

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 223479 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223479 has 17 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Fanaw 51
- Track 2 : StinkyVeggy\_57, KarasumaRum\_57
- Track 3: Nehemiah\_56, Mysterious\_57
- Track 4 : Baee 58
- Track 5 : Shenyu 57
- Track 6 : Suigeneris\_58
- Track 7 : EastView9101 56
- Track 8 : Nangang\_57
- Track 9 : Rich 57
- Track 10 : SirJeffery 56
- Track 11 : Serendipitous\_55
- Track 12 : Phelemich\_55, Reprobate\_56
- Track 13: Rinkes\_55
- Track 14 : CRB2\_56

# 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 5 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Baee\_58, EastView9101\_56, Mysterious\_57, Nehemiah\_56, Phelemich\_55, Reprobate\_56, Serendipitous\_55,

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

Rich\_57,

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

CRB2\_56, Fanaw\_51, KarasumaRum\_57, Nangang\_57, Rinkes\_55, Shenyu\_57, SirJeffery\_56, StinkyVeggy\_57, Suigeneris\_58,

# Summary by start number:

Start 1:

- Found in 1 of 17 (5.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fanaw\_51 (B4),

### Start 3:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Suigeneris\_58 (B5),

### Start 5:

- Found in 8 of 17 (47.1%) of genes in pham
- Manual Annotations of this start: 5 of 9
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Baee\_58 (B5), EastView9101\_56 (B5), Mysterious\_57 (B5), Nehemiah\_56 (B5), Phelemich\_55 (B5), Reprobate\_56 (B5), Serendipitous\_55 (B5),

### Start 7:

- Found in 4 of 17 (23.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KarasumaRum\_57 (B5), Nangang\_57 (B5), Shenyu\_57 (B5), StinkyVeggy\_57 (B5),

#### Start 9:

- Found in 1 of 17 (5.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SirJeffery 56 (B5),

## Start 14:

- Found in 12 of 17 (70.6%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Rich 57 (B5),

#### Start 16:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CRB2\_56 (B9), Rinkes\_55 (B9),

# Summary by clusters:

There are 3 clusters represented in this pham: B4, B5, B9,

### Info for manual annotations of cluster B5:

- •Start number 3 was manually annotated 1 time for cluster B5.
- •Start number 5 was manually annotated 5 times for cluster B5.
- •Start number 14 was manually annotated 1 time for cluster B5.

Info for manual annotations of cluster B9:

•Start number 16 was manually annotated 2 times for cluster B9.

#### Gene Information:

Gene: Baee\_58 Start: 53704, Stop: 53204, Start Num: 5

Candidate Starts for Baee\_58:

(Start: 5 @53704 has 5 MA's), (13, 53590), (Start: 14 @53587 has 1 MA's), (30, 53518), (39, 53383), (47, 53338),

Gene: CRB2\_56 Start: 53718, Stop: 53233, Start Num: 16

Candidate Starts for CRB2 56:

(6, 53814), (Start: 16 @53718 has 2 MA's), (18, 53694), (33, 53499), (38, 53412), (47, 53355),

Gene: EastView9101 56 Start: 52507, Stop: 51881, Start Num: 5

Candidate Starts for EastView9101 56:

(Start: 5 @52507 has 5 MA's), (Start: 14 @52390 has 1 MA's), (24, 52288), (30, 52198), (40, 52060), (47, 52018),

Gene: Fanaw\_51 Start: 51919, Stop: 51119, Start Num: 1

Candidate Starts for Fanaw\_51:

(1, 51919), (2, 51895), (10, 51760), (11, 51709), (17, 51631), (25, 51538), (29, 51469), (30, 51433), (31, 51424), (34, 51361), (35, 51358), (39, 51286), (40, 51283), (47, 51241), (49, 51226), (52, 51175),

Gene: KarasumaRum\_57 Start: 52746, Stop: 52102, Start Num: 7

Candidate Starts for KarasumaRum\_57:

(7, 52746), (Start: 14 @52632 has 1 MA's), (22, 52551), (23, 52548), (25, 52530), (26, 52521), (30, 52425), (40, 52278), (46, 52221),

Gene: Mysterious 57 Start: 52741, Stop: 52097, Start Num: 5

Candidate Starts for Mysterious 57:

(Start: 5 @52741 has 5 MA's), (Start: 14 @52615 has 1 MA's), (27, 52447), (30, 52423), (40, 52273), (42, 52258), (46, 52216),

Gene: Nangang 57 Start: 52928, Stop: 52311, Start Num: 7

Candidate Starts for Nangang 57:

(7, 52928), (12, 52817), (15, 52811), (21, 52748), (22, 52739), (30, 52637), (40, 52487), (46, 52430),

Gene: Nehemiah\_56 Start: 52741, Stop: 52097, Start Num: 5

Candidate Starts for Nehemiah 56:

(Start: 5 @52741 has 5 MA's), (Start: 14 @52615 has 1 MA's), (27, 52447), (30, 52423), (40, 52273), (42, 52258), (46, 52216),

Gene: Phelemich\_55 Start: 52737, Stop: 52096, Start Num: 5

Candidate Starts for Phelemich 55:

(Start: 5 @52737 has 5 MA's), (Start: 14 @52611 has 1 MA's), (20, 52566), (27, 52443), (28, 52440), (30, 52419), (40, 52272), (41, 52260), (46, 52215),

Gene: Reprobate\_56 Start: 52742, Stop: 52101, Start Num: 5

Candidate Starts for Reprobate\_56:

(Start: 5 @52742 has 5 MA's), (Start: 14 @52616 has 1 MA's), (20, 52571), (27, 52448), (28, 52445), (30, 52424), (40, 52277), (41, 52265), (46, 52220),

Gene: Rich\_57 Start: 53862, Stop: 53494, Start Num: 14

Candidate Starts for Rich\_57:

(Start: 5 @53979 has 5 MA's), (13, 53865), (Start: 14 @53862 has 1 MA's), (30, 53793), (39, 53658), (47, 53613),

Gene: Rinkes\_55 Start: 52581, Stop: 52141, Start Num: 16

Candidate Starts for Rinkes\_55:

(Start: 16 @52581 has 2 MA's), (32, 52422), (43, 52290), (45, 52269), (48, 52260), (50, 52206), (51, 52200),

Gene: Serendipitous\_55 Start: 51901, Stop: 51308, Start Num: 5

Candidate Starts for Serendipitous\_55:

(Start: 5 @51901 has 5 MA's), (8, 51865), (Start: 14 @51808 has 1 MA's), (20, 51763), (28, 51637), (36, 51532), (37, 51514), (40, 51478), (44, 51448), (52, 51370),

Gene: Shenyu 57 Start: 52961, Stop: 52323, Start Num: 7

Candidate Starts for Shenyu\_57:

(4, 52985), (7, 52961), (Start: 14 @52844 has 1 MA's), (19, 52802), (21, 52757), (24, 52736), (30, 52646), (40, 52499), (46, 52442),

Gene: SirJeffery\_56 Start: 52558, Stop: 51962, Start Num: 9

Candidate Starts for SirJeffery\_56:

(Start: 3 @ 52672 has 1 MA's), (9, 52558), (30, 52279), (40, 52138), (46, 52081),

Gene: StinkyVeggy 57 Start: 52746, Stop: 52102, Start Num: 7

Candidate Starts for StinkyVeggy\_57:

(7, 52746), (Start: 14 @52632 has 1 MA's), (22, 52551), (23, 52548), (25, 52530), (26, 52521), (30, 52425), (40, 52278), (46, 52221),

Gene: Suigeneris 58 Start: 52838, Stop: 52212, Start Num: 3

Candidate Starts for Suigeneris 58:

(Start: 3 @52838 has 1 MA's), (Start: 14 @52721 has 1 MA's), (24, 52619), (30, 52529), (40, 52388), (46, 52331),