Pham 86684


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 86684 Report

This analysis was run 04/05/24 on database version 557.
Pham number 86684 has 20 members, 1 are drafts.
Phages represented in each track:

- Track 1 : Rohr_62, Melissauren88_73, Burton_61, Scottish_79, Empress_79
- Track 2 : Jerm $\overline{2} 62$
- Track 3 : Polka14_85, Sumter_56, BodEinwohner17_86, Stap_74, Poenanya_84, Bob3_61, Barriga_63, Petp2012̄_63, Museum_62, Doomphist_ 84 , KingMidas_ 80 , Spoon̄ill_77, DaddyRickover_8
- Track 4 : Bipolar_83


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

The start number called the most often in the published annotations is 2 , it was called in 12 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Barriga_63, Bob3_61, BodEinwohner17_86, DaddyRickover_84, Doomphist_84, KingMidās_80, Museum_62, Petp2012_63̄, Poenanya_84, Pō̄ka14_85, Spoonbill_77, Stap_74, Sumter_56,

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

- Bipolar_83, Burton_61, Empress_79, Jerm2_62, Melissauren88_73, Rohr_62, Scottish_79,

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: 6 of 19
- Called $30.0 \%$ of time when present
- Phage (with cluster) where this start called: Bipolar_83 (F1), Burton_61 (A1), Empress_79 (F1), Melissauren88_73 (F1), Rohr_62 (A1), Scottish_7 ${ }^{9}$ (F1),

Start 2:

- Found in 20 of 20 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 12 of 19
- Called $65.0 \%$ of time when present
- Phage (with cluster) where this start called: Barriga_63 (A1), Bob361 (A1), BodEinwohner17_86 (F1), DaddyRickover_84 (F1), Doomphist_84 (F1), KingMidas 80 ( $\mathrm{F} \overline{1}$ ), Museum_62 (A1), Petp2012_63 (A1), Poenanya_84 (F1), Polka14_85 (F1), Spoonbill_77 (F1), Stap_74 (F1), Sumter_56 (A1),


## Start 3:

- Found in 20 of 20 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 5.0\% of time when present
- Phage (with cluster) where this start called: Jerm2_62 (A1),


## Summary by clusters:

There are 2 clusters represented in this pham: A1, F1,
Info for manual annotations of cluster A1:

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

Info for manual annotations of cluster F1:

- Start number 1 was manually annotated 4 times for cluster F1.
-Start number 2 was manually annotated 7 times for cluster F1.


## Gene Information:

Gene: Barriga_63 Start: 39826, Stop: 39578, Start Num: 2
Candidate Starts for Barriga_63:
(Start: 1 @39829 has 6 MA's), (Start: 2 @39826 has 12 MA's), (Start: 3 @39769 has 1 MA's), (4, 39766), (5, 39754), (6, 39637),

Gene: Bipolar_83 Start: 50376, Stop: 50624, Start Num: 1
Candidate Starts for Bipolar_83:
(Start: 1 @50376 has 6 MA's), (Start: 2 @50379 has 12 MA's), (Start: 3 @50436 has 1 MA's), (4, 50439), (5, 50451),

Gene: Bob3_61 Start: 40650, Stop: 40402, Start Num: 2
Candidate Starts for Bob3_61:
(Start: 1 @40653 has 6 MA's), (Start: 2 @40650 has 12 MA's), (Start: 3 @40593 has 1 MA's), (4, 40590), (5, 40578), (6, 40461),

Gene: BodEinwohner17_86 Start: 50838, Stop: 51083, Start Num: 2
Candidate Starts for BodEinwohner17_86:
(Start: 1 @50835 has 6 MA's), (Start: 2 @50838 has 12 MA's), (Start: 3 @50895 has 1 MA's), (4, 50898), (5, 50910), (6, 51027),

Gene: Burton_61 Start: 42443, Stop: 42192, Start Num: 1
Candidate Starts for Burton_61:
(Start: 1 @42443 has 6 MA's), (Start: 2 @42440 has 12 MA's), (Start: 3 @42383 has 1 MA's), (4, 42380), (5, 42368), (6, 42251),

Gene: DaddyRickover_84 Start: 50128, Stop: 50373, Start Num: 2
Candidate Starts for DäddyRickover_84:
(Start: 1 @50125 has 6 MA's), (Start: 2 @50128 has 12 MA's), (Start: 3 @50185 has 1 MA's), (4, 50188), (5, 50200), (6, 50317),

Gene: Doomphist_84 Start: 49537, Stop: 49782, Start Num: 2
Candidate Starts for Doomphist_84:
(Start: 1 @49534 has 6 MA's), (Start: 2 @49537 has 12 MA's), (Start: 3 @49594 has 1 MA's), (4, 49597), (5, 49609), (6, 49726),

Gene: Empress_79 Start: 48345, Stop: 48593, Start Num: 1
Candidate Starts for Empress_79:
(Start: 1 @48345 has 6 MA's), (Start: 2 @48348 has 12 MA's), (Start: 3 @48405 has 1 MA's), (4, 48408), (5, 48420), (6, 48537),

Gene: Jerm2_62 Start: 42085, Stop: 41894, Start Num: 3
Candidate Starts for Jerm2_62:
(Start: 1 @42145 has 6 MA's), (Start: 2 @42142 has 12 MA's), (Start: 3 @42085 has 1 MA's), (4, 42082), (5, 42070), (6, 41953),

Gene: KingMidas_80 Start: 48763, Stop: 49008, Start Num: 2
Candidate Starts for KingMidas_80:
(Start: 1 @48760 has 6 MA's), (Start: 2 @48763 has 12 MA's), (Start: 3 @48820 has 1 MA's), (4, 48823), (5, 48835), (6, 48952),

Gene: Melissauren88_73 Start: 45678, Stop: 45926, Start Num: 1
Candidate Starts for Melissauren88_73:
(Start: 1 @45678 has 6 MA's), (Start: 2 @45681 has 12 MA's), (Start: 3 @45738 has 1 MA's), (4, 45741), (5, 45753), (6, 45870),

Gene: Museum_62 Start: 42358, Stop: 42110, Start Num: 2
Candidate Starts for Museum_62:
(Start: 1 @42361 has 6 MA's), (Start: 2 @42358 has 12 MA's), (Start: 3 @42301 has 1 MA's), (4, 42298), (5, 42286), (6, 42169),

Gene: Petp2012_63 Start: 42842, Stop: 42594, Start Num: 2
Candidate Starts for Petp2012_63:
(Start: 1 @42845 has 6 MA's), (Start: 2 @42842 has 12 MA's), (Start: 3 @42785 has 1 MA's), (4, 42782), (5, 42770), (6, 42653),

Gene: Poenanya_84 Start: 49537, Stop: 49782, Start Num: 2
Candidate Starts for Poenanya_84:
(Start: 1 @49534 has 6 MA's), (Start: 2 @49537 has 12 MA's), (Start: 3 @49594 has 1 MA's), (4, 49597), (5, 49609), (6, 49726),

Gene: Polka14_85 Start: 50327, Stop: 50572, Start Num: 2
Candidate Starts for Polka14_85:
(Start: 1 @50324 has 6 MA's), (Start: 2 @50327 has 12 MA's), (Start: 3 @50384 has 1 MA's), (4, 50387), (5, 50399), (6, 50516),

Gene: Rohr_62 Start: 42191, Stop: 41940, Start Num: 1
Candidate Starts for Rohr_62:
(Start: 1 @ 42191 has 6 MA's), (Start: 2 @ 42188 has 12 MA's), (Start: 3 @ 42131 has 1 MA's), (4, $42128)$, $(5,42116),(6,41999)$,

Gene: Scottish_79 Start: 48015, Stop: 48263, Start Num: 1
Candidate Starts for Scottish_79:
(Start: 1 @48015 has 6 MA's), (Start: 2 @48018 has 12 MA's), (Start: 3 @ 48075 has 1 MA's), (4, 48078), (5, 48090), (6, 48207),

Gene: Spoonbill_77 Start: 46647, Stop: 46892, Start Num: 2
Candidate Starts for Spoonbill_77:
(Start: 1 @46644 has 6 MA's), (Start: 2 @46647 has 12 MA's), (Start: 3 @46704 has 1 MA's), (4, 46707), (5, 46719), (6, 46836),

Gene: Stap_74 Start: 45684, Stop: 45929, Start Num: 2
Candidate Starts for Stap_74:
(Start: 1 @ 45681 has 6 MA's), (Start: 2 @ 45684 has 12 MA's), (Start: 3 @ 45741 has 1 MA's), (4, 45744), (5, 45756), (6, 45873),

Gene: Sumter_56 Start: 40884, Stop: 40636, Start Num: 2
Candidate Starts for Sumter_56:
(Start: 1 @40887 has 6 MA's), (Start: 2 @40884 has 12 MA's), (Start: 3 @40827 has 1 MA's), (4, 40824), (5, 40812), (6, 40695),

