

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 172039 Report

This analysis was run 07/10/24 on database version 566.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 172039 has 6 members, 1 are drafts.

Phages represented in each track:

Track 1 : Nanodon\_51

Track 2 : Conan\_54
Track 3 : Provolone 52

• Track 4 : Yosif\_54

Track 5 : Celia\_50Track 6 : Ibantik 5

# 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 2 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Celia\_50, Conan\_54, Yosif\_54,

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

• Ibantik\_5, Nanodon\_51, Provolone\_52,

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

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## Summary by start number:

#### Start 7

- Found in 3 of 6 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Nanodon\_51 (BD1),

#### Start 9:

- Found in 6 of 6 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Celia\_50 (BD6), Conan\_54 (BD3), Yosif\_54 (BD3),

### Start 10:

- Found in 2 of 6 (33.3%) 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: Provolone\_52 (BD3),

### Start 13:

- Found in 1 of 6 ( 16.7% ) 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: Ibantik\_5 (singleton),

## **Summary by clusters:**

There are 4 clusters represented in this pham: singleton, BD6, BD1, BD3,

Info for manual annotations of cluster BD1:

•Start number 7 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD3:

- •Start number 9 was manually annotated 1 time for cluster BD3.
- •Start number 10 was manually annotated 1 time for cluster BD3.

Info for manual annotations of cluster BD6:

•Start number 9 was manually annotated 1 time for cluster BD6.

### Gene Information:

Gene: Celia\_50 Start: 33292, Stop: 34872, Start Num: 9

Candidate Starts for Celia\_50:

(Start: 9 @33292 has 2 MA's), (Start: 10 @33304 has 1 MA's), (12, 33379), (17, 33466), (20, 33556), (23, 33601), (27, 33649), (29, 33709), (32, 33778), (35, 33844), (44, 34075), (46, 34108), (47, 34129), (48, 34207), (53, 34399), (56, 34429), (59, 34453), (60, 34459), (66, 34582), (72, 34663), (77, 34807),

Gene: Conan 54 Start: 36624, Stop: 38183, Start Num: 9

Candidate Starts for Conan\_54:

(6, 36582), (Start: 9 @ 36624 has 2 MA's), (17, 36798), (21, 36909), (28, 36999), (29, 37041), (31, 37098), (32, 37110), (37, 37248), (42, 37359), (45, 37410), (47, 37461), (48, 37539), (56, 37761), (58, 37779), (59, 37785), (61, 37809), (63, 37878), (67, 37929), (70, 37983), (71, 37995), (73, 38019), (76, 38097), (77, 38142), (78, 38154),

Gene: Ibantik 5 Start: 2018, Stop: 3472, Start Num: 13

Candidate Starts for Ibantik 5:

(1, 1661), (2, 1733), (3, 1751), (5, 1826), (Start: 9 @1886 has 2 MA's), (11, 1943), (Start: 13 @2018 has 1 MA's), (18, 2126), (21, 2195), (22, 2198), (24, 2222), (25, 2231), (26, 2234), (30, 2345), (39,

2612), (41, 2639), (50, 2936), (53, 3026), (55, 3047), (57, 3059), (59, 3083), (75, 3395),

Gene: Nanodon\_51 Start: 34791, Stop: 36407, Start Num: 7

Candidate Starts for Nanodon\_51:

(Start: 7 @ 34791 has 1 MA's), (Start: 9 @ 34827 has 2 MA's), (15, 34968), (16, 34983), (17, 35001), (19, 35055), (20, 35091), (23, 35136), (27, 35184), (29, 35244), (32, 35313), (34, 35358), (40, 35538), (43, 35601), (44, 35610), (45, 35613), (47, 35664), (55, 35955), (56, 35964), (59, 35988), (62, 36051), (63, 36081), (65, 36114), (66, 36117), (73, 36219), (76, 36297),

Gene: Provolone\_52 Start: 36671, Stop: 38251, Start Num: 10 Candidate Starts for Provolone 52:

(Start: 7 @ 36623 has 1 MA's), (Start: 9 @ 36659 has 2 MA's), (Start: 10 @ 36671 has 1 MA's), (14, 36800), (15, 36806), (16, 36821), (21, 36950), (23, 36974), (26, 36989), (27, 37022), (28, 37040), (29, 37082), (32, 37151), (33, 37154), (34, 37196), (37, 37295), (38, 37343), (39, 37364), (43, 37445), (44, 37454), (45, 37457), (47, 37508), (49, 37655), (52, 37742), (53, 37775), (54, 37790), (55, 37796), (56, 37805), (59, 37829), (67, 37973), (68, 37988), (69, 37994), (74, 38093), (77, 38186),

Gene: Yosif\_54 Start: 37465, Stop: 39051, Start Num: 9 Candidate Starts for Yosif 54:

(4, 37357), (Start: 7 @37429 has 1 MA's), (8, 37456), (Start: 9 @37465 has 2 MA's), (15, 37606), (17, 37639), (21, 37750), (23, 37774), (27, 37822), (28, 37840), (29, 37882), (32, 37951), (34, 37996), (36, 38074), (39, 38158), (40, 38176), (43, 38239), (45, 38251), (47, 38302), (49, 38452), (51, 38527), (53, 38575), (56, 38605), (58, 38623), (59, 38629), (64, 38728), (69, 38794), (73, 38863), (76, 38941), (77, 38986),