

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 162537 Report

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

Pham number 162537 has 6 members, 2 are drafts.

Phages represented in each track:

Track 1 : BarnCat\_72Track 2 : WaterT\_75Track 3 : Lifes 72

Track 4: LeeroyJenkins\_79

Track 5 : Cassita\_75Track 6 : CN1A\_18

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

The start number called the most often in the published annotations is 10, it was called in 2 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Cassita\_75, LeeroyJenkins\_79,

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

• Lifes\_72, WaterT\_75,

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

BarnCat\_72, CN1A\_18,

## Summary by start number:

#### Start 3:

- Found in 1 of 6 (16.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CN1A\_18 (singleton),

#### Start 4:

- Found in 2 of 6 (33.3%) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lifes 72 (GB), WaterT 75 (GB).

#### Start 7:

- Found in 2 of 6 (33.3%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BarnCat\_72 (GB),

### Start 10:

- Found in 4 of 6 (66.7%) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Cassita\_75 (GB), LeeroyJenkins\_79 (GB),

## Summary by clusters:

There are 2 clusters represented in this pham: singleton, GB,

Info for manual annotations of cluster GB:

- •Start number 4 was manually annotated 2 times for cluster GB.
- •Start number 10 was manually annotated 2 times for cluster GB.

### Gene Information:

Gene: BarnCat\_72 Start: 43640, Stop: 42804, Start Num: 7

Candidate Starts for BarnCat\_72:

(6, 43643), (7, 43640), (9, 43619), (13, 43553), (14, 43466), (18, 43442), (20, 43421), (23, 43316), (25, 43298), (28, 43250), (29, 43208), (32, 43184), (33, 43160), (34, 43136), (35, 43109), (36, 43103), (38, 43067), (41, 42980), (42, 42977), (46, 42854), (48, 42830),

Gene: CN1A 18 Start: 10315, Stop: 11211, Start Num: 3

Candidate Starts for CN1A 18:

(1, 10186), (2, 10297), (3, 10315), (5, 10351), (8, 10411), (12, 10453), (13, 10477), (15, 10564), (17, 10576), (20, 10603), (22, 10636), (23, 10720), (24, 10723), (26, 10768), (27, 10771), (28, 10786), (30, 10837), (31, 10846), (33, 10882), (37, 10963), (39, 10990), (40, 11047), (41, 11065), (43, 11113), (44, 11119), (47, 11191),

Gene: Cassita 75 Start: 44392, Stop: 43580, Start Num: 10

Candidate Starts for Cassita 75:

(Start: 10 @44392 has 2 MA's), (11, 44374), (12, 44359), (13, 44335), (14, 44248), (18, 44224), (19, 44206), (21, 44200), (23, 44098), (24, 44095), (25, 44080), (28, 44032), (32, 43966), (33, 43942), (35, 43891), (36, 43885), (41, 43756), (42, 43753), (46, 43630), (48, 43606),

Gene: LeeroyJenkins\_79 Start: 45485, Stop: 44679, Start Num: 10

Candidate Starts for LeeroyJenkins\_79:

(Start: 10 @45485 has 2 MA's), (11, 45467), (12, 45452), (13, 45428), (16, 45329), (19, 45299), (23, 45191), (24, 45188), (33, 45035), (34, 45011), (35, 44984), (38, 44942), (41, 44855), (42, 44852), (46, 44729), (48, 44705),

Gene: Lifes 72 Start: 42506, Stop: 41583, Start Num: 4

Candidate Starts for Lifes\_72:

(Start: 4 @ 42506 has 2 MA's), (Start: 10 @ 42395 has 2 MA's), (11, 42377), (12, 42362), (13, 42338), (14, 42251), (19, 42209), (23, 42101), (24, 42098), (25, 42083), (28, 42035), (32, 41969), (33, 41945), (35, 41894), (36, 41888), (41, 41759), (42, 41756), (46, 41633), (48, 41609),

(33, 43785), (34, 43761), (35, 43734), (36, 43728), (41, 43599), (42, 43596), (45, 43527), (46, 43473),

Gene: WaterT\_75 Start: 44346, Stop: 43423, Start Num: 4 Candidate Starts for WaterT\_75: (Start: 4 @44346 has 2 MA's), (6, 44268), (7, 44265), (Start: 10 @44235 has 2 MA's), (11, 44217), (18, 44067), (19, 44049), (23, 43941), (24, 43938), (25, 43923), (28, 43875), (29, 43833), (32, 43809),

(48, 43449),