Pham 132390



$1^{x} 1^{8}$

$5 \times 8$

$\left.\imath^{\imath^{2}}\right|_{3^{5}} ^{3^{6}}$






$\left.\left.\right|^{3}\right|^{9}$


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 132390 Report

This analysis was run 04/05/24 on database version 557.
Pham number 132390 has 22 members, 4 are drafts.
Phages represented in each track:

- Track 1 : Big3_90
- Track 2 : MrGōrdo_91
- Track 3 : Mask 55
- Track 4 : Mao1-56
- Track 5 : Dori_55
- Track 6 : Sejanus_53
- Track 7 : MulchSalad_51
- Track 8 : Xula_33, QueenHazel_34
- Track 9 : Brujita_38, Island3_38
- Track 10 : HC_37, Babsiella_39
- Track 11 : Sbash_49
- Track 12 : Kevin1_40
- Track 13 : Rubeelu_ 42, Philonius_39, Butters_42
- Track 14 : Aggie_38̄, Silvy_40, Scitech_37
- Track 15 : MicheIleMyBell_39


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

The start number called the most often in the published annotations is 11 , it was called in 6 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Babsiella_39, Brujita_38, HC_37, Island3_38, QueenHazel_34, Xula_33,

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

- Aggie_38, Big3_90, Butters_42, Dori_55, Kevin1_40, Mao1_56, Mask_55, MichelleMyBell_39, MrGordo_91, MulchSalad_51, Philonius_39, Rubeēu_42, Sbash_49, Scitēch_37, Sejanus_53, Silvy_40,


## Summary by start number:

Start 2:

- Found in 2 of 22 ( $9.1 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: MrGordo_91 (A1),

Start 3:

- Found in 2 of 22 ( $9.1 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Big3_90 (A1),

Start 6:

- Found in 5 of 22 ( $22.7 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $20.0 \%$ of time when present
- Phage (with cluster) where this start called: Mao1_56 (AD),

Start 9:

- Found in 9 of 22 ( $40.9 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 18
- Called $88.9 \%$ of time when present
- Phage (with cluster) where this start called: Aggie_38 (N), Dori_55 (AD), Mask_55 (AD), MulchSalad_51 (F), Sbash_49 (I2), Scitech_37 (N), Sejanūs_53 (AD), Silvy_40 ( N ),

Start 11:

- Found in 6 of 22 ( $27.3 \%$ ) of genes in pham
- Manual Annotations of this start: 6 of 18
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Babsiella_39 (11), Brujita_38 (I1), HC_37 (11), Island3_38 (11), QueenHazel_34 (11), Xula_33 (11),

Start 17:

- Found in 5 of 22 ( $22.7 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 18
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Butters 42 (N), Kevin1_40 (N), MichelleMyBell_39 (N), Philonius_39 (N), Rubeelu_42 (N),


## Summary by clusters:

There are 6 clusters represented in this pham: AD, F, I1, I2, N, A1,
Info for manual annotations of cluster A1:

- Start number 2 was manually annotated 1 time for cluster A1.
-Start number 3 was manually annotated 1 time for cluster A1.
Info for manual annotations of cluster AD:
-Start number 9 was manually annotated 3 times for cluster AD.

Info for manual annotations of cluster I1:
-Start number 11 was manually annotated 6 times for cluster I1.
Info for manual annotations of cluster I2:

- Start number 9 was manually annotated 1 time for cluster 12 .

Info for manual annotations of cluster N:

- Start number 9 was manually annotated 1 time for cluster N .
-Start number 17 was manually annotated 5 times for cluster N .


## Gene Information:

Gene: Aggie_38 Start: 28626, Stop: 29180, Start Num: 9
Candidate Starts for Aggie_38:
(1, 28494), (Start: 9 @28626 has 5 MA's), (13, 28764), (19, 28791), (21, 28845), (29, 28959),
Gene: Babsiella_39 Start: 30203, Stop: 30715, Start Num: 11
Candidate Starts for Babsiella_39:
(Start: 11 @30203 has 6 MA's), (16, 30323), (22, 30395), (23, 30404), (32, 30548), (35, 30578), (38, 30623),

Gene: Big3_90 Start: 52730, Stop: 52278, Start Num: 3
Candidate Starts for Big3_90:
(Start: 2 @52745 has 1 MA's), (Start: 3 @52730 has 1 MA's), (4, 52691), (5, 52688), (8, 52652), (10, 52634), (12, 52622), (19, 52496), (33, 52442), (36, 52427), (39, 52367), (41, 52337),

Gene: Brujita_38 Start: 30937, Stop: 31458, Start Num: 11
Candidate Starts for Brujita_38:
(Start: 11 @30937 has 6 MA's), (16, 31057), (22, 31129), (23, 31138), (32, 31282), (35, 31312), (40, 31393), (41, 31399),

Gene: Butters_42 Start: 30620, Stop: 31015, Start Num: 17
Candidate Starts for Butters_42:
(7, 30455), (Start: 17 @30620 has 5 MA's), (26, 30746), (30, 30824),
Gene: Dori_55 Start: 46509, Stop: 47012, Start Num: 9
Candidate Starts for Dori_55:
(6, 46494), (Start: 9 @46509 has 5 MA's), (14, 46644), (18, 46659), (36, 46875),
Gene: HC_37 Start: 28984, Stop: 29496, Start Num: 11
Candidate Starts for HC_37:
(Start: 11 @28984 has 6 MA's), (16, 29104), (22, 29176), (23, 29185), (32, 29329), (35, 29359), (38, 29404),

Gene: Island3_38 Start: 30937, Stop: 31458, Start Num: 11
Candidate Starts for Island3_38:
(Start: 11 @30937 has 6 MA's), (16, 31057), (22, 31129), (23, 31138), (32, 31282), (35, 31312), (40, 31393), (41, 31399),

Gene: Kevin1_40 Start: 29799, Stop: 30191, Start Num: 17
Candidate Starts for Kevin1_40:
(Start: 17 @29799 has 5 MA's), (26, 29925), (30, 30000),

Gene: Mao1_56 Start: 44783, Stop: 45418, Start Num: 6
Candidate Starts for Mao1_56:
( 6,44783 ), (Start: 9 @ $447 \overline{9} 8$ has 5 MA's), ( 14,44933 ), (18, 44948), ( 24,45014 ), ( 25,45029 ), ( 28 , $45056)$, $(31,45116),(34,45146),(36,45170),(37,45191),(41,45248),(42,45278),(43,45353),(44$, 45359),

Gene: Mask_55 Start: 47356, Stop: 47739, Start Num: 9
Candidate Starts for Mask_55:
(6, 47341), (Start: 9 @47356 has 5 MA's), (15, 47494), (18, 47509), (24, 47575), (25, 47590), (28, 47617),

Gene: MichelleMyBell_39 Start: 28891, Stop: 29283, Start Num: 17
Candidate Starts for MichelleMyBell_39:
(7, 28726), (Start: 17 @28891 has 5 MA's), (26, 29017), (30, 29092),
Gene: MrGordo_91 Start: 50305, Stop: 49841, Start Num: 2
Candidate Starts for MrGordo_91:
(Start: 2 @50305 has 1 MA's), (Start: 3 @50290 has 1 MA's), (4, 50254), (5, 50251), (8, 50215), (10, 50197), (12, 50185), (19, 50059), (33, 50005), (36, 49990), $(39,49930),(41,49900)$,

Gene: MulchSalad_51 Start: 34761, Stop: 35228, Start Num: 9
Candidate Starts for MulchSalad_51:
(1, 34629), (Start: 9 @34761 has 5 MA's), (13, 34899), (19, 34926), (27, 34995), (33, 35076), (36, 35091),

Gene: Philonius_39 Start: 28559, Stop: 28951, Start Num: 17
Candidate Starts for Philonius_39:
(7, 28394), (Start: 17 @28559 has 5 MA's), ( 26,28685 ), ( 30,28760 ),
Gene: QueenHazel_34 Start: 28973, Stop: 29488, Start Num: 11
Candidate Starts for QueenHazel_34:
(Start: 11 @28973 has 6 MA's), (16, 29093), (22, 29168), (23, 29177), (32, 29321), (35, 29351), (38, 29396),

Gene: Rubeelu_42 Start: 30620, Stop: 31015, Start Num: 17
Candidate Starts for Rubeelu_42:
(7, 30455), (Start: 17 @30620 has 5 MA's), (26, 30746), (30, 30824),
Gene: Sbash_49 Start: 38081, Stop: 38728, Start Num: 9
Candidate Starts for Sbash_49:
(6, 38066), (Start: 9 @38081 has 5 MA's), (14, 38216), (18, 38234), (20, 38285), (24, 38333), (25, $38348),(37,38510),(41,38567),(42,38597)$,

Gene: Scitech_37 Start: 27823, Stop: 28377, Start Num: 9
Candidate Starts for Scitech_37:
(1, 27691), (Start: 9 @27823 has 5 MA's), (13, 27961), (19, 27988), (21, 28042), (29, 28156),
Gene: Sejanus_53 Start: 46287, Stop: 46670, Start Num: 9
Candidate Starts for Sejanus_53:
(6, 46272), (Start: 9 @46287 has 5 MA's), (15, 46425), (18, 46440), (24, 46506), (25, 46521), (28, 46548),

Gene: Silvy_40 Start: 28626, Stop: 29180, Start Num: 9
Candidate Starts for Silvy_40:
(1, 28494), (Start: 9 @28626 has 5 MA's), (13, 28764), (19, 28791), (21, 28845), (29, 28959),
Gene: Xula_33 Start: 28497, Stop: 29012, Start Num: 11
Candidate Starts for Xula_33:
(Start: 11 @28497 has 6 MA's), (16, 28617), (22, 28692), (23, 28701), (32, 28845), (35, 28875), (38, 28920),

