

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 87054 Report

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

Pham number 87054 has 17 members, 3 are drafts.

Phages represented in each track:

Track 1 : BruhMoment_48Track 2 : NiceHouse_270

Track 3 : Dorin_258, Francesca_258

• Track 4 : Cucurbita_3, Miskis_4, Norvs_3, Engineer_3, ClubL_3, Lozinak_3,

Smoothie_3, Aphelion_3, Toniann_3

Track 5 : OneUp_5Track 6 : Rabbitrun 83

Track 7 : Trax_82Track 8 : Neville 79

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 8 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aphelion_3, ClubL_3, Cucurbita_3, Engineer_3, Lozinak_3, Miskis_4, Norvs_3, Smoothie_3, Toniann_3,

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

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

• BruhMoment_48, Dorin_258, Francesca_258, Neville_79, NiceHouse_270, OneUp_5, Rabbitrun_83, Trax_82,

Summary by start number:

Start 9:

- Found in 9 of 17 (52.9%) of genes in pham
- Manual Annotations of this start: 8 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aphelion_3 (CQ1), ClubL_3 (CQ1), Cucurbita_3 (CQ1), Engineer_3 (CQ1), Lozinak_3 (CQ1), Miskis_4 (CQ), Norvs_3

(CQ), Smoothie_3 (CQ1), Toniann_3 (CQ1),

Start 10:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Neville_79 (DU2),

Start 11:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Rabbitrun_83 (DU2), Trax_82 (DU2),

Start 13:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BruhMoment_48 (AP3), NiceHouse_270 (CE), OneUp_5 (CQ2),

Start 14:

- Found in 2 of 17 (11.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dorin_258 (CG), Francesca_258 (CG),

Summary by clusters:

There are 7 clusters represented in this pham: AP3, CG, CE, CQ2, CQ1, CQ, DU2,

Info for manual annotations of cluster AP3:

•Start number 13 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster CE:

•Start number 13 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CQ:

Start number 9 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

Start number 9 was manually annotated 7 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

•Start number 13 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DU2:

- •Start number 10 was manually annotated 1 time for cluster DU2.
- •Start number 11 was manually annotated 2 times for cluster DU2.

Gene Information:

Gene: Aphelion_3 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for Aphelion_3:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: BruhMoment_48 Start: 39496, Stop: 39329, Start Num: 13

Candidate Starts for BruhMoment_48:

(12, 39499), (Start: 13 @39496 has 3 MA's), (17, 39448), (18, 39445), (22, 39367), (23, 39358),

Gene: ClubL_3 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for ClubL_3:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: Cucurbita 3 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for Cucurbita_3:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: Dorin_258 Start: 127433, Stop: 127594, Start Num: 14

Candidate Starts for Dorin 258:

(14, 127433), (16, 127472), (20, 127508),

Gene: Engineer 3 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for Engineer_3:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: Francesca 258 Start: 128076, Stop: 128237, Start Num: 14

Candidate Starts for Francesca_258:

(14, 128076), (16, 128115), (20, 128151),

Gene: Lozinak_3 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for Lozinak 3:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: Miskis_4 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for Miskis_4:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: Neville_79 Start: 50225, Stop: 50398, Start Num: 10

Candidate Starts for Neville_79:

(5, 50177), (7, 50198), (Start: 10 @50225 has 1 MA's), (Start: 11 @50228 has 2 MA's), (17, 50282), (20, 50315),

Gene: NiceHouse_270 Start: 134252, Stop: 134413, Start Num: 13

Candidate Starts for NiceHouse 270:

(12, 134249), (Start: 13 @134252 has 3 MA's), (21, 134363),

Gene: Norvs_3 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for Norvs_3:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: OneUp 5 Start: 1237, Stop: 1076, Start Num: 13

Candidate Starts for OneUp_5:

(Start: 13 @1237 has 3 MA's), (16, 1195),

Gene: Rabbitrun_83 Start: 50941, Stop: 51111, Start Num: 11

Candidate Starts for Rabbitrun_83:

(5, 50890), (7, 50911), (Start: 11 @50941 has 2 MA's), (17, 50995),

Gene: Smoothie_3 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for Smoothie_3:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: Toniann_3 Start: 715, Stop: 545, Start Num: 9

Candidate Starts for Toniann_3:

(3, 799), (4, 793), (6, 742), (8, 727), (Start: 9 @715 has 8 MA's), (19, 631),

Gene: Trax_82 Start: 51235, Stop: 51405, Start Num: 11

Candidate Starts for Trax_82:

 $(1,\,50983),\,(2,\,51004),\,(5,\,51184),\,(7,\,51205),\,(Start:\,11\,\,@51235\,\,has\,\,2\,\,MA's),\,(15,\,51283),\,(20,\,1205),\,(20,$

51322),