

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 164123 Report

This analysis was run 05/04/24 on database version 560.

Pham number 164123 has 9 members, 1 are drafts.

Phages represented in each track:

• Track 1: Wrigley 49

Track 2 : Marteena\_42, EMsquaredA\_43

Track 3 : RavenCo17\_43

• Track 4 : Budski 52

Track 5: Kamaru\_49, LitninMcQueen\_48

Track 6 : Horus\_54Track 7 : Kenna\_55

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

The start number called the most often in the published annotations is 9, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• EMsquaredA\_43, Horus\_54, Marteena\_42, RavenCo17\_43,

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:

Budski\_52, Kamaru\_49, Kenna\_55, LitninMcQueen\_48, Wrigley\_49,

## Summary by start number:

#### Start 1:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wrigley\_49 (CY),

### Start 2:

- Found in 2 of 9 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Kamaru\_49 (DN1), LitninMcQueen\_48 (DN1),

## Start 3:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kenna\_55 (DN1),

#### Start 8:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Budski\_52 (DN),

#### Start 9:

- Found in 4 of 9 (44.4%) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EMsquaredA\_43 (CY1), Horus\_54 (DN1), Marteena\_42 (CY1), RavenCo17\_43 (CZ8),

## Summary by clusters:

There are 5 clusters represented in this pham: DN, CY1, DN1, CZ8, CY,

Info for manual annotations of cluster CY:

•Start number 1 was manually annotated 1 time for cluster CY.

Info for manual annotations of cluster CY1:

•Start number 9 was manually annotated 2 times for cluster CY1.

Info for manual annotations of cluster CZ8:

•Start number 9 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DN:

•Start number 8 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- •Start number 2 was manually annotated 1 time for cluster DN1.
- •Start number 3 was manually annotated 1 time for cluster DN1.
- •Start number 9 was manually annotated 1 time for cluster DN1.

## Gene Information:

Gene: Budski\_52 Start: 35756, Stop: 35184, Start Num: 8

Candidate Starts for Budski 52:

(Start: 8 @ 35756 has 1 MA's), (21, 35531), (22, 35522), (24, 35444), (26, 35432), (32, 35291),

Gene: EMsquaredA 43 Start: 34832, Stop: 34245, Start Num: 9

Candidate Starts for EMsquaredA\_43:

(Start: 9 @34832 has 4 MA's), (12, 34799), (14, 34778), (15, 34760), (22, 34601), (23, 34535), (29, 34490), (32, 34391),

Gene: Horus\_54 Start: 36955, Stop: 36323, Start Num: 9

Candidate Starts for Horus\_54:

(Start: 9 @ 36955 has 4 MA's), (12, 36922), (15, 36883), (17, 36781), (19, 36754), (20, 36748), (22, 36724), (23, 36658), (29, 36613), (32, 36508), (34, 36418),

Gene: Kamaru\_49 Start: 35377, Stop: 34655, Start Num: 2

Candidate Starts for Kamaru\_49:

(Start: 2 @35377 has 1 MA's), (5, 35338), (6, 35329), (7, 35323), (11, 35293), (18, 35125), (21, 35095), (22, 35086), (25, 34999), (28, 34987), (29, 34975), (31, 34858), (32, 34837),

Gene: Kenna\_55 Start: 36730, Stop: 36059, Start Num: 3

Candidate Starts for Kenna\_55:

(Start: 3 @36730 has 1 MA's), (4, 36721), (10, 36685), (16, 36562), (17, 36520), (20, 36487), (27, 36367), (32, 36247),

Gene: LitninMcQueen 48 Start: 35126, Stop: 34404, Start Num: 2

Candidate Starts for LitninMcQueen\_48:

(Start: 2 @35126 has 1 MA's), (5, 35087), (6, 35078), (7, 35072), (11, 35042), (18, 34874), (21, 34844), (22, 34835), (25, 34748), (28, 34736), (29, 34724), (31, 34607), (32, 34586),

Gene: Marteena\_42 Start: 34832, Stop: 34245, Start Num: 9

Candidate Starts for Marteena 42:

(Start: 9 @34832 has 4 MA's), (12, 34799), (14, 34778), (15, 34760), (22, 34601), (23, 34535), (29, 34490), (32, 34391),

Gene: RavenCo17\_43 Start: 35137, Stop: 34553, Start Num: 9

Candidate Starts for RavenCo17\_43:

(Start: 9 @35137 has 4 MA's), (12, 35104), (14, 35083), (15, 35065), (22, 34906), (23, 34840), (29, 34795), (32, 34696), (35, 34576),

Gene: Wrigley 49 Start: 35786, Stop: 35133, Start Num: 1

Candidate Starts for Wrigley\_49:

(Start: 1 @35786 has 1 MA's), (13, 35690), (25, 35438), (30, 35393), (33, 35237),