

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 : MrGordo 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\_38, Silvy\_40, Scitech\_37
- Track 15 : MichelleMyBell 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, Rubeelu\_42, Sbash\_49, Scitech\_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), Sejanus\_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 (I1), Brujita\_38 (I1), HC\_37 (I1), Island3\_38 (I1), QueenHazel\_34 (I1), Xula\_33 (I1),

## 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 I2.

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 Mao 1 56:

(6, 44783), (Start: 9 @44798 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:

 $(Start:\ 11\ @28497\ has\ 6\ MA's),\ (16,\ 28617),\ (22,\ 28692),\ (23,\ 28701),\ (32,\ 28845),\ (35,\ 28875),\ (38,\ 28845),\ (38,\ 28875)$ 

28920),