

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 158212 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158212 has 18 members, 3 are drafts.

Phages represented in each track:

• Track 1: Chargerpower 38

Track 2 : Refuge\_40

Track 3 : Jeeves\_41

Track 4 : Luchador\_41

Track 5 : LadyBird\_38

• Track 6: VA6\_35, ANI8\_38, VC3\_38, C3\_33, AN3\_35

• Track 7 : RedRock 39

Track 8 : CRB1\_37

Track 9 : Iwokeuplikedis\_38

Track 10 : First\_0035, 20ES\_36

Track 11 : Rachaly\_40, Lokk\_40, BobSwaget\_39

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

The start number called the most often in the published annotations is 6, it was called in 14 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• 20ES\_36, AN3\_35, ANI8\_38, BobSwaget\_39, C3\_33, CRB1\_37, Chargerpower\_38, First\_0035, Iwokeuplikedis\_38, LadyBird\_38, Lokk\_40, Luchador\_41, Rachaly\_40, RedRock\_39, Refuge\_40, VA6\_35, VC3\_38,

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

Jeeves\_41,

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

### Summary by start number:

#### Start 5:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present

Phage (with cluster) where this start called: Jeeves\_41 (A14),

#### Start 6:

- Found in 18 of 18 (100.0%) of genes in pham
- Manual Annotations of this start: 14 of 15
- Called 94.4% of time when present
- Phage (with cluster) where this start called: 20ES\_36 (A2), AN3\_35 (A2), ANI8\_38 (A2), BobSwaget\_39 (A2), C3\_33 (A2), CRB1\_37 (A2), Chargerpower\_38 (A), First\_0035 (A2), Iwokeuplikedis\_38 (A2), LadyBird\_38 (A2), Lokk\_40 (A2), Luchador\_41 (A14), Rachaly\_40 (A2), RedRock\_39 (A2), Refuge\_40 (A12), VA6\_35 (A2), VC3\_38 (A2),

### **Summary by clusters:**

There are 4 clusters represented in this pham: A, A14, A2, A12,

Info for manual annotations of cluster A:

•Start number 6 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A12:

•Start number 6 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A14:

- •Start number 5 was manually annotated 1 time for cluster A14.
- •Start number 6 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A2:

•Start number 6 was manually annotated 11 times for cluster A2.

### Gene Information:

Gene: 20ES 36 Start: 27465, Stop: 27295, Start Num: 6

Candidate Starts for 20ES 36:

(Start: 6 @ 27465 has 14 MA's), (7, 27450), (16, 27330),

Gene: AN3\_35 Start: 27506, Stop: 27351, Start Num: 6

Candidate Starts for AN3 35:

(Start: 6 @ 27506 has 14 MA's), (9, 27440), (11, 27398), (12, 27392),

Gene: ANI8\_38 Start: 27491, Stop: 27336, Start Num: 6

Candidate Starts for ANI8 38:

(Start: 6 @ 27491 has 14 MA's), (9, 27425), (11, 27383), (12, 27377),

Gene: BobSwaget 39 Start: 28627, Stop: 28457, Start Num: 6

Candidate Starts for BobSwaget\_39:

(1, 28894), (2, 28882), (Start: 6 @28627 has 14 MA's), (16, 28492),

Gene: C3 33 Start: 27491, Stop: 27336, Start Num: 6

Candidate Starts for C3 33:

(Start: 6 @ 27491 has 14 MA's), (9, 27425), (11, 27383), (12, 27377),

Gene: CRB1\_37 Start: 27951, Stop: 27781, Start Num: 6

Candidate Starts for CRB1\_37:

(Start: 6 @ 27951 has 14 MA's), (7, 27936), (14, 27822), (16, 27816),

Gene: Chargerpower\_38 Start: 27456, Stop: 27310, Start Num: 6

Candidate Starts for Chargerpower 38:

(Start: 6 @ 27456 has 14 MA's), (8, 27423), (9, 27390),

Gene: First\_0035 Start: 27341, Stop: 27171, Start Num: 6

Candidate Starts for First\_0035:

(Start: 6 @27341 has 14 MA's), (7, 27326), (16, 27206),

Gene: Iwokeuplikedis\_38 Start: 27721, Stop: 27551, Start Num: 6

Candidate Starts for Iwokeuplikedis\_38:

(Start: 6 @ 27721 has 14 MA's), (10, 27640), (13, 27598), (14, 27592), (15, 27589),

Gene: Jeeves 41 Start: 28311, Stop: 28138, Start Num: 5

Candidate Starts for Jeeves\_41:

(3, 28431), (4, 28368), (Start: 5 @28311 has 1 MA's), (Start: 6 @28299 has 14 MA's), (7, 28284), (13, 28176),

Gene: LadyBird\_38 Start: 27910, Stop: 27740, Start Num: 6

Candidate Starts for LadyBird 38:

(Start: 6 @ 27910 has 14 MA's), (7, 27895), (14, 27781), (16, 27775),

Gene: Lokk\_40 Start: 29149, Stop: 28979, Start Num: 6

Candidate Starts for Lokk\_40:

(1, 29416), (2, 29404), (Start: 6 @29149 has 14 MA's), (16, 29014),

Gene: Luchador\_41 Start: 30058, Stop: 29897, Start Num: 6

Candidate Starts for Luchador\_41:

(4, 30115), (Start: 6 @ 30058 has 14 MA's), (7, 30043), (17, 29911),

Gene: Rachaly\_40 Start: 29223, Stop: 29053, Start Num: 6

Candidate Starts for Rachaly\_40:

(1, 29490), (2, 29478), (Start: 6 @29223 has 14 MA's), (16, 29088),

Gene: RedRock\_39 Start: 29082, Stop: 28912, Start Num: 6

Candidate Starts for RedRock 39:

(Start: 6 @29082 has 14 MA's), (9, 29019),

Gene: Refuge\_40 Start: 30004, Stop: 29828, Start Num: 6

Candidate Starts for Refuge 40:

(Start: 6 @ 30004 has 14 MA's), (9, 29941),

Gene: VA6\_35 Start: 27503, Stop: 27348, Start Num: 6

Candidate Starts for VA6\_35:

(Start: 6 @ 27503 has 14 MA's), (9, 27437), (11, 27395), (12, 27389),

Gene: VC3 38 Start: 27491, Stop: 27336, Start Num: 6

Candidate Starts for VC3\_38:

(Start: 6 @ 27491 has 14 MA's), (9, 27425), (11, 27383), (12, 27377),