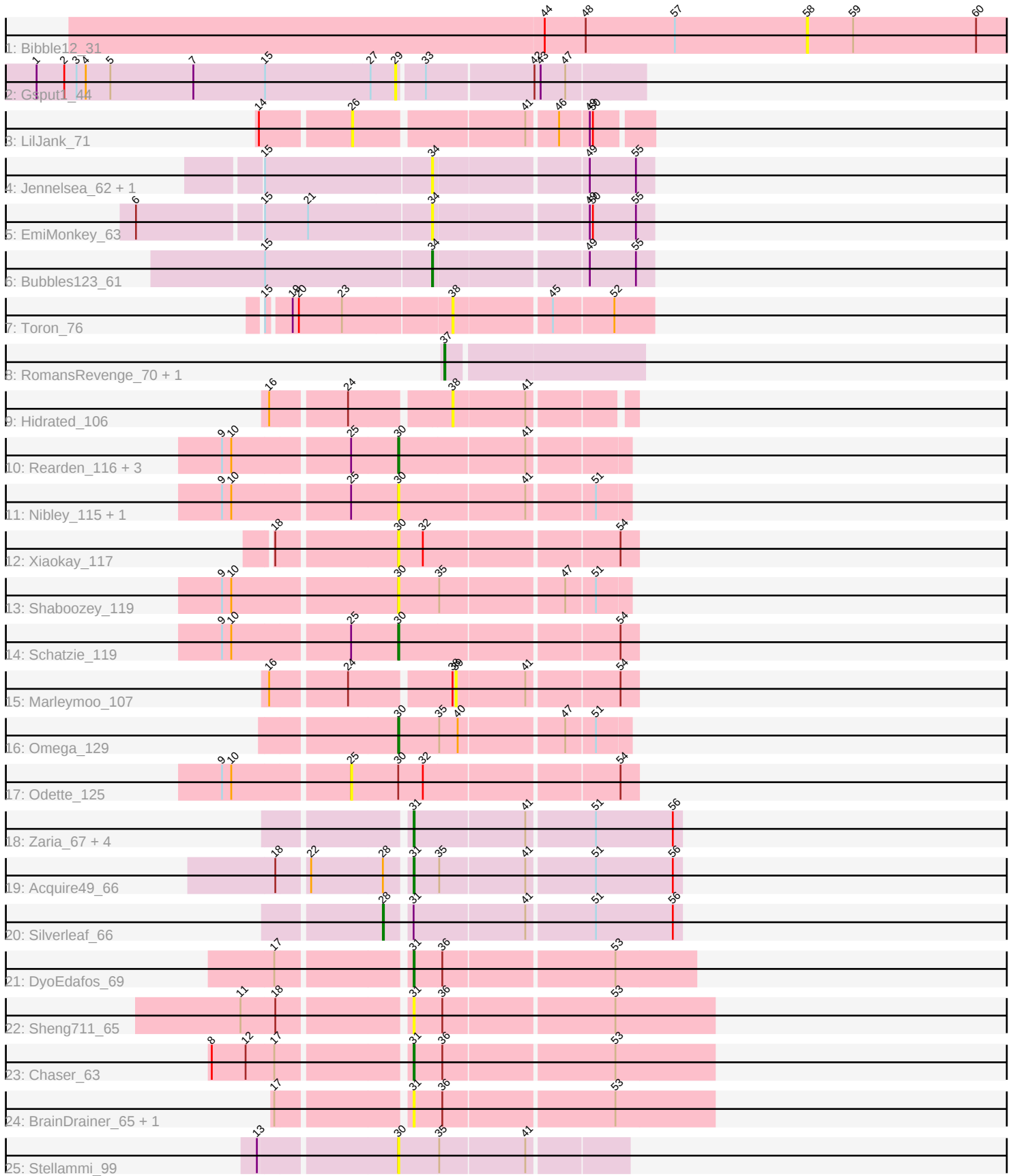


Pham 278418



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 278418 Report

This analysis was run 02/07/26 on database version 634.

Pham number 278418 has 36 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Bibble12\_31
- Track 2 : Gsput1\_44
- Track 3 : LilJank\_71
- Track 4 : Jennelsea\_62, Mwanjiwa\_71
- Track 5 : EmiMonkey\_63
- Track 6 : Bubbles123\_61
- Track 7 : Toron\_76
- Track 8 : RomansRevenge\_70, Boise\_68
- Track 9 : Hidrated\_106
- Track 10 : Rearden\_116, Hannaconda\_109, Porcelain\_118, KashFlow\_115
- Track 11 : Nibley\_115, BronnyJames\_115
- Track 12 : Xiaokay\_117
- Track 13 : Shaboozey\_119
- Track 14 : Schatzie\_119
- Track 15 : Marleymo\_107
- Track 16 : Omega\_129
- Track 17 : Odette\_125
- Track 18 : Zaria\_67, Halena\_64, DirkDirk\_63, Calm\_67, LeBron\_65
- Track 19 : Acquire49\_66
- Track 20 : Silverleaf\_66
- Track 21 : DyoEdafos\_69
- Track 22 : Sheng711\_65
- Track 23 : Chaser\_63
- Track 24 : BrainDrainer\_65, Kropertea\_63
- Track 25 : Stellammi\_99

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

The start number called the most often in the published annotations is 31, it was called in 8 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49\_66, BrainDrainer\_65, Calm\_67, Chaser\_63, DirkDirk\_63, DyoEdafos\_69, Halena\_64, Kropertea\_63, LeBron\_65, Sheng711\_65, Zaria\_67,

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

- Silverleaf\_66,

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

- Bibble12\_31, Boise\_68, BronnyJames\_115, Bubbles123\_61, EmiMonkey\_63, Gsput1\_44, Hannaconda\_109, Hidrated\_106, Jennelsea\_62, KashFlow\_115, LilJank\_71, Marleymoo\_107, Mwanjiwa\_71, Nibley\_115, Odette\_125, Omega\_129, Porcelain\_118, Rearden\_116, RomansRevenge\_70, Schatzie\_119, Shaboozey\_119, Stellammi\_99, Toron\_76, Xiaokay\_117,

### Summary by start number:

Start 25:

- Found in 8 of 36 ( 22.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Odette\_125 (J),

Start 26:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilJank\_71 (DU2),

Start 28:

- Found in 2 of 36 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Silverleaf\_66 (L1),

Start 29:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gsput1\_44 (CU2),

Start 30:

- Found in 12 of 36 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called 91.7% of time when present
- Phage (with cluster) where this start called: BronnyJames\_115 (J), Hannaconda\_109 (J), KashFlow\_115 (J), Nibley\_115 (J), Omega\_129 (J), Porcelain\_118 (J), Rearden\_116 (J), Schatzie\_119 (J), Shaboozey\_119 (J), Stellammi\_99 (UNK), Xiaokay\_117 (J),

Start 31:

- Found in 12 of 36 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 8 of 16
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Acquire49\_66 (L1), BrainDrainer\_65 (L4), Calm\_67 (L1), Chaser\_63 (L4), DirkDirk\_63 (L1), DyoEdafos\_69 (L4), Halena\_64 (L1), Kropertea\_63 (L4), LeBron\_65 (L1), Sheng711\_65 (L4), Zaria\_67

(L1),

Start 34:

- Found in 4 of 36 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bubbles123\_61 (F1), EmiMonkey\_63 (F1), Jennelsea\_62 (F1), Mwanjiwa\_71 (F1),

Start 37:

- Found in 2 of 36 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boise\_68 (FT), RomansRevenge\_70 (FT),

Start 38:

- Found in 3 of 36 ( 8.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Hidrated\_106 (J), Toron\_76 (F6),

Start 39:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marleymoo\_107 (J),

Start 58:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bibble12\_31 (AS2),

### **Summary by clusters:**

There are 10 clusters represented in this pham: F1, FT, CU2, F6, AS2, J, L4, L1, DU2, UNK,

Info for manual annotations of cluster F1:

- Start number 34 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster FT:

- Start number 37 was manually annotated 1 time for cluster FT.

Info for manual annotations of cluster J:

- Start number 30 was manually annotated 5 times for cluster J.

Info for manual annotations of cluster L1:

- Start number 28 was manually annotated 1 time for cluster L1.
- Start number 31 was manually annotated 6 times for cluster L1.

Info for manual annotations of cluster L4:

- Start number 31 was manually annotated 2 times for cluster L4.

### **Gene Information:**

Gene: Acquire49\_66 Start: 45197, Stop: 45448, Start Num: 31

Candidate Starts for Acquire49\_66:

(18, 45080), (22, 45107), (Start: 28 @45176 has 1 MA's), (Start: 31 @45197 has 8 MA's), (35, 45221), (41, 45302), (51, 45365), (56, 45440),

Gene: Bibble12\_31 Start: 21385, Stop: 21161, Start Num: 58

Candidate Starts for Bibble12\_31:

(44, 21640), (48, 21601), (57, 21514), (58, 21385), (59, 21340), (60, 21220),

Gene: Boise\_68 Start: 47176, Stop: 46991, Start Num: 37

Candidate Starts for Boise\_68:

(Start: 37 @47176 has 1 MA's),

Gene: BrainDrainer\_65 Start: 45385, Stop: 45666, Start Num: 31

Candidate Starts for BrainDrainer\_65:

(17, 45268), (Start: 31 @45385 has 8 MA's), (36, 45412), (53, 45571),

Gene: BronnyJames\_115 Start: 65267, Stop: 65479, Start Num: 30

Candidate Starts for BronnyJames\_115:

(9, 65105), (10, 65114), (25, 65222), (Start: 30 @65267 has 5 MA's), (41, 65387), (51, 65447),

Gene: Bubbles123\_61 Start: 41991, Stop: 42194, Start Num: 34

Candidate Starts for Bubbles123\_61:

(15, 41832), (Start: 34 @41991 has 1 MA's), (49, 42132), (55, 42177),

Gene: Calm\_67 Start: 44988, Stop: 45239, Start Num: 31

Candidate Starts for Calm\_67:

(Start: 31 @44988 has 8 MA's), (41, 45093), (51, 45156), (56, 45231),

Gene: Chaser\_63 Start: 45157, Stop: 45438, Start Num: 31

Candidate Starts for Chaser\_63:

(8, 44980), (12, 45013), (17, 45040), (Start: 31 @45157 has 8 MA's), (36, 45184), (53, 45343),

Gene: DirkDirk\_63 Start: 44398, Stop: 44649, Start Num: 31

Candidate Starts for DirkDirk\_63:

(Start: 31 @44398 has 8 MA's), (41, 44503), (51, 44566), (56, 44641),

Gene: DyoEdafos\_69 Start: 45646, Stop: 45909, Start Num: 31

Candidate Starts for DyoEdafos\_69:

(17, 45529), (Start: 31 @45646 has 8 MA's), (36, 45673), (53, 45832),

Gene: EmiMonkey\_63 Start: 44267, Stop: 44470, Start Num: 34

Candidate Starts for EmiMonkey\_63:

(6, 43991), (15, 44108), (21, 44150), (Start: 34 @44267 has 1 MA's), (49, 44408), (50, 44411), (55, 44453),

Gene: Gsput1\_44 Start: 32260, Stop: 32490, Start Num: 29

Candidate Starts for Gsput1\_44:

(1, 31912), (2, 31939), (3, 31951), (4, 31960), (5, 31984), (7, 32065), (15, 32134), (27, 32236), (29, 32260), (33, 32284), (42, 32386), (43, 32392), (47, 32416),

Gene: Halena\_64 Start: 44435, Stop: 44686, Start Num: 31

Candidate Starts for Halena\_64:

(Start: 31 @44435 has 8 MA's), (41, 44540), (51, 44603), (56, 44678),

Gene: Hannaconda\_109 Start: 62823, Stop: 63035, Start Num: 30

Candidate Starts for Hannaconda\_109:

(9, 62661), (10, 62670), (25, 62778), (Start: 30 @62823 has 5 MA's), (41, 62943),

Gene: Hidrated\_106 Start: 65428, Stop: 65589, Start Num: 38

Candidate Starts for Hidrated\_106:

(16, 65269), (24, 65338), (38, 65428), (41, 65497),

Gene: Jennelsea\_62 Start: 41284, Stop: 41487, Start Num: 34

Candidate Starts for Jennelsea\_62:

(15, 41125), (Start: 34 @41284 has 1 MA's), (49, 41425), (55, 41470),

Gene: KashFlow\_115 Start: 65328, Stop: 65540, Start Num: 30

Candidate Starts for KashFlow\_115:

(9, 65166), (10, 65175), (25, 65283), (Start: 30 @65328 has 5 MA's), (41, 65448),

Gene: Kropertea\_63 Start: 45311, Stop: 45574, Start Num: 31

Candidate Starts for Kropertea\_63:

(17, 45194), (Start: 31 @45311 has 8 MA's), (36, 45338), (53, 45497),

Gene: LeBron\_65 Start: 44439, Stop: 44690, Start Num: 31

Candidate Starts for LeBron\_65:

(Start: 31 @44439 has 8 MA's), (41, 44544), (51, 44607), (56, 44682),

Gene: LilJank\_71 Start: 45400, Stop: 45666, Start Num: 26

Candidate Starts for LilJank\_71:

(14, 45319), (26, 45400), (41, 45556), (46, 45583), (49, 45610), (50, 45613),

Gene: Marleymoo\_107 Start: 65101, Stop: 65268, Start Num: 39

Candidate Starts for Marleymoo\_107:

(16, 64939), (24, 65008), (38, 65098), (39, 65101), (41, 65167), (54, 65251),

Gene: Mwanjiwa\_71 Start: 43700, Stop: 43903, Start Num: 34

Candidate Starts for Mwanjiwa\_71:

(15, 43541), (Start: 34 @43700 has 1 MA's), (49, 43841), (55, 43886),

Gene: Nibley\_115 Start: 64844, Stop: 65056, Start Num: 30

Candidate Starts for Nibley\_115:

(9, 64682), (10, 64691), (25, 64799), (Start: 30 @64844 has 5 MA's), (41, 64964), (51, 65024),

Gene: Odette\_125 Start: 69428, Stop: 69694, Start Num: 25

Candidate Starts for Odette\_125:

(9, 69311), (10, 69320), (25, 69428), (Start: 30 @69473 has 5 MA's), (32, 69497), (54, 69677),

Gene: Omega\_129 Start: 69312, Stop: 69524, Start Num: 30

Candidate Starts for Omega\_129:

(Start: 30 @69312 has 5 MA's), (35, 69351), (40, 69369), (47, 69465), (51, 69492),

Gene: Porcelain\_118 Start: 65153, Stop: 65365, Start Num: 30

Candidate Starts for Porcelain\_118:

(9, 64991), (10, 65000), (25, 65108), (Start: 30 @65153 has 5 MA's), (41, 65273),

Gene: Rearden\_116 Start: 64864, Stop: 65076, Start Num: 30

Candidate Starts for Rearden\_116:

(9, 64702), (10, 64711), (25, 64819), (Start: 30 @64864 has 5 MA's), (41, 64984),

Gene: RomansRevenge\_70 Start: 47385, Stop: 47200, Start Num: 37

Candidate Starts for RomansRevenge\_70:

(Start: 37 @47385 has 1 MA's),

Gene: Schatzie\_119 Start: 68356, Stop: 68577, Start Num: 30

Candidate Starts for Schatzie\_119:

(9, 68194), (10, 68203), (25, 68311), (Start: 30 @68356 has 5 MA's), (54, 68560),

Gene: Shaboozey\_119 Start: 65288, Stop: 65500, Start Num: 30

Candidate Starts for Shaboozey\_119:

(9, 65126), (10, 65135), (Start: 30 @65288 has 5 MA's), (35, 65327), (47, 65441), (51, 65468),

Gene: Sheng711\_65 Start: 45215, Stop: 45496, Start Num: 31

Candidate Starts for Sheng711\_65:

(11, 45065), (18, 45098), (Start: 31 @45215 has 8 MA's), (36, 45242), (53, 45401),

Gene: Silverleaf\_66 Start: 45037, Stop: 45309, Start Num: 28

Candidate Starts for Silverleaf\_66:

(Start: 28 @45037 has 1 MA's), (Start: 31 @45058 has 8 MA's), (41, 45163), (51, 45226), (56, 45301),

Gene: Stellammi\_99 Start: 47175, Stop: 47387, Start Num: 30

Candidate Starts for Stellammi\_99:

(13, 47049), (Start: 30 @47175 has 5 MA's), (35, 47214), (41, 47295),

Gene: Toron\_76 Start: 46968, Stop: 47153, Start Num: 38

Candidate Starts for Toron\_76:

(15, 46797), (19, 46818), (20, 46824), (23, 46866), (38, 46968), (45, 47058), (52, 47115),

Gene: Xiaokay\_117 Start: 66343, Stop: 66564, Start Num: 30

Candidate Starts for Xiaokay\_117:

(18, 66232), (Start: 30 @66343 has 5 MA's), (32, 66367), (54, 66547),

Gene: Zaria\_67 Start: 44988, Stop: 45239, Start Num: 31

Candidate Starts for Zaria\_67:

(Start: 31 @44988 has 8 MA's), (41, 45093), (51, 45156), (56, 45231),