

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 216619 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216619 has 18 members, 0 are drafts.

Phages represented in each track:

- Track 1 : SkiPole\_67, Pepe\_58
- Track 2: Moose\_61, Forsytheast\_61, Bruns\_61, SwissCheese\_63
- Track 3 : Seanderson\_62
- Track 4: ArcusAngelus\_54, Chevrolet\_57, Royals2015\_53
- Track 5 : Ogopogo\_51
- Track 6 : Che8\_53
- Track 7 : MilleniumForce 53
- Track 8 : Melville\_59, Duplicity\_53
- Track 9 : GodPhather 65
- Track 10 : Jeon 63
- Track 11 : LilSpotty\_71

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

The start number called the most often in the published annotations is 16, it was called in 8 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bruns\_61, Forsytheast\_61, GodPhather\_65, Moose\_61, Pepe\_58, Seanderson\_62, SkiPole\_67, SwissCheese\_63,

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

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

• ArcusAngelus\_54, Che8\_53, Chevrolet\_57, Duplicity\_53, Jeon\_63, LilSpotty\_71, Melville\_59, MilleniumForce\_53, Ogopogo\_51, Royals2015\_53,

## Summary by start number:

#### Start 4:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present

Phage (with cluster) where this start called: Ogopogo\_51 (F1),

### Start 8:

- Found in 8 of 18 (44.4%) of genes in pham
- Manual Annotations of this start: 7 of 18
- Called 87.5% of time when present
- Phage (with cluster) where this start called: ArcusAngelus\_54 (F1), Che8\_53 (F1), Chevrolet\_57 (F1), Duplicity\_53 (N), LilSpotty\_71 (singleton), Melville\_59 (N), Royals2015\_53 (F1),

## Start 9:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MilleniumForce\_53 (F1),

#### Start 11:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jeon\_63 (W),

#### Start 16:

- Found in 8 of 18 (44.4%) of genes in pham
- Manual Annotations of this start: 8 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bruns\_61 (A1), Forsytheast\_61 (A1), GodPhather\_65 (W), Moose\_61 (A1), Pepe\_58 (A1), Seanderson\_62 (A1), SkiPole\_67 (A1), SwissCheese\_63 (A1),

## Summary by clusters:

There are 5 clusters represented in this pham: A1, F1, singleton, W, N,

Info for manual annotations of cluster A1:

•Start number 16 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster F1:

- •Start number 4 was manually annotated 1 time for cluster F1.
- •Start number 8 was manually annotated 4 times for cluster F1.
- •Start number 9 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster N:

•Start number 8 was manually annotated 2 times for cluster N.

Info for manual annotations of cluster W:

- •Start number 11 was manually annotated 1 time for cluster W.
- •Start number 16 was manually annotated 1 time for cluster W.

## Gene Information:

Gene: ArcusAngelus\_54 Start: 38017, Stop: 38256, Start Num: 8

Candidate Starts for ArcusAngelus\_54:

(Start: 8 @38017 has 7 MA's), (14, 38050), (17, 38077), (20, 38101), (30, 38239),

Gene: Bruns\_61 Start: 39972, Stop: 39745, Start Num: 16

Candidate Starts for Bruns 61:

(Start: 16 @39972 has 8 MA's), (22, 39924), (25, 39864),

Gene: Che8\_53 Start: 37842, Stop: 38123, Start Num: 8

Candidate Starts for Che8\_53:

(Start: 8 @ 37842 has 7 MA's), (14, 37875), (17, 37902), (19, 37914), (20, 37926), (28, 38040),

Gene: Chevrolet\_57 Start: 38018, Stop: 38257, Start Num: 8

Candidate Starts for Chevrolet\_57:

(Start: 8 @38018 has 7 MA's), (14, 38051), (17, 38078), (20, 38102), (30, 38240),

Gene: Duplicity 53 Start: 35954, Stop: 36301, Start Num: 8

Candidate Starts for Duplicity\_53:

(2, 35864), (3, 35900), (Start: 8 @ 35954 has 7 MA's), (13, 35996), (15, 36017), (22, 36068), (29, 36197), (33, 36239),

Gene: Forsytheast\_61 Start: 40140, Stop: 39913, Start Num: 16

Candidate Starts for Forsytheast 61:

(Start: 16 @40140 has 8 MA's), (22, 40092), (25, 40032),

Gene: GodPhather\_65 Start: 49176, Stop: 49409, Start Num: 16

Candidate Starts for GodPhather\_65:

(Start: 16 @49176 has 8 MA's), (22, 49224), (25, 49284), (32, 49389),

Gene: Jeon\_63 Start: 48868, Stop: 49173, Start Num: 11

Candidate Starts for Jeon\_63:

(1, 48709), (Start: 11 @48868 has 1 MA's), (12, 48880), (18, 48943), (20, 48958), (21, 48985), (23, 48991), (24, 49039), (32, 49153),

Gene: LilSpotty\_71 Start: 43082, Stop: 43513, Start Num: 8

Candidate Starts for LilSpotty\_71:

(2, 42992), (3, 43028), (Start: 8 @43082 has 7 MA's), (13, 43124), (27, 43286), (29, 43349), (34, 43466),

Gene: Melville\_59 Start: 36268, Stop: 36615, Start Num: 8

Candidate Starts for Melville\_59:

(2, 36178), (3, 36214), (Start: 8 @36268 has 7 MA's), (13, 36310), (15, 36331), (22, 36382), (29, 36511), (33, 36553),

Gene: MilleniumForce 53 Start: 38559, Stop: 38825, Start Num: 9

Candidate Starts for MilleniumForce\_53:

(Start: 9 @38559 has 1 MA's), (10, 38562), (14, 38589), (17, 38616), (20, 38640),

Gene: Moose\_61 Start: 40140, Stop: 39913, Start Num: 16

Candidate Starts for Moose 61:

(Start: 16 @40140 has 8 MA's), (22, 40092), (25, 40032),

Gene: Ogopogo\_51 Start: 36143, Stop: 36514, Start Num: 4

Candidate Starts for Ogopogo\_51:

(Start: 4 @36143 has 1 MA's), (5, 36155), (6, 36176), (7, 36182), (Start: 8 @36191 has 7 MA's), (24, 36362), (30, 36458), (31, 36467),

Gene: Pepe\_58 Start: 39571, Stop: 39344, Start Num: 16

Candidate Starts for Pepe\_58:

(Start: 16 @39571 has 8 MA's), (22, 39523), (25, 39463), (26, 39460),

Gene: Royals2015\_53 Start: 36891, Stop: 37130, Start Num: 8

Candidate Starts for Royals2015\_53:

(Start: 8 @ 36891 has 7 MA's), (14, 36924), (17, 36951), (20, 36975), (30, 37113),

Gene: Seanderson\_62 Start: 42352, Stop: 42125, Start Num: 16

Candidate Starts for Seanderson\_62:

(Start: 16 @42352 has 8 MA's), (22, 42304), (25, 42244),

Gene: SkiPole 67 Start: 41615, Stop: 41388, Start Num: 16

Candidate Starts for SkiPole\_67:

(Start: 16 @41615 has 8 MA's), (22, 41567), (25, 41507), (26, 41504),

Gene: SwissCheese\_63 Start: 40640, Stop: 40413, Start Num: 16

Candidate Starts for SwissCheese\_63:

(Start: 16 @40640 has 8 MA's), (22, 40592), (25, 40532),