

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 194535 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194535 has 11 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Muddy 41

Track 2: 8UZL_41, FF47_40, Maco6_39

Track 3: NoShow_49

Track 4 : Zuko 82

Track 5 : KimJongPhill_84

Track 6 : Elinal_44, KayGee_42

Track 7 : MAnor_42

• Track 8 : Pons_42

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 4 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Elinal_44, KayGee_42, MAnor_42, Pons_42,

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

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

• 8UZL_41, FF47_40, KimJongPhill_84, Maco6_39, Muddy_41, NoShow_49, Zuko_82,

Summary by start number:

Start 2:

- Found in 1 of 11 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NoShow_49 (AB),

Start 3:

• Found in 4 of 11 (36.4%) of genes in pham

- Manual Annotations of this start: 4 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elinal_44 (CT), KayGee_42 (CT), MAnor_42 (CT), Pons_42 (CT),

Start 4:

- Found in 4 of 11 (36.4%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 8UZL_41 (AB), FF47_40 (AB), Maco6_39 (AB), Muddy_41 (AB),

Start 5:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KimJongPhill_84 (BR), Zuko_82 (BR),

Summary by clusters:

There are 3 clusters represented in this pham: AB, BR, CT,

Info for manual annotations of cluster AB:

- •Start number 2 was manually annotated 1 time for cluster AB.
- •Start number 4 was manually annotated 2 times for cluster AB.

Info for manual annotations of cluster BR:

•Start number 5 was manually annotated 2 times for cluster BR.

Info for manual annotations of cluster CT:

•Start number 3 was manually annotated 4 times for cluster CT.

Gene Information:

Gene: 8UZL_41 Start: 30093, Stop: 29446, Start Num: 4

Candidate Starts for 8UZL 41:

(Start: 4 @30093 has 2 MA's), (6, 30015), (7, 29979), (8, 29976), (9, 29946), (15, 29859), (16, 29850), (20, 29826), (22, 29811), (25, 29736), (27, 29715),

Gene: Elinal 44 Start: 29769, Stop: 29167, Start Num: 3

Candidate Starts for Elinal 44:

(Start: 3 @ 29769 has 4 MA's), (7, 29631), (12, 29553), (14, 29532), (21, 29463), (28, 29355),

Gene: FF47 40 Start: 30004, Stop: 29357, Start Num: 4

Candidate Starts for FF47 40:

(Start: 4 @30004 has 2 MA's), (6, 29926), (7, 29890), (8, 29887), (9, 29857), (15, 29770), (16, 29761), (20, 29737), (22, 29722), (25, 29647), (27, 29626),

Gene: KayGee 42 Start: 29769, Stop: 29167, Start Num: 3

Candidate Starts for KayGee 42:

(Start: 3 @ 29769 has 4 MA's), (7, 29631), (12, 29553), (14, 29532), (21, 29463), (28, 29355),

Gene: KimJongPhill_84 Start: 62747, Stop: 63463, Start Num: 5

Candidate Starts for KimJongPhill_84:

(Start: 5 @62747 has 2 MA's), (9, 62882), (10, 62888), (13, 62933), (16, 62978), (17, 62981), (26,

63101), (29, 63350), (30, 63443), (31, 63449),

Gene: MAnor_42 Start: 30111, Stop: 29515, Start Num: 3

Candidate Starts for MAnor 42:

(Start: 3 @30111 has 4 MA's), (7, 29973), (10, 29931), (12, 29895), (21, 29805), (28, 29697),

Gene: Maco6_39 Start: 29344, Stop: 28697, Start Num: 4

Candidate Starts for Maco6 39:

(Start: 4 @ 29344 has 2 MA's), (6, 29266), (7, 29230), (8, 29227), (9, 29197), (15, 29110), (16, 29101),

(20, 29077), (22, 29062), (25, 28987), (27, 28966),

Gene: Muddy_41 Start: 30576, Stop: 29920, Start Num: 4

Candidate Starts for Muddy_41:

 $(Start: 4 @ 30576 \ has 2 \ MA's), \ (6, \ 30498), \ (7, \ 30462), \ (8, \ 30459), \ (9, \ 30429), \ (16, \ 30333), \ (20, \ 30309), \ (20,$

(22, 30294), (25, 30219), (27, 30198),

Gene: NoShow_49 Start: 33469, Stop: 32750, Start Num: 2

Candidate Starts for NoShow_49:

 $(Start: 2 @ 33469 \ has \ 1 \ MA's), \ (9, \ 33289), \ (11, \ 33274), \ (19, \ 33175), \ (20, \ 33169), \ (23, \ 33112), \ (24, \ 33175), \ (20, \ 33169), \ (23, \ 33112), \ (24, \ 33175), \$

33106), (27, 33058),

Gene: Pons_42 Start: 29741, Stop: 29139, Start Num: 3

Candidate Starts for Pons_42:

(Start: 3 @29741 has 4 MA's), (7, 29603), (12, 29525), (21, 29435), (28, 29327),

Gene: Zuko_82 Start: 62610, Stop: 63302, Start Num: 5

Candidate Starts for Zuko_82:

(1, 62478), (Start: 5 @ 62610 has 2 MA's), (9, 62745), (11, 62760), (12, 62787), (17, 62844), (18,

62847), (20, 62865), (22, 62880), (26, 62964), (30, 63282), (31, 63288),