

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 87657 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87657 has 9 members, 1 are drafts.

Phages represented in each track:

Track 1 : Yara\_54Track 2 : Dryad 63

Track 3: ShakeNBake\_59

Track 4 : PHTowN\_59

• Track 5 : Lizz 59

• Track 6: Gibson\_59, Rooney\_59

Track 7 : Wentworth\_59

Track 8 : Wilkos\_61

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

The start number called the most often in the published annotations is 3, it was called in 5 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Gibson\_59, Lizz\_59, PHTowN\_59, Rooney\_59, ShakeNBake\_59,

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:

Dryad\_63, Wentworth\_59, Wilkos\_61, Yara\_54,

### Summary by start number:

#### Start 3:

- Found in 5 of 9 (55.6%) of genes in pham
- Manual Annotations of this start: 5 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gibson\_59 (BN), Lizz\_59 (BN), PHTowN\_59 (BN), Rooney\_59 (BN), ShakeNBake\_59 (BN),

#### Start 4:

• Found in 3 of 9 (33.3%) of genes in pham

- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dryad\_63 (BN), Wentworth\_59 (BN), Wilkos\_61 (BN),

#### Start 6:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yara\_54 (BN),

### **Summary by clusters:**

There is one cluster represented in this pham: BN

Info for manual annotations of cluster BN:

- •Start number 3 was manually annotated 5 times for cluster BN.
- •Start number 4 was manually annotated 2 times for cluster BN.
- •Start number 6 was manually annotated 1 time for cluster BN.

#### Gene Information:

Gene: Dryad\_63 Start: 43745, Stop: 43191, Start Num: 4

Candidate Starts for Dryad\_63:

(1, 43766), (Start: 4 @ 43745 has 2 MA's), (10, 43682), (11, 43661), (19, 43559), (28, 43439), (29, 43409), (30, 43367), (31, 43358), (32, 43337), (34, 43316), (35, 43307), (37, 43274), (38, 43250), (41, 43205), (42, 43202),

Gene: Gibson\_59 Start: 42975, Stop: 42421, Start Num: 3

Candidate Starts for Gibson 59:

(2, 42984), (Start: 3 @ 42975 has 5 MA's), (5, 42966), (8, 42927), (10, 42909), (14, 42855), (20, 42759), (23, 42720), (25, 42693), (27, 42678), (28, 42669), (29, 42639), (30, 42597), (32, 42567), (35, 42537), (37, 42504), (38, 42480), (41, 42435), (42, 42432),

Gene: Lizz\_59 Start: 42815, Stop: 42261, Start Num: 3

Candidate Starts for Lizz\_59:

(2, 42824), (Start: 3 @42815 has 5 MA's), (7, 42797), (8, 42767), (10, 42749), (14, 42695), (18, 42632), (20, 42599), (23, 42560), (27, 42518), (28, 42509), (29, 42479), (30, 42437), (32, 42407), (35, 42377), (37, 42344), (38, 42320), (41, 42275), (42, 42272),

Gene: PHTowN 59 Start: 42813, Stop: 42259, Start Num: 3

Candidate Starts for PHTowN\_59:

(2, 42822), (Start: 3 @ 42813 has 5 MA's), (7, 42795), (8, 42765), (10, 42747), (14, 42693), (20, 42597), (23, 42558), (27, 42516), (28, 42507), (29, 42477), (30, 42435), (32, 42405), (35, 42375), (37, 42342), (38, 42318), (41, 42273), (42, 42270),

Gene: Rooney 59 Start: 42972, Stop: 42418, Start Num: 3

Candidate Starts for Rooney 59:

(2, 42981), (Start: 3 @42972 has 5 MA's), (5, 42963), (8, 42924), (10, 42906), (14, 42852), (20, 42756), (23, 42717), (25, 42690), (27, 42675), (28, 42666), (29, 42636), (30, 42594), (32, 42564), (35, 42534), (37, 42501), (38, 42477), (41, 42432), (42, 42429),

Gene: ShakeNBake\_59 Start: 42831, Stop: 42277, Start Num: 3

Candidate Starts for ShakeNBake 59:

(2, 42840), (Start: 3 @42831 has 5 MA's), (7, 42813), (8, 42783), (10, 42765), (14, 42711), (18, 42648), (20, 42615), (23, 42576), (27, 42534), (28, 42525), (29, 42495), (30, 42453), (32, 42423), (37, 42360), (38, 42336), (41, 42291), (42, 42288),

Gene: Wentworth\_59 Start: 42998, Stop: 42447, Start Num: 4 Candidate Starts for Wentworth\_59:

(1, 43019), (Start: 4 @42998 has 2 MA's), (10, 42935), (11, 42914), (12, 42905), (15, 42860), (18, 42818), (20, 42785), (22, 42755), (28, 42695), (29, 42665), (30, 42623), (32, 42593), (38, 42506), (39, 42500), (41, 42461), (42, 42458),

Gene: Wilkos\_61 Start: 43142, Stop: 42591, Start Num: 4 Candidate Starts for Wilkos\_61:

(1, 43163), (Start: 4 @43142 has 2 MA's), (10, 43079), (11, 43058), (15, 43004), (20, 42929), (28, 42839), (29, 42809), (30, 42767), (32, 42737), (35, 42707), (37, 42674), (38, 42650), (41, 42605), (42, 42602),

Gene: Yara\_54 Start: 41457, Stop: 40912, Start Num: 6 Candidate Starts for Yara\_54:

(Start: 6 @41457 has 1 MA's), (9, 41406), (13, 41349), (16, 41310), (17, 41295), (19, 41280), (21, 41235), (24, 41190), (26, 41175), (28, 41163), (33, 41040), (35, 41028), (36, 40998), (37, 40995), (38, 40971), (40, 40938), (41, 40926), (42, 40923),