Pham 86817

$9 \quad 0$

$9 \underbrace{0} \left\lvert\, \begin{gathered}2 \\ \\ \end{gathered}\right.$

$9 \quad 0$

$90^{\circ}$

$\circ$

ง ヘ ィ
$9 \therefore$
$\overbrace{1}^{0} \prod_{1}^{10}$
9

9

|  |
| :--- |
| B:Ariel_123 + 4 |


|  |  |
| :--- | :--- |
| 10: Hannaconda_114 + 2 |  |


$\square$
9

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 86817 Report

This analysis was run 04/05/24 on database version 557.
Pham number 86817 has 20 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Francis47_61, Agaliana_57, Guppsters_73
- Track 2 : Gompeii1̄̄_62, Bircsak_62
- Track 3 : Marcell_59
- Track 4 : Maroc7 60
- Track 5 : PacerPāul 62
- Track 6 : Goku_41, Eureka_41
- Track 7 : DaWorst 82
- Track 8 : LittleE_127
- Track 9 : Ariel_123, Superphikiman_120, Courthouse_118, Omega_134, Squint 121
- Track 10 : Hannaconda_114, MiaZeal_123, KashFlow_120


## 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 12 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel 123, Courthouse 118, Eureka 41, Goku 41, Hannaconda 114, KashF̄̄ow_120, LittleE_127, Marcell_59, MiaZeā_123, Omega_13̄4, Squint_121, Superphikiman_120,

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

- Agaliana_57, Bircsak_62, DaWorst_82, Francis47_61, Gompeii16_62, Guppsters_73, Maroc7_60, PacerPaū_62,

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

## -

## Summary by start number:

Start 2:

- Found in 9 of 20 ( $45.0 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 22.2\% of time when present
- Phage (with cluster) where this start called: Maroc7_60 (A1), PacerPaul_62 (A1),

Start 3:

- Found in 9 of 20 ( $45.0 \%$ ) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called $66.7 \%$ of time when present
- Phage (with cluster) where this start called: Agaliana 57 (A1), Bircsak 62 (A1), DaWorst_82 (F1), Francis47_61 (A1), Gompeii16_62 (A1), Guppsters_73 (F1),

Start 5:

- Found in 20 of 20 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 12 of 18
- Called $60.0 \%$ of time when present
- Phage (with cluster) where this start called: Ariel_123 (J), Courthouse_118 (J),

Eureka_41 (E), Goku_41 (E), Hannaconda_114 (J), KashFlow_120 (J), LittleE_127 (J), Marcell_59 (A1), MiaZeal_123 (J), Omega_134 (J), Squint_121 (J),

Superphikiman_120 (J),

## Summary by clusters:

There are 4 clusters represented in this pham: A1, F1, J, E,
Info for manual annotations of cluster A1:

- Start number 2 was manually annotated 2 times for cluster A1.
- Start number 3 was manually annotated 3 times for cluster A1.
- Start number 5 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster E:

- Start number 5 was manually annotated 2 times for cluster $E$.

Info for manual annotations of cluster F1:

- Start number 3 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster J:

- Start number 5 was manually annotated 9 times for cluster J.


## Gene Information:

Gene: Agaliana_57 Start: 38241, Stop: 37912, Start Num: 3
Candidate Starts for Agaliana_57:
(Start: 2 @38244 has 2 MA's), (Start: 3 @38241 has 4 MA's), (Start: 5 @38217 has 12 MA's), (6, 38124), (7, 38046), (8, 38043), (9, 37977), (10, 37965),

Gene: Ariel_123 Start: 65698, Stop: 65952, Start Num: 5
Candidate Starts for Ariel_123:
(Start: 5 @65698 has 12 MA's), (6, 65791), (7, 65869), (8, 65872), (9, 65938),
Gene: Bircsak_62 Start: 43158, Stop: 42880, Start Num: 3
Candidate Starts for Bircsak_62:
(Start: 2 @43161 has 2 MA's), (Start: 3 @43158 has 4 MA's), (Start: 5 @43134 has 12 MA's), (6, 43041), (7, 42963), (8, 42960), (9, 42894),

Gene: Courthouse_118 Start: 65298, Stop: 65552, Start Num: 5
Candidate Starts for Courthouse 118:
(Start: 5 @65298 has 12 MA's), (6, 65391), (7, 65469), (8, 65472), (9, 65538),
Gene: DaWorst_82 Start: 48589, Stop: 48924, Start Num: 3
Candidate Starts for DaWorst_82:
(Start: 2 @48586 has 2 MA's), (Start: 3 @48589 has 4 MA's), (Start: 5 @48613 has 12 MA's), (6, 48706), (7, 48784), (8, 48787), (9, 48853), (10, 48865), (11, 48886),

Gene: Eureka_41 Start: 35273, Stop: 34962, Start Num: 5
Candidate Starts for Eureka_41:
(4, 35288), (Start: 5 @35273 has 12 MA's), (6, 35180), (7, 35102), (8, 35099), (9, 35033), (10, 35021), $(11,35000)$,

Gene: Francis47_61 Start: 42085, Stop: 41756, Start Num: 3
Candidate Starts for Francis47_61:
(Start: 2 @42088 has 2 MA's), (Start: 3 @42085 has 4 MA's), (Start: 5 @42061 has 12 MA's), (6, 41968), (7, 41890), (8, 41887), (9, 41821), (10, 41809),

Gene: Goku_41 Start: 35002, Stop: 34691, Start Num: 5
Candidate Starts for Goku_41:
(4, 35017), (Start: 5 @35002 has 12 MA's), (6, 34909), (7, 34831), (8, 34828), (9, 34762), (10, 34750), (11, 34729),

Gene: Gompeii16_62 Start: 43159, Stop: 42881, Start Num: 3
Candidate Starts for Gompeii16_62:
(Start: 2 @43162 has 2 MA's), (Start: 3 @43159 has 4 MA's), (Start: 5 @43135 has 12 MA's), (6, 43042), (7, 42964), (8, 42961), (9, 42895),

Gene: Guppsters_73 Start: 45751, Stop: 46098, Start Num: 3
Candidate Starts for Guppsters_73:
(Start: 2 @45748 has 2 MA's), (Start: 3 @45751 has 4 MA's), (Start: 5 @45775 has 12 MA's), (6, 45868), (7, 45946), (8, 45949), (9, 46015), (10, 46027),

Gene: Hannaconda_114 Start: 64647, Stop: 64901, Start Num: 5
Candidate Starts for Hannaconda_114:
(1, 64590), (Start: 5 @64647 has 12 MA's), (6, 64740), (7, 64818), (8, 64821), (9, 64887),
Gene: KashFlow_120 Start: 67152, Stop: 67406, Start Num: 5
Candidate Starts for KashFlow_120:
(1, 67095), (Start: 5 @67152 hās 12 MA's), (6, 67245), (7, 67323), (8, 67326), (9, 67392),
Gene: LittleE_127 Start: 68903, Stop: 69157, Start Num: 5
Candidate Starts for LittleE_127:
(Start: 5 @68903 has 12 MA's), (6, 68996), (7, 69074), (8, 69077), (9, 69143),

Gene: Marcell_59 Start: 40110, Stop: 39784, Start Num: 5
Candidate Starts for Marcell_59:
(Start: 2 @40137 has 2 MA's), (Start: 3 @40134 has 4 MA's), (Start: 5 @40110 has 12 MA's), (6, 40017), (7, 39939), (8, 39936), (9, 39870), (10, 39858), (12, 39798),

Gene: Maroc7_60 Start: 41661, Stop: 41308, Start Num: 2
Candidate Starts for Maroc7_60:
(Start: 2 @ 41661 has 2 MA's), (Start: 3 @41658 has 4 MA's), (Start: 5 @41634 has 12 MA's), (6, $41541),(7,41463),(8,41460),(9,41394),(10,41382),(12,41322)$,

Gene: MiaZeal_123 Start: 66376, Stop: 66630, Start Num: 5
Candidate Starts for MiaZeal_123:
(1, 66319), (Start: 5 @66376 has 12 MA's), (6, 66469), (7, 66547), (8, 66550), (9, 66616),
Gene: Omega_134 Start: 70584, Stop: 70838, Start Num: 5
Candidate Starts for Omega_134:
(Start: 5 @70584 has 12 MA's), (6, 70677), (7, 70755), (8, 70758), (9, 70824),
Gene: PacerPaul_62 Start: 41455, Stop: 41123, Start Num: 2
Candidate Starts for PacerPaul_62:
(Start: 2 @ 41455 has 2 MA's), (Start: 3 @41452 has 4 MA's), (Start: 5 @41428 has 12 MA's), (6, 41335), (7, 41257), (8, 41254), (9, 41188), (10, 41176),

Gene: Squint_121 Start: 66489, Stop: 66743, Start Num: 5
Candidate Starts for Squint_121:
(Start: 5 @66489 has 12 MA's), (6, 66582), (7, 66660), (8, 66663), (9, 66729),
Gene: Superphikiman_120 Start: 65580, Stop: 65834, Start Num: 5 Candidate Starts for Superphikiman_120:
(Start: 5 @65580 has 12 MA's), $(6,65673)$, (7, 65751), (8, 65754), (9, 65820),

