

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 152430 Report

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

Pham number 152430 has 8 members, 3 are drafts.

Phages represented in each track:

• Track 1 : Weirdo19\_46

• Track 2 : GMA5 19

Track 3 : Kiko\_41

Track 4 : Dmitri\_40

Track 5: TaronosaurasRx\_42

Track 6 : Opie\_43Track 7 : Doggs\_37Track 8 : Nyceirae\_36

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

The start number called the most often in the published annotations is 8, it was called in 2 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Doggs\_37, Kiko\_41,

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

Dmitri\_40, Opie\_43, TaronosaurasRx\_42,

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

GMA5\_19, Nyceirae\_36, Weirdo19\_46,

## Summary by start number:

#### Start 8:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Doggs\_37 (DB), Kiko\_41 (DB),

#### Start 10:

- Found in 6 of 8 (75.0%) of genes in pham
- Manual Annotations of this start: 1 of 5

- Called 16.7% of time when present
- Phage (with cluster) where this start called: Opie\_43 (DB),

#### Start 14:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nyceirae\_36 (DT),

#### Start 16:

- Found in 4 of 8 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dmitri\_40 (DB), TaronosaurasRx\_42 (DB),

#### Start 17:

- Found in 3 of 8 (37.5%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: GMA5\_19 (CW2), Weirdo19\_46 (AH),

### Summary by clusters:

There are 4 clusters represented in this pham: AH, DT, CW2, DB,

Info for manual annotations of cluster DB:

- •Start number 8 was manually annotated 2 times for cluster DB.
- •Start number 10 was manually annotated 1 time for cluster DB.
- •Start number 16 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DT:

•Start number 14 was manually annotated 1 time for cluster DT.

### Gene Information:

Gene: Dmitri 40 Start: 33369, Stop: 33049, Start Num: 16

Candidate Starts for Dmitri 40:

(Start: 8 @ 33429 has 2 MA's), (Start: 10 @ 33411 has 1 MA's), (Start: 16 @ 33369 has 1 MA's), (29,

33210), (30, 33204), (35, 33072), (37, 33063),

Gene: Doggs\_37 Start: 32568, Stop: 32188, Start Num: 8

Candidate Starts for Doggs\_37:

(Start: 8 @32568 has 2 MA's), (Start: 10 @32550 has 1 MA's), (Start: 16 @32508 has 1 MA's), (23,

32421), (26, 32376), (35, 32211), (37, 32202),

Gene: GMA5 19 Start: 14633, Stop: 14346, Start Num: 17

Candidate Starts for GMA5 19:

(9, 14684), (11, 14672), (15, 14651), (17, 14633), (20, 14591), (22, 14573), (23, 14558), (29, 14486), (33, 14381), (34, 14369),

Gene: Kiko\_41 Start: 32143, Stop: 31775, Start Num: 8

Candidate Starts for Kiko\_41:

(5, 32188), (Start: 8 @32143 has 2 MA's), (12, 32113), (13, 32104), (18, 32065), (19, 32056), (24, 31969), (25, 31966), (30, 31930),

Gene: Nyceirae\_36 Start: 30000, Stop: 29677, Start Num: 14

Candidate Starts for Nyceirae\_36:

(Start: 10 @30033 has 1 MA's), (Start: 14 @30000 has 1 MA's), (17, 29979), (22, 29919), (23, 29904), (27, 29856), (28, 29844), (35, 29700),

Gene: Opie\_43 Start: 33208, Stop: 32843, Start Num: 10

Candidate Starts for Opie\_43:

(Start: 8 @33226 has 2 MA's), (Start: 10 @33208 has 1 MA's), (Start: 16 @33166 has 1 MA's), (23, 33079), (26, 33034), (29, 33007), (30, 33001), (37, 32857).

Gene: TaronosaurasRx 42 Start: 31568, Stop: 31248, Start Num: 16

Candidate Starts for TaronosaurasRx\_42:

(Start: 8 @31628 has 2 MA's), (Start: 10 @31610 has 1 MA's), (Start: 16 @31568 has 1 MA's), (28, 31421), (30, 31403), (37, 31262),

Gene: Weirdo19\_46 Start: 34933, Stop: 34580, Start Num: 17

Candidate Starts for Weirdo19\_46:

(1, 35212), (2, 35206), (3, 35134), (4, 35116), (6, 35044), (7, 35023), (Start: 10 @34987 has 1 MA's), (17, 34933), (21, 34879), (28, 34798), (29, 34786), (30, 34780), (31, 34750), (32, 34711), (36, 34639), (38, 34594),