Pham 42502


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 42502 Report

This analysis was run 04/05/24 on database version 557.
Pham number 42502 has 23 members, 7 are drafts.
Phages represented in each track:

- Track 1 : Swiphy_61, AbsoluteMadLad_58, Fozzie_58, KlimbOn_58, ProfessorX_58
- Track 2 : ThreeŌh3D2_60, JacAttac_6̄̄, IsaacEli_ 60 , JDog_59, Kikipoo_60,

Brilliant_61, Vista_58

- Track $\overline{3}$ : Lasso_59, Simielle_58, Orion_60, AltPhacts_58, Pacifista_61
- Track 4 : Colettí59, Chute_59, Cornob̄̄le_58
- Track 5 : Basato 59
- Track 6 : Olak $5 \overline{9}$
- Track 7 : Mesh1_60


## 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 6 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Brilliant_61, IsaacEli_60, JDog_59, JacAttac_60, Kikipoo_60, ThreeOh3D2_60, Vista_58,

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

- AbsoluteMadLad_58, AltPhacts_58, Basato_59, Chute_59, Coletti_59, Cornobble_58, Fozzie_58, Klimb̄̄n_58, Lasso_59, Mesh1_60, Olak_59, Orion_60, Pacifista_61, ProfessorX_58, Simielle_58, Swiphy_61,

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

## Summary by start number:

Start 1:

- Found in 10 of 23 ( $43.5 \%$ ) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: AbsoluteMadLad_58 (B1), Fozzie_58
(B1), KlimbOn_58 (B1), ProfessorX_58 (B1), Swiphy_61 (B1),

Start 2:

- Found in 10 of 23 ( $43.5 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called $40.0 \%$ of time when present
- Phage (with cluster) where this start called: Basato_59 (B1), Chute_59 (B1), Coletti_59 (B1), Cornobble_58 (B1),


## Start 3:

- Found in 23 of 23 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called $26.1 \%$ of time when present
- Phage (with cluster) where this start called: AltPhacts_58 (B1), Lasso_59 (B1), Mesh1_60 (B1), Orion_60 (B1), Pacifista_61 (B1), Simielle_58 (B1),

Start 4:

- Found in 23 of 23 ( $100.0 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $4.3 \%$ of time when present
- Phage (with cluster) where this start called: Olak_59 (B1),

Start 5:

- Found in 23 of 23 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 6 of 16
- Called $30.4 \%$ of time when present
- Phage (with cluster) where this start called: Brilliant 61 (B1), IsaacEli 60 (B1),

JDog_59 (B1), JacAttac_60 (B1), Kikipoo_60 (B1), ThreeOh3D2_60 (B1), Vista_58
(B1),

## Summary by clusters:

There is one cluster represented in this pham: B1
Info for manual annotations of cluster B1:
-Start number 1 was manually annotated 4 times for cluster B1.
-Start number 2 was manually annotated 1 time for cluster B1.
-Start number 3 was manually annotated 5 times for cluster B1.
-Start number 5 was manually annotated 6 times for cluster B1.

## Gene Information:

Gene: AbsoluteMadLad_58 Start: 51668, Stop: 51802, Start Num: 1
Candidate Starts for AbsoluteMadLad_58:
(Start: 1 @51668 has 4 MA's), (Start: 2 @51683 has 1 MA's), (Start: 3 @51704 has 5 MA's), (4, 51707), (Start: 5 @51710 has 6 MA's), $(6,51719),(8,51767)$,

Gene: AltPhacts_58 Start: 51018, Stop: 51116, Start Num: 3
Candidate Starts for AltPhacts_58:
(Start: 3 @51018 has 5 MA's), (4, 51021), (Start: 5 @51024 has 6 MA's), (6, 51033), (8, 51081),
Gene: Basato_59 Start: 51715, Stop: 51834, Start Num: 2

Candidate Starts for Basato_59:
(Start: 1 @51700 has 4 MA's), (Start: 2 @51715 has 1 MA's), (Start: 3 @51736 has 5 MA's), (4, 51739), (Start: 5 @51742 has 6 MA's), (6, 51751), (7, 51754), (8, 51799),

Gene: Brilliant_61 Start: 52011, Stop: 52103, Start Num: 5
Candidate Starts for Brilliant_61:
(Start: 3 @52005 has 5 MA's), (4, 52008), (Start: 5 @52011 has 6 MA's), (6, 52020), (8, 52068),
Gene: Chute_59 Start: 51805, Stop: 51924, Start Num: 2
Candidate Starts for Chute_59:
(Start: 1 @51790 has 4 MA's), (Start: 2 @51805 has 1 MA's), (Start: 3 @51826 has 5 MA's), (4, 51829), (Start: 5 @51832 has 6 MA's), (6, 51841), (8, 51889),

Gene: Coletti_59 Start: 51805, Stop: 51924, Start Num: 2
Candidate Starts for Coletti_59:
(Start: 1 @51790 has 4 MA's), (Start: 2 @51805 has 1 MA's), (Start: 3 @51826 has 5 MA's), (4, 51829), (Start: 5 @51832 has 6 MA's), (6, 51841), (8, 51889),

Gene: Cornobble_58 Start: 51400, Stop: 51519, Start Num: 2
Candidate Starts for Cornobble_58:
(Start: 1 @51385 has 4 MA's), (Start: 2 @51400 has 1 MA's), (Start: 3 @51421 has 5 MA's), (4, 51424), (Start: 5 @51427 has 6 MA's), (6, 51436), (8, 51484),

Gene: Fozzie_58 Start: 51761, Stop: 51895, Start Num: 1
Candidate Starts for Fozzie_58:
(Start: 1 @51761 has 4 MA's), (Start: 2 @51776 has 1 MA's), (Start: 3 @51797 has 5 MA's), (4, 51800), (Start: 5 @51803 has 6 MA's), (6, 51812), (8, 51860),

Gene: IsaacEli_60 Start: 52014, Stop: 52106, Start Num: 5
Candidate Starts for IsaacEli_60:
(Start: 3 @52008 has 5 MA's), (4, 52011), (Start: 5 @52014 has 6 MA's), (6, 52023), (8, 52071),
Gene: JDog_59 Start: 52030, Stop: 52122, Start Num: 5
Candidate Starts for JDog_59:
(Start: 3 @52024 has 5 MA's), (4, 52027), (Start: 5 @52030 has 6 MA's), (6, 52039), (8, 52087),
Gene: JacAttac_60 Start: 51435, Stop: 51527, Start Num: 5
Candidate Starts for JacAttac_60:
(Start: 3 @51429 has 5 MA's), $(4,51432)$, (Start: 5 @51435 has 6 MA's), (6, 51444), (8, 51492),
Gene: Kikipoo_60 Start: 52014, Stop: 52106, Start Num: 5
Candidate Starts for Kikipoo_60:
(Start: 3 @52008 has 5 MA's), (4, 52011), (Start: 5 @52014 has 6 MA's), (6, 52023), (8, 52071),
Gene: KlimbOn_58 Start: 51439, Stop: 51573, Start Num: 1
Candidate Starts for KlimbOn_58:
(Start: 1 @51439 has 4 MA's), (Start: 2 @51454 has 1 MA's), (Start: 3 @51475 has 5 MA's), (4, 51478), (Start: 5 @51481 has 6 MA's), (6, 51490), (8, 51538),

Gene: Lasso_59 Start: 51744, Stop: 51842, Start Num: 3
Candidate Starts for Lasso_59:
(Start: 3 @51744 has 5 MA's), (4, 51747), (Start: 5 @51750 has 6 MA's), (6, 51759), (8, 51807),

Gene: Mesh1_60 Start: 52015, Stop: 52113, Start Num: 3
Candidate Starts for Mesh1_60:
(Start: 1 @51979 has 4 MA's), (Start: 2 @51994 has 1 MA's), (Start: 3 @52015 has 5 MA's), (4, 52018), (Start: 5 @52021 has 6 MA's), (6, 52030), (8, 52078),

Gene: Olak_59 Start: 51456, Stop: 51551, Start Num: 4
Candidate Starts for Olak_59:
(Start: 3 @51453 has 5 MA's), (4, 51456), (Start: 5 @51459 has 6 MA's), (6, 51468), (8, 51516),
Gene: Orion_60 Start: 51436, Stop: 51534, Start Num: 3
Candidate Starts for Orion_60:
(Start: 3 @51436 has 5 MA's), (4, 51439), (Start: 5 @51442 has 6 MA's), (6, 51451), (8, 51499),
Gene: Pacifista_61 Start: 51449, Stop: 51547, Start Num: 3
Candidate Starts for Pacifista_61:
(Start: 3 @51449 has 5 MA's), (4, 51452), (Start: 5 @51455 has 6 MA's), (6, 51464), (8, 51512),
Gene: ProfessorX_58 Start: 51426, Stop: 51560, Start Num: 1
Candidate Starts for ProfessorX_58:
(Start: 1 @51426 has 4 MA's), (Start: 2 @ 51441 has 1 MA's), (Start: 3 @51462 has 5 MA's), (4, 51465), (Start: 5 @51468 has 6 MA's), $(6,51477)$, (8, 51525),

Gene: Simielle_58 Start: 51433, Stop: 51531, Start Num: 3
Candidate Starts for Simielle_58:
(Start: 3 @51433 has 5 MA's), (4, 51436), (Start: 5 @51439 has 6 MA's), (6, 51448), (8, 51496),
Gene: Swiphy_61 Start: 51751, Stop: 51885, Start Num: 1
Candidate Starts for Swiphy_61:
(Start: 1 @51751 has 4 MA's), (Start: 2 @51766 has 1 MA's), (Start: 3 @51787 has 5 MA's), (4, 51790), (Start: 5 @51793 has 6 MA's), (6, 51802), (8, 51850),

Gene: ThreeOh3D2_60 Start: 52008, Stop: 52100, Start Num: 5
Candidate Starts for ThreeOh3D2_60:
(Start: 3 @52002 has 5 MA's), (4, 52005), (Start: 5 @52008 has 6 MA's), (6, 52017), (8, 52065),
Gene: Vista_58 Start: 51504, Stop: 51596, Start Num: 5
Candidate Starts for Vista_58:
(Start: 3 @51498 has 5 MA's), (4, 51501), (Start: 5 @51504 has 6 MA's), (6, 51513), (8, 51561),

