

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 87206 Report

This analysis was run 04/28/24 on database version 559.

Pham number 87206 has 12 members, 0 are drafts.

Phages represented in each track:

• Track 1 : Nibb\_37

• Track 2 : KiSi\_38

Track 3 : LeMond\_38

Track 4 : MarkPhew\_39

Track 5 : Oscar\_38

Track 6 : Scarlett\_38

• Track 7 : Chris 37

Track 8: Yuna 87

• Track 9 : Marshawn 39

• Track 10 : Sunflower1121 89

Track 11 : Tierra\_91Track 12 : Unicorn 91

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

The start number called the most often in the published annotations is 12, it was called in 9 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Chris\_37, LeMond\_38, MarkPhew\_39, Nibb\_37, Scarlett\_38, Sunflower1121\_89, Tierra\_91, Unicorn\_91, Yuna\_87,

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

KiSi\_38, Marshawn\_39, Oscar\_38,

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

### Summary by start number:

#### Start 11:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 37.5% of time when present

• Phage (with cluster) where this start called: KiSi\_38 (K1), Marshawn\_39 (K6), Oscar 38 (K1),

### Start 12:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 9 of 12
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Chris\_37 (K1), LeMond\_38 (K1), MarkPhew\_39 (K1), Nibb\_37 (K1), Scarlett\_38 (K1), Sunflower1121\_89 (K6), Tierra\_91 (K6), Unicorn\_91 (K6), Yuna\_87 (K6),

## **Summary by clusters:**

There are 2 clusters represented in this pham: K1, K6,

Info for manual annotations of cluster K1:

- •Start number 11 was manually annotated 2 times for cluster K1.
- •Start number 12 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K6:

- •Start number 11 was manually annotated 1 time for cluster K6.
- •Start number 12 was manually annotated 4 times for cluster K6.

### Gene Information:

Gene: Chris\_37 Start: 29849, Stop: 30016, Start Num: 12

Candidate Starts for Chris\_37:

(3, 29648), (Start: 11 @29843 has 3 MA's), (Start: 12 @29849 has 9 MA's), (16, 29909), (17, 29933), (18, 29945), (21, 29963), (23, 30005),

Gene: KiSi 38 Start: 29952, Stop: 30125, Start Num: 11

Candidate Starts for KiSi 38:

(3, 29757), (Start: 11 @29952 has 3 MA's), (Start: 12 @29958 has 9 MA's), (15, 30015), (18, 30054), (21, 30072),

Gene: LeMond\_38 Start: 30029, Stop: 30196, Start Num: 12

Candidate Starts for LeMond 38:

(3, 29828), (Start: 11 @30023 has 3 MA's), (Start: 12 @30029 has 9 MA's), (15, 30086), (16, 30089), (17, 30113), (18, 30125),

Gene: MarkPhew 39 Start: 29921, Stop: 30088, Start Num: 12

Candidate Starts for MarkPhew\_39:

(3, 29720), (Start: 11 @29915 has 3 MA's), (Start: 12 @29921 has 9 MA's), (15, 29978), (16, 29981), (17, 30005), (18, 30017), (21, 30035),

Gene: Marshawn 39 Start: 30328, Stop: 30501, Start Num: 11

Candidate Starts for Marshawn 39:

(Start: 11 @30328 has 3 MA's), (Start: 12 @30334 has 9 MA's), (15, 30391), (16, 30394), (17, 30418), (18, 30430), (21, 30448), (22, 30466),

Gene: Nibb\_37 Start: 29486, Stop: 29653, Start Num: 12

Candidate Starts for Nibb 37:

(3, 29285), (Start: 11 @29480 has 3 MA's), (Start: 12 @29486 has 9 MA's), (16, 29546), (17, 29570), (18, 29582), (21, 29600),

Gene: Oscar\_38 Start: 30025, Stop: 30207, Start Num: 11

Candidate Starts for Oscar 38:

(3, 29830), (Start: 11 @30025 has 3 MA's), (Start: 12 @30031 has 9 MA's), (15, 30088), (16, 30091), (17, 30115), (18, 30127), (20, 30145), (21, 30151), (22, 30172), (23, 30196),

Gene: Scarlett\_38 Start: 30031, Stop: 30198, Start Num: 12

Candidate Starts for Scarlett 38:

(3, 29830), (Start: 11 @30025 has 3 MA's), (Start: 12 @30031 has 9 MA's), (15, 30088), (18, 30127), (21, 30145),

Gene: Sunflower1121\_89 Start: 54079, Stop: 54279, Start Num: 12

Candidate Starts for Sunflower1121\_89:

(5, 53911), (7, 53959), (8, 53968), (9, 54016), (10, 54046), (Start: 12 @54079 has 9 MA's), (13, 54121), (15, 54136), (21, 54193), (25, 54274),

Gene: Tierra\_91 Start: 55336, Stop: 55536, Start Num: 12

Candidate Starts for Tierra 91:

(1, 55108), (4, 55150), (6, 55198), (Start: 12 @55336 has 9 MA's), (13, 55378), (15, 55393), (21, 55450).

Gene: Unicorn\_91 Start: 55047, Stop: 55247, Start Num: 12

Candidate Starts for Unicorn\_91:

(1, 54831), (4, 54873), (6, 54921), (Start: 12 @55047 has 9 MA's), (13, 55089), (15, 55104), (21, 55161), (25, 55242),

Gene: Yuna\_87 Start: 55563, Stop: 55775, Start Num: 12

Candidate Starts for Yuna\_87:

(2, 55356), (7, 55446), (8, 55455), (9, 55503), (10, 55533), (Start: 12 @55563 has 9 MA's), (13, 55605), (14, 55611), (15, 55620), (18, 55659), (19, 55665), (21, 55677), (24, 55749),