Pham 86516







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 86516 Report

This analysis was run 04/05/24 on database version 557.
Pham number 86516 has 25 members, 5 are drafts.
Phages represented in each track:

- Track 1 : Pita2_1, Conceptll_1, Francis47_1, JuliaChild_1, Gandalf20_1,

TwoPeat_1, Bircsak_1, Agaliāna_1, PSullivān_1, Gompeīi16_1, Tote_1, Swole_1, Jorgensen 1

- Track 2 : Homines_1
- Track 3 : Kanely_2, Niza_2, Altman_2
- Track 4 : Wheeler_1
- Track 5 : PacerPaūl_1, KBG_1
- Track 6 : BPBiebs31_1
- Track 7 : Papez_1, Lopton_1
- Track 8 : Rohr_1
- Track 9 : Esprēsso_1


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

The start number called the most often in the published annotations is 4 , it was called in 14 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agaliana_1, Altman_2, Bircsak_1, Conceptll_1, Espresso_1, Francis47_1,

Gandalf20_1, Gompeii16_1, Jorgensen_1, JuliaChild_1, Kānely_2, Loptō_1, Niza_2, PSullivan_1, Papez_1, Pita2_1, Swole_1, Tote_1, Two Peat_1,

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

- BPBiebs31_1, Homines_1, KBG_1, PacerPaul_1, Rohr_1, Wheeler_1,

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

## Summary by start number:

Start 1:

- Found in 20 of 25 ( 80.0\%) of genes in pham
- Manual Annotations of this start: 3 of 20
- Called $15.0 \%$ of time when present
- Phage (with cluster) where this start called: BPBiebs31_1 (A1), KBG_1 (A1),

PacerPaul_1 (A1),
Start 2:

- Found in 25 of 25 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called $4.0 \%$ of time when present
- Phage (with cluster) where this start called: Wheeler_1 (A1),

Start 4:

- Found in 25 of 25 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 14 of 20
- Called $76.0 \%$ of time when present
- Phage (with cluster) where this start called: Agaliana_1 (A1), Altman_2 (A1),

Bircsak_1 (A1), ConceptI_1 (A1), Espresso_1 (A1), Francis47_1 (A1), Gandalf20_1 (A1), Gompeii16_1 (A1), Jorgensen_1 (A1), JuliaChild_1 (A1), Kanely_2 (A1), Lopton_1 (A1), Niza_2 (A1), PSullivān_1 (A1), Papez_1 (A1), Pita2_1 (A1), Swole_1 (A1), Tote_1 (A1), TwoPeat_1 (A1),

Start 5:

- Found in 25 of 25 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called $8.0 \%$ of time when present
- Phage (with cluster) where this start called: Homines_1 (A1), Rohr_1 (A1),


## Summary by clusters:

There is one cluster represented in this pham: A1
Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 3 times for cluster A1.
- Start number 2 was manually annotated 1 time for cluster A1.
- Start number 4 was manually annotated 14 times for cluster A1.
-Start number 5 was manually annotated 2 times for cluster A1.


## Gene Information:

Gene: Agaliana_1 Start: 602, Stop: 838, Start Num: 4
Candidate Starts for Agaliana_1:
(Start: 1 @ 536 has 3 MA's), (Start: 2 @ 572 has 1 MA's), (3, 581), (Start: 4 @602 has 14 MA's), (Start:
5 @605 has 2 MA's), (6, 707), (7, 755),
Gene: Altman_2 Start: 1064, Stop: 1300, Start Num: 4
Candidate Starts for Altman_2:
(Start: 2 @ 1034 has 1 MA's), (3, 1043), (Start: 4 @1064 has 14 MA's), (Start: 5 @1067 has 2 MA's), $(6,1169),(7,1217)$,

Gene: BPBiebs31_1 Start: 533, Stop: 835, Start Num: 1
Candidate Starts for BPBiebs31_1:
(Start: 1 @ 533 has 3 MA's), (Start: 2 @569 has 1 MA's), (3, 578), (Start: 4 @599 has 14 MA's), (Start: 5 @602 has 2 MA's), (6, 704), (7, 752),

Gene: Bircsak_1 Start: 602, Stop: 838, Start Num: 4
Candidate Starts for Bircsak_1:
(Start: 1 @ 536 has 3 MA's), (Start: 2 @ 572 has 1 MA's), (3, 581), (Start: 4 @602 has 14 MA's), (Start: 5 @605 has 2 MA's), (6, 707), (7, 755),

Gene: Conceptll_1 Start: 602, Stop: 838, Start Num: 4 Candidate Starts for Conceptll_1:
(Start: 1 @536 has 3 MA's), (Start: 2 @572 has 1 MA's), (3, 581), (Start: 4 @602 has 14 MA's), (Start: 5 @605 has 2 MA's), (6, 707), (7, 755),

Gene: Espresso_1 Start: 599, Stop: 835, Start Num: 4
Candidate Starts for Espresso_1:
(Start: 2 @ 569 has 1 MA's), ( 3,578 ), (Start: 4 @599 has 14 MA's), (Start: 5 @602 has 2 MA's), (6, 704), (7, 752),

Gene: Francis47_1 Start: 602, Stop: 838, Start Num: 4
Candidate Starts for Francis47_1:
(Start: 1 @ 536 has 3 MA's), (Start: 2 @ 572 has 1 MA's), (3, 581), (Start: 4 @602 has 14 MA's), (Start: 5 @605 has 2 MA's), ( 6,707 ), ( 7,755 ),

Gene: Gandalf20_1 Start: 610, Stop: 846, Start Num: 4
Candidate Starts for Gandalf20_1:
(Start: 1 @544 has 3 MA's), (Start: 2 @580 has 1 MA's), (3, 589), (Start: 4 @610 has 14 MA's), (Start: 5 @613 has 2 MA's), (6, 715), (7, 763),

Gene: Gompeii16_1 Start: 602, Stop: 838, Start Num: 4
Candidate Starts for Gompeii16_1:
(Start: 1 @ 536 has 3 MA's), (Start: 2 @ 572 has 1 MA's), ( 3,581 ), (Start: 4 @602 has 14 MA's), (Start: 5 @605 has 2 MA's), ( 6,707 ), ( 7,755 ),

Gene: Homines_1 Start: 602, Stop: 835, Start Num: 5
Candidate Starts for Homines_1:
(Start: 1 @533 has 3 MA's), (Start: 2 @569 has 1 MA's), (3, 578), (Start: 4 @599 has 14 MA's), (Start: 5 @602 has 2 MA's), (6, 704), (7, 752),

Gene: Jorgensen_1 Start: 600, Stop: 836, Start Num: 4 Candidate Starts for Jorgensen_1:
(Start: 1 @534 has 3 MA's), (Start: 2 @570 has 1 MA's), (3, 579), (Start: 4 @600 has 14 MA's), (Start: 5 @603 has 2 MA's), (6, 705), (7, 753),

Gene: JuliaChild_1 Start: 601, Stop: 837, Start Num: 4
Candidate Starts for JuliaChild_1:
(Start: 1 @535 has 3 MA's), (Start: 2 @ 571 has 1 MA's), (3, 580), (Start: 4 @601 has 14 MA's), (Start: 5 @604 has 2 MA's), ( 6,706 ), ( 7,754 ),

Gene: KBG_1 Start: 536, Stop: 838, Start Num: 1
Candidate Starts for KBG_1:
(Start: 1 @536 has 3 MA's), (Start: 2 @572 has 1 MA's), (3, 581), (Start: 4 @602 has 14 MA's), (Start: 5 @605 has 2 MA's), (6, 707), (7, 755),

Gene: Kanely_2 Start: 1064, Stop: 1300, Start Num: 4
Candidate Starts for Kanely_2:
(Start: 2 @1034 has 1 MA's), (3, 1043), (Start: 4 @1064 has 14 MA's), (Start: 5 @1067 has 2 MA's), $(6,1169),(7,1217)$,

Gene: Lopton_1 Start: 608, Stop: 844, Start Num: 4
Candidate Starts for Lopton_1:
(Start: 1 @ 542 has 3 MA's), (Start: 2 @578 has 1 MA's), (3, 587), (Start: 4 @608 has 14 MA's), (Start: 5 @611 has 2 MA's), ( 6,713 ), ( 7,761 ),

Gene: Niza_2 Start: 1064, Stop: 1300, Start Num: 4
Candidate Starts for Niza_2:
(Start: 2 @ 1034 has 1 MA's), (3, 1043), (Start: 4 @1064 has 14 MA's), (Start: 5 @1067 has 2 MA's), $(6,1169),(7,1217)$,

Gene: PSullivan_1 Start: 601, Stop: 837, Start Num: 4
Candidate Starts for PSullivan_1:
(Start: 1 @ 535 has 3 MA's), (Start: 2 @ 571 has 1 MA's), (3, 580), (Start: 4 @601 has 14 MA's), (Start: 5 @604 has 2 MA's), (6, 706), (7, 754),

Gene: PacerPaul_1 Start: 536, Stop: 838, Start Num: 1
Candidate Starts for PacerPaul_1:
(Start: 1 @ 536 has 3 MA's), (Start: 2 @ 572 has 1 MA's), (3, 581), (Start: 4 @602 has 14 MA's), (Start: 5 @605 has 2 MA's), (6, 707), (7, 755),

Gene: Papez_1 Start: 600, Stop: 836, Start Num: 4 Candidate Starts for Papez_1:
(Start: 1 @534 has 3 MA's), (Start: 2 @570 has 1 MA's), (3, 579), (Start: 4 @600 has 14 MA's), (Start: 5 @603 has 2 MA's), (6, 705), (7, 753),

Gene: Pita2_1 Start: 601, Stop: 837, Start Num: 4
Candidate Starts for Pita2_1:
(Start: 1 @ 535 has 3 MA's), (Start: 2 @ 571 has 1 MA's), (3, 580), (Start: 4 @601 has 14 MA's), (Start: 5 @604 has 2 MA's), (6, 706), (7, 754),

Gene: Rohr_1 Start: 602, Stop: 835, Start Num: 5
Candidate Starts for Rohr_1:
(Start: 1 @ 533 has 3 MA's), (Start: 2 @ 569 has 1 MA's), (3, 578), (Start: 4 @599 has 14 MA's), (Start: 5 @602 has 2 MA's), ( 6,704 ), ( 7,752 ),

Gene: Swole_1 Start: 601, Stop: 837, Start Num: 4
Candidate Starts for Swole_1:
(Start: 1 @ 535 has 3 MA's), (Start: 2 @571 has 1 MA's), (3, 580), (Start: 4 @601 has 14 MA's), (Start: 5 @604 has 2 MA's), ( 6,706 ), ( 7,754 ),

Gene: Tote_1 Start: 601, Stop: 837, Start Num: 4
Candidate Starts for Tote_1:
(Start: 1 @ 535 has 3 MA's), (Start: 2 @ 571 has 1 MA's), (3, 580), (Start: 4 @601 has 14 MA's), (Start: 5 @604 has 2 MA's), (6, 706), (7, 754),

Gene: TwoPeat_1 Start: 601, Stop: 837, Start Num: 4
Candidate Starts for TwoPeat_1:
(Start: 1 @535 has 3 MA's), (Start: 2 @571 has 1 MA's), (3, 580), (Start: 4 @601 has 14 MA's), (Start: 5 @604 has 2 MA's), (6, 706), (7, 754),

Gene: Wheeler_1 Start: 570, Stop: 836, Start Num: 2
Candidate Starts for Wheeler_1:
(Start: 2 @ 570 has 1 MA's), ( $\overline{3}, 579$ ), (Start: 4 @600 has 14 MA's), (Start: 5 @603 has 2 MA's), (6, 705), (7, 753),

