22 MA's), (4, 16139), (7, 16115), (9, 16088), (11, 16082), (12, 16076),

Gene: Bordeaux\_35 Start: 16375, Stop: 16214, Start Num: 1

Candidate Starts for Bordeaux\_35:

(Start: 1 @16375 has 22 MA's), (2, 16351), (3, 16333), (5, 16318), (7, 16297), (8, 16288), (10, 16267), (11, 16264), (12, 16258),

Gene: Enygma\_34 Start: 15506, Stop: 15345, Start Num: 1

Candidate Starts for Enygma\_34:

(Start: 1 @15506 has 22 MA's), (9, 15401), (11, 15395),

Gene: Genie2\_37 Start: 16196, Stop: 16035, Start Num: 1

Candidate Starts for Genie2\_37:

(Start: 1 @16196 has 22 MA's), (4, 16142), (7, 16118), (9, 16091), (11, 16085), (12, 16079),

Gene: JimJam\_37 Start: 16323, Stop: 16162, Start Num: 1

Candidate Starts for JimJam\_37:

(Start: 1 @16323 has 22 MA's), (2, 16299), (3, 16281), (5, 16266), (7, 16245), (8, 16236), (10, 16215), (11, 16212), (12, 16206),

Gene: Jollison\_40 Start: 16341, Stop: 16180, Start Num: 1

Candidate Starts for Jollison\_40:

(Start: 1 @16341 has 22 MA's), (2, 16317), (3, 16299), (5, 16284), (7, 16263), (8, 16254), (10, 16233), (11, 16230), (12, 16224),

Gene: Karimac\_36 Start: 16490, Stop: 16329, Start Num: 1

Candidate Starts for Karimac\_36:

(Start: 1 @16490 has 22 MA's), (2, 16466), (3, 16448), (5, 16433), (7, 16412), (8, 16403), (10, 16382), (11, 16379), (12, 16373),

Gene: KentuckyRacer\_40 Start: 16136, Stop: 15975, Start Num: 1

Candidate Starts for KentuckyRacer\_40:

(Start: 1 @16136 has 22 MA's), (2, 16112), (3, 16094), (5, 16079), (7, 16058), (8, 16049), (10, 16028), (11, 16025), (12, 16019),

Gene: LukeCage\_36 Start: 16073, Stop: 15912, Start Num: 1

Candidate Starts for LukeCage\_36:

(Start: 1 @16073 has 22 MA's), (2, 16049), (3, 16031), (5, 16016), (7, 15995), (8, 15986), (9, 15968), (10, 15965), (11, 15962), (12, 15956),

Gene: MindFlayer\_35 Start: 15994, Stop: 15833, Start Num: 1

Candidate Starts for MindFlayer\_35:

(Start: 1 @15994 has 22 MA's), (2, 15970), (3, 15952), (5, 15937), (7, 15916), (8, 15907), (10, 15886), (11, 15883), (12, 15877),

Gene: PumpkinSpice\_36 Start: 16384, Stop: 16223, Start Num: 1

Candidate Starts for PumpkinSpice\_36:

(Start: 1 @16384 has 22 MA's), (2, 16360), (3, 16342), (5, 16327), (7, 16306), (8, 16297), (10, 16276), (11, 16273), (12, 16267),

Gene: Quaran19\_37 Start: 16375, Stop: 16214, Start Num: 1

Candidate Starts for Quaran19\_37:

(Start: 1 @16375 has 22 MA's), (2, 16351), (3, 16333), (5, 16318), (7, 16297), (8, 16288), (10, 16267), (11, 16264), (12, 16258),

Gene: SaltySpittoon\_37 Start: 16384, Stop: 16223, Start Num: 1

Candidate Starts for SaltySpittoon\_37:

(Start: 1 @16384 has 22 MA's), (2, 16360), (3, 16342), (5, 16327), (7, 16306), (8, 16297), (10, 16276), (11, 16273), (12, 16267),

Gene: Sollertia\_37 Start: 16196, Stop: 16035, Start Num: 1

Candidate Starts for Sollertia\_37:

(Start: 1 @16196 has 22 MA's), (4, 16142), (7, 16118), (9, 16091), (11, 16085), (12, 16079),

Gene: Spelly\_37 Start: 16339, Stop: 16178, Start Num: 1

Candidate Starts for Spelly\_37:

(Start: 1 @16339 has 22 MA's), (2, 16315), (3, 16297), (5, 16282), (7, 16261), (8, 16252), (10, 16231), (11, 16228), (12, 16222),

Gene: Spilled\_37 Start: 16093, Stop: 15932, Start Num: 1

Candidate Starts for Spilled\_37:

(Start: 1 @16093 has 22 MA's), (2, 16069), (3, 16051), (5, 16036), (7, 16015), (8, 16006), (10, 15985), (11, 15982), (12, 15976),

Gene: Stanimal\_37 Start: 16196, Stop: 16035, Start Num: 1

Candidate Starts for Stanimal\_37:

(Start: 1 @16196 has 22 MA's), (4, 16142), (7, 16118), (9, 16091), (11, 16085), (12, 16079),

Gene: StarPlatinum\_35 Start: 15993, Stop: 15832, Start Num: 1

Candidate Starts for StarPlatinum\_35:

(Start: 1 @15993 has 22 MA's), (2, 15969), (5, 15936), (6, 15921), (7, 15915), (8, 15906), (9, 15888), (10, 15885), (11, 15882), (12, 15876),

Gene: Starbow\_35 Start: 16360, Stop: 16199, Start Num: 1

Candidate Starts for Starbow\_35:

(Start: 1 @16360 has 22 MA's), (2, 16336), (3, 16318), (5, 16303), (7, 16282), (8, 16273), (10, 16252), (11, 16249), (12, 16243),

Gene: TomSawyer\_35 Start: 15978, Stop: 15817, Start Num: 1

Candidate Starts for TomSawyer\_35:

(Start: 1 @15978 has 22 MA's), (2, 15954), (3, 15936), (5, 15921), (7, 15900), (8, 15891), (10, 15870), (11, 15867), (12, 15861),

Gene: Yaboi\_38 Start: 16172, Stop: 16011, Start Num: 1

Candidate Starts for Yaboi\_38:

(Start: 1 @16172 has 22 MA's), (4, 16118), (7, 16094), (9, 16067), (11, 16061), (12, 16055),