

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 88259 Report

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

Pham number 88259 has 7 members, 2 are drafts.

Phages represented in each track:

Track 1 : Myrna\_133Track 2 : Phabba\_138Track 3 : Greely\_136

• Track 4 : ScoobyDoobyDoo 129

Track 5 : Stormageddon 48, RedWattleHog 51

• Track 6 : E3\_gp120

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

Genes that call this "Most Annotated" start:

Greely\_136, Myrna\_133, Phabba\_138, ScoobyDoobyDoo\_129,

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:

E3\_gp120, RedWattleHog\_51, Stormageddon\_48,

### Summary by start number:

#### Start 6:

- Found in 4 of 7 (57.1%) of genes in pham
- Manual Annotations of this start: 3 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greely\_136 (C2), Myrna\_133 (C2), Phabba\_138 (C2), ScoobyDoobyDoo\_129 (C2),

### Start 17:

- Found in 1 of 7 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

Phage (with cluster) where this start called: E3\_gp120 (singleton),

#### Start 18:

- Found in 2 of 7 (28.6%) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog\_51 (DX), Stormageddon\_48 (DX),

## **Summary by clusters:**

There are 3 clusters represented in this pham: C2, singleton, DX,

Info for manual annotations of cluster C2:

•Start number 6 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster DX:

Start number 18 was manually annotated 2 times for cluster DX.

### Gene Information:

Gene: E3 gp120 Start: 75148, Stop: 75987, Start Num: 17

Candidate Starts for E3\_gp120:

(17, 75148), (22, 75205), (23, 75226), (24, 75238), (31, 75361), (34, 75391), (39, 75469), (41, 75487), (49, 75601), (51, 75622), (55, 75688), (56, 75697), (59, 75763), (62, 75793), (64, 75868), (66, 75904), (70, 75949), (73, 75970),

Gene: Greely\_136 Start: 79307, Stop: 80266, Start Num: 6

Candidate Starts for Greely 136:

(5, 79295), (Start: 6 @79307 has 3 MA's), (11, 79397), (12, 79400), (14, 79412), (15, 79421), (19, 79457), (29, 79646), (37, 79763), (41, 79796), (42, 79805), (43, 79829), (44, 79835), (45, 79865), (54, 79988), (58, 80066), (63, 80153), (66, 80201), (67, 80228), (68, 80237), (71, 80246), (72, 80255),

Gene: Myrna\_133 Start: 80005, Stop: 80964, Start Num: 6

Candidate Starts for Myrna 133:

(Start: 6 @ 80005 has 3 MA's), (7, 80011), (10, 80071), (11, 80095), (12, 80098), (15, 80119), (29, 80344), (40, 80488), (41, 80494), (42, 80503), (43, 80527), (44, 80533), (48, 80578), (54, 80686), (58, 80764), (60, 80770), (63, 80851), (67, 80926), (71, 80944), (72, 80953),

Gene: Phabba 138 Start: 79004, Stop: 79960, Start Num: 6

Candidate Starts for Phabba 138:

(5, 78992), (Start: 6 @79004 has 3 MA's), (11, 79091), (12, 79094), (14, 79106), (15, 79115), (29, 79340), (32, 79361), (41, 79490), (43, 79523), (44, 79529), (54, 79682), (58, 79760), (60, 79766), (62, 79793), (63, 79847), (67, 79922), (68, 79931), (71, 79940), (72, 79949),

Gene: RedWattleHog\_51 Start: 49506, Stop: 50321, Start Num: 18

Candidate Starts for RedWattleHog 51:

(3, 49113), (4, 49287), (Start: 18 @49506 has 2 MA's), (21, 49551), (25, 49611), (26, 49638), (27, 49689), (30, 49713), (35, 49776), (36, 49794), (38, 49827), (44, 49890), (46, 49920), (47, 49926), (57, 50058), (60, 50103), (61, 50127), (65, 50235),

Gene: ScoobyDoobyDoo\_129 Start: 78620, Stop: 79579, Start Num: 6 Candidate Starts for ScoobyDoobyDoo\_129: (1, 78158), (2, 78329), (Start: 6 @78620 has 3 MA's), (7, 78626), (8, 78671), (9, 78677), (13, 78716), (14, 78725), (16, 78743), (20, 78776), (28, 78941), (29, 78959), (33, 78986), (41, 79100), (42, 79109), (43, 79133), (48, 79184), (50, 79220), (52, 79262), (53, 79271), (55, 79319), (60, 79391), (61, 79415), (62, 79418), (69, 79553),

Gene: Stormageddon\_48 Start: 49489, Stop: 50304, Start Num: 18 Candidate Starts for Stormageddon\_48: (3, 49096), (4, 49270), (Start: 18 @49489 has 2 MA's), (21, 49534), (25, 49594), (26, 49621), (27, 49672), (30, 49696), (35, 49759), (36, 49777), (38, 49810), (44, 49873), (46, 49903), (47, 49909), (57, 50041), (60, 50086), (61, 50110), (65, 50218),