



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 86727 Report

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

Pham number 86727 has 26 members, 7 are drafts.

Phages represented in each track:

- Track 1 : BabyDotz\_83, Judebell\_89, Kyva\_89
- Track 2 : SallyK\_87, Zagie\_87, Wayne3\_87, Rowlf\_85, Teehee\_86, Phabia\_85, Blab\_82, Namago\_87, Jehoshaphat\_87, Viceroy\_83, StrawberryJamm\_91, Grassboy\_90, Wheelie\_85, Rudy\_83, Quammi\_84, Hyperion\_84
- Track 3 : Casend\_86, Lonelysoil\_83
- Track 4 : Sillytadpoles\_88, DonaldDuck\_87, Llemily\_87, Zhafia\_91
- Track 5 : AluminumJesus\_82

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

The start number called the most often in the published annotations is 3, it was called in 18 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AluminumJesus\_82, Blab\_82, Casend\_86, Grassboy\_90, Hyperion\_84, Jehoshaphat\_87, Lonelysoil\_83, Namago\_87, Phabia\_85, Quammi\_84, Rowlf\_85, Rudy\_83, SallyK\_87, StrawberryJamm\_91, Teehee\_86, Viceroy\_83, Wayne3\_87, Wheelie\_85, Zagie\_87,

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

- BabyDotz\_83, DonaldDuck\_87, Judebell\_89, Kyva\_89, Llemily\_87, Sillytadpoles\_88, Zhafia\_91,

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

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

Start 2:

- Found in 26 of 26 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 26.9% of time when present
- Phage (with cluster) where this start called: BabyDotz\_83 (EG), DonaldDuck\_87 (EG), Judebell\_89 (EG), Kyva\_89 (EG), Llemily\_87 (EG), Sillytadpoles\_88 (EG),

Zhafia\_91 (EG),

Start 3:

- Found in 26 of 26 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 18 of 19
- Called 73.1% of time when present
- Phage (with cluster) where this start called: AluminumJesus\_82 (EG), Blab\_82 (EG), Casend\_86 (EG), Grassboy\_90 (EG), Hyperion\_84 (EG), Jehoshaphat\_87 (EG), Lonelysoil\_83 (EG), Namago\_87 (EG), Phabia\_85 (EG), Quammi\_84 (EG), Rowlf\_85 (EG), Rudy\_83 (EG), SallyK\_87 (EG), StrawberryJamm\_91 (EG), Teehee\_86 (EG), Viceroy\_83 (EG), Wayne3\_87 (EG), Wheelie\_85 (EG), Zagie\_87 (EG),

### **Summary by clusters:**

There is one cluster represented in this pham: EG

Info for manual annotations of cluster EG:

- Start number 2 was manually annotated 1 time for cluster EG.
- Start number 3 was manually annotated 18 times for cluster EG.

### **Gene Information:**

Gene: AluminumJesus\_82 Start: 53737, Stop: 53414, Start Num: 3

Candidate Starts for AluminumJesus\_82:

(1, 53971), (Start: 2 @53746 has 1 MA's), (Start: 3 @53737 has 18 MA's), (5, 53575), (6, 53554), (7, 53539), (8, 53476), (9, 53470),

Gene: BabyDotz\_83 Start: 55256, Stop: 54924, Start Num: 2

Candidate Starts for BabyDotz\_83:

(Start: 2 @55256 has 1 MA's), (Start: 3 @55247 has 18 MA's), (5, 55085), (6, 55064), (7, 55049), (8, 54986), (9, 54980),

Gene: Blab\_82 Start: 54121, Stop: 53798, Start Num: 3

Candidate Starts for Blab\_82:

(Start: 2 @54130 has 1 MA's), (Start: 3 @54121 has 18 MA's), (5, 53959), (6, 53938), (7, 53923), (8, 53860), (9, 53854),

Gene: Casend\_86 Start: 54720, Stop: 54397, Start Num: 3

Candidate Starts for Casend\_86:

(Start: 2 @54729 has 1 MA's), (Start: 3 @54720 has 18 MA's), (4, 54672), (5, 54558), (6, 54537), (7, 54522), (8, 54459), (9, 54453),

Gene: DonaldDuck\_87 Start: 54081, Stop: 53749, Start Num: 2

Candidate Starts for DonaldDuck\_87:

(Start: 2 @54081 has 1 MA's), (Start: 3 @54072 has 18 MA's), (4, 54024), (5, 53910), (6, 53889), (7, 53874), (8, 53811), (9, 53805),

Gene: Grassboy\_90 Start: 55246, Stop: 54923, Start Num: 3

Candidate Starts for Grassboy\_90:

(Start: 2 @55255 has 1 MA's), (Start: 3 @55246 has 18 MA's), (5, 55084), (6, 55063), (7, 55048), (8, 54985), (9, 54979),

Gene: Hyperion\_84 Start: 54434, Stop: 54111, Start Num: 3

Candidate Starts for Hyperion\_84:

(Start: 2 @54443 has 1 MA's), (Start: 3 @54434 has 18 MA's), (5, 54272), (6, 54251), (7, 54236), (8, 54173), (9, 54167),

Gene: Jehoshaphat\_87 Start: 54988, Stop: 54665, Start Num: 3

Candidate Starts for Jehoshaphat\_87:

(Start: 2 @54997 has 1 MA's), (Start: 3 @54988 has 18 MA's), (5, 54826), (6, 54805), (7, 54790), (8, 54727), (9, 54721),

Gene: Judebell\_89 Start: 54224, Stop: 53892, Start Num: 2

Candidate Starts for Judebell\_89:

(Start: 2 @54224 has 1 MA's), (Start: 3 @54215 has 18 MA's), (5, 54053), (6, 54032), (7, 54017), (8, 53954), (9, 53948),

Gene: Kyva\_89 Start: 55279, Stop: 54947, Start Num: 2

Candidate Starts for Kyva\_89:

(Start: 2 @55279 has 1 MA's), (Start: 3 @55270 has 18 MA's), (5, 55108), (6, 55087), (7, 55072), (8, 55009), (9, 55003),

Gene: Llemily\_87 Start: 53776, Stop: 53444, Start Num: 2

Candidate Starts for Llemily\_87:

(Start: 2 @53776 has 1 MA's), (Start: 3 @53767 has 18 MA's), (4, 53719), (5, 53605), (6, 53584), (7, 53569), (8, 53506), (9, 53500),

Gene: Lonelysoil\_83 Start: 53524, Stop: 53201, Start Num: 3

Candidate Starts for Lonelysoil\_83:

(Start: 2 @53533 has 1 MA's), (Start: 3 @53524 has 18 MA's), (4, 53476), (5, 53362), (6, 53341), (7, 53326), (8, 53263), (9, 53257),

Gene: Namago\_87 Start: 54307, Stop: 53984, Start Num: 3

Candidate Starts for Namago\_87:

(Start: 2 @54316 has 1 MA's), (Start: 3 @54307 has 18 MA's), (5, 54145), (6, 54124), (7, 54109), (8, 54046), (9, 54040),

Gene: Phabia\_85 Start: 54179, Stop: 53856, Start Num: 3

Candidate Starts for Phabia\_85:

(Start: 2 @54188 has 1 MA's), (Start: 3 @54179 has 18 MA's), (5, 54017), (6, 53996), (7, 53981), (8, 53918), (9, 53912),

Gene: Quammi\_84 Start: 53879, Stop: 53556, Start Num: 3

Candidate Starts for Quammi\_84:

(Start: 2 @53888 has 1 MA's), (Start: 3 @53879 has 18 MA's), (5, 53717), (6, 53696), (7, 53681), (8, 53618), (9, 53612),

Gene: Rowlf\_85 Start: 53971, Stop: 53648, Start Num: 3

Candidate Starts for Rowlf\_85:

(Start: 2 @53980 has 1 MA's), (Start: 3 @53971 has 18 MA's), (5, 53809), (6, 53788), (7, 53773), (8, 53710), (9, 53704),

Gene: Rudy\_83 Start: 53915, Stop: 53592, Start Num: 3

Candidate Starts for Rudy\_83:

(Start: 2 @53924 has 1 MA's), (Start: 3 @53915 has 18 MA's), (5, 53753), (6, 53732), (7, 53717), (8, 53654), (9, 53648),

Gene: SallyK\_87 Start: 55352, Stop: 55029, Start Num: 3

Candidate Starts for SallyK\_87:

(Start: 2 @55361 has 1 MA's), (Start: 3 @55352 has 18 MA's), (5, 55190), (6, 55169), (7, 55154), (8, 55091), (9, 55085),

Gene: Sillytadpoles\_88 Start: 53764, Stop: 53432, Start Num: 2

Candidate Starts for Sillytadpoles\_88:

(Start: 2 @53764 has 1 MA's), (Start: 3 @53755 has 18 MA's), (4, 53707), (5, 53593), (6, 53572), (7, 53557), (8, 53494), (9, 53488),

Gene: StrawberryJamm\_91 Start: 54339, Stop: 54016, Start Num: 3

Candidate Starts for StrawberryJamm\_91:

(Start: 2 @54348 has 1 MA's), (Start: 3 @54339 has 18 MA's), (5, 54177), (6, 54156), (7, 54141), (8, 54078), (9, 54072),

Gene: Teehee\_86 Start: 54985, Stop: 54662, Start Num: 3

Candidate Starts for Teehee\_86:

(Start: 2 @54994 has 1 MA's), (Start: 3 @54985 has 18 MA's), (5, 54823), (6, 54802), (7, 54787), (8, 54724), (9, 54718),

Gene: Viceroy\_83 Start: 53700, Stop: 53377, Start Num: 3

Candidate Starts for Viceroy\_83:

(Start: 2 @53709 has 1 MA's), (Start: 3 @53700 has 18 MA's), (5, 53538), (6, 53517), (7, 53502), (8, 53439), (9, 53433),

Gene: Wayne3\_87 Start: 54748, Stop: 54425, Start Num: 3

Candidate Starts for Wayne3\_87:

(Start: 2 @54757 has 1 MA's), (Start: 3 @54748 has 18 MA's), (5, 54586), (6, 54565), (7, 54550), (8, 54487), (9, 54481),

Gene: Wheelie\_85 Start: 54069, Stop: 53746, Start Num: 3

Candidate Starts for Wheelie\_85:

(Start: 2 @54078 has 1 MA's), (Start: 3 @54069 has 18 MA's), (5, 53907), (6, 53886), (7, 53871), (8, 53808), (9, 53802),

Gene: Zagie\_87 Start: 54572, Stop: 54249, Start Num: 3

Candidate Starts for Zagie\_87:

(Start: 2 @54581 has 1 MA's), (Start: 3 @54572 has 18 MA's), (5, 54410), (6, 54389), (7, 54374), (8, 54311), (9, 54305),

Gene: Zhafia\_91 Start: 54558, Stop: 54226, Start Num: 2

Candidate Starts for Zhafia\_91:

(Start: 2 @54558 has 1 MA's), (Start: 3 @54549 has 18 MA's), (4, 54501), (5, 54387), (6, 54366), (7, 54351), (8, 54288), (9, 54282),