



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 3015 Report

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

Pham number 3015 has 26 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Nimrod\_143, Manda\_147, Elite2014\_144, ChosenOne\_145, Lilpickle\_144, Phaux\_145, Hopey\_142, Goku\_143, Maxxinista\_146, Eureka\_145
- Track 2 : HufflyPuff\_146, Murphy\_146, Emmina\_146, Elph10\_143, Phrux\_141, Pumpkin\_143, Lilac\_140, MPhalcon\_146, NoSleep\_143, Porky\_147, ChotaBhai\_149
- Track 3 : Harella\_151, Gator\_146
- Track 4 : Nala\_147
- Track 5 : Amao\_148
- Track 6 : Pat3\_145

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

The start number called the most often in the published annotations is 1, it was called in 21 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ChosenOne\_145, ChotaBhai\_149, Elite2014\_144, Elph10\_143, Emmina\_146, Eureka\_145, Goku\_143, Hopey\_142, HufflyPuff\_146, Lilac\_140, Lilpickle\_144, MPhalcon\_146, Manda\_147, Maxxinista\_146, Murphy\_146, Nimrod\_143, NoSleep\_143, Phaux\_145, Phrux\_141, Porky\_147, Pumpkin\_143,

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

- Amao\_148, Nala\_147, Pat3\_145,

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

- Gator\_146, Harella\_151,

### **Summary by start number:**

Start 1:

- Found in 24 of 26 ( 92.3% ) of genes in pham
- Manual Annotations of this start: 21 of 25
- Called 87.5% of time when present
- Phage (with cluster) where this start called: ChosenOne\_145 (E), ChotaBhai\_149 (E), Elite2014\_144 (E), Elph10\_143 (E), Emmina\_146 (E), Eureka\_145 (E),

Goku\_143 (E), Hopey\_142 (E), HufflyPuff\_146 (E), Lilac\_140 (E), Lilpickle\_144 (E), MPhalcon\_146 (E), Manda\_147 (E), Maxxinista\_146 (E), Murphy\_146 (E), Nimrod\_143 (E), NoSleep\_143 (E), Phaux\_145 (E), Phrux\_141 (E), Porky\_147 (E), Pumpkin\_143 (E),

#### Start 2:

- Found in 26 of 26 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 4 of 25
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Gator\_146 (E), Harella\_151 (E), Nala\_147 (E), Pat3\_145 (E),

#### Start 3:

- Found in 15 of 26 ( 57.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Amao\_148 (E),

### Summary by clusters:

There is one cluster represented in this pham: E

Info for manual annotations of cluster E:

- Start number 1 was manually annotated 21 times for cluster E.
- Start number 2 was manually annotated 4 times for cluster E.

### **Gene Information:**

Gene: Amao\_148 Start: 75806, Stop: 75636, Start Num: 3

Candidate Starts for Amao\_148:

(Start: 1 @75854 has 21 MA's), (Start: 2 @75842 has 4 MA's), (3, 75806), (4, 75716), (5, 75713), (6, 75686),

Gene: ChosenOne\_145 Start: 74070, Stop: 73858, Start Num: 1

Candidate Starts for ChosenOne\_145:

(Start: 1 @74070 has 21 MA's), (Start: 2 @74058 has 4 MA's), (4, 73932),

Gene: ChotaBhai\_149 Start: 75245, Stop: 75027, Start Num: 1

Candidate Starts for ChotaBhai\_149:

(Start: 1 @75245 has 21 MA's), (Start: 2 @75233 has 4 MA's), (3, 75197), (4, 75107), (5, 75104), (6, 75077),

Gene: Elite2014\_144 Start: 74069, Stop: 73857, Start Num: 1

Candidate Starts for Elite2014\_144:

(Start: 1 @74069 has 21 MA's), (Start: 2 @74057 has 4 MA's), (4, 73931),

Gene: Elph10\_143 Start: 73775, Stop: 73557, Start Num: 1

Candidate Starts for Elph10\_143:

(Start: 1 @73775 has 21 MA's), (Start: 2 @73763 has 4 MA's), (3, 73727), (4, 73637), (5, 73634), (6, 73607),

Gene: Emmina\_146 Start: 74395, Stop: 74177, Start Num: 1  
Candidate Starts for Emmina\_146:  
(Start: 1 @74395 has 21 MA's), (Start: 2 @74383 has 4 MA's), (3, 74347), (4, 74257), (5, 74254), (6, 74227),

Gene: Eureka\_145 Start: 75274, Stop: 75062, Start Num: 1  
Candidate Starts for Eureka\_145:  
(Start: 1 @75274 has 21 MA's), (Start: 2 @75262 has 4 MA's), (4, 75136),

Gene: Gator\_146 Start: 75481, Stop: 75275, Start Num: 2  
Candidate Starts for Gator\_146:  
(Start: 2 @75481 has 4 MA's), (3, 75445), (4, 75355), (5, 75352), (6, 75325),

Gene: Goku\_143 Start: 75583, Stop: 75371, Start Num: 1  
Candidate Starts for Goku\_143:  
(Start: 1 @75583 has 21 MA's), (Start: 2 @75571 has 4 MA's), (4, 75445),

Gene: Harella\_151 Start: 75989, Stop: 75783, Start Num: 2  
Candidate Starts for Harella\_151:  
(Start: 2 @75989 has 4 MA's), (3, 75953), (4, 75863), (5, 75860), (6, 75833),

Gene: Hokey\_142 Start: 74685, Stop: 74473, Start Num: 1  
Candidate Starts for Hokey\_142:  
(Start: 1 @74685 has 21 MA's), (Start: 2 @74673 has 4 MA's), (4, 74547),

Gene: HufflyPuff\_146 Start: 75423, Stop: 75205, Start Num: 1  
Candidate Starts for HufflyPuff\_146:  
(Start: 1 @75423 has 21 MA's), (Start: 2 @75411 has 4 MA's), (3, 75375), (4, 75285), (5, 75282), (6, 75255),

Gene: Lilac\_140 Start: 75360, Stop: 75142, Start Num: 1  
Candidate Starts for Lilac\_140:  
(Start: 1 @75360 has 21 MA's), (Start: 2 @75348 has 4 MA's), (3, 75312), (4, 75222), (5, 75219), (6, 75192),

Gene: Lilpickle\_144 Start: 74069, Stop: 73857, Start Num: 1  
Candidate Starts for Lilpickle\_144:  
(Start: 1 @74069 has 21 MA's), (Start: 2 @74057 has 4 MA's), (4, 73931),

Gene: MPhalcon\_146 Start: 74705, Stop: 74487, Start Num: 1  
Candidate Starts for MPhalcon\_146:  
(Start: 1 @74705 has 21 MA's), (Start: 2 @74693 has 4 MA's), (3, 74657), (4, 74567), (5, 74564), (6, 74537),

Gene: Manda\_147 Start: 75123, Stop: 74911, Start Num: 1  
Candidate Starts for Manda\_147:  
(Start: 1 @75123 has 21 MA's), (Start: 2 @75111 has 4 MA's), (4, 74985),

Gene: Maxxinista\_146 Start: 74313, Stop: 74101, Start Num: 1  
Candidate Starts for Maxxinista\_146:  
(Start: 1 @74313 has 21 MA's), (Start: 2 @74301 has 4 MA's), (4, 74175),

Gene: Murphy\_146 Start: 75279, Stop: 75061, Start Num: 1

Candidate Starts for Murphy\_146:

(Start: 1 @75279 has 21 MA's), (Start: 2 @75267 has 4 MA's), (3, 75231), (4, 75141), (5, 75138), (6, 75111),

Gene: Nala\_147 Start: 74982, Stop: 74776, Start Num: 2

Candidate Starts for Nala\_147:

(Start: 1 @74994 has 21 MA's), (Start: 2 @74982 has 4 MA's), (4, 74856), (5, 74853), (6, 74826),

Gene: Nimrod\_143 Start: 75535, Stop: 75323, Start Num: 1

Candidate Starts for Nimrod\_143:

(Start: 1 @75535 has 21 MA's), (Start: 2 @75523 has 4 MA's), (4, 75397),

Gene: NoSleep\_143 Start: 73755, Stop: 73537, Start Num: 1

Candidate Starts for NoSleep\_143:

(Start: 1 @73755 has 21 MA's), (Start: 2 @73743 has 4 MA's), (3, 73707), (4, 73617), (5, 73614), (6, 73587),

Gene: Pat3\_145 Start: 74805, Stop: 74599, Start Num: 2

Candidate Starts for Pat3\_145:

(Start: 1 @74817 has 21 MA's), (Start: 2 @74805 has 4 MA's), (3, 74769), (4, 74679), (5, 74676), (6, 74649),

Gene: Phaux\_145 Start: 75579, Stop: 75367, Start Num: 1

Candidate Starts for Phaux\_145:

(Start: 1 @75579 has 21 MA's), (Start: 2 @75567 has 4 MA's), (4, 75441),

Gene: Phrux\_141 Start: 73811, Stop: 73593, Start Num: 1

Candidate Starts for Phrux\_141:

(Start: 1 @73811 has 21 MA's), (Start: 2 @73799 has 4 MA's), (3, 73763), (4, 73673), (5, 73670), (6, 73643),

Gene: Porky\_147 Start: 75412, Stop: 75194, Start Num: 1

Candidate Starts for Porky\_147:

(Start: 1 @75412 has 21 MA's), (Start: 2 @75400 has 4 MA's), (3, 75364), (4, 75274), (5, 75271), (6, 75244),

Gene: Pumpkin\_143 Start: 73591, Stop: 73373, Start Num: 1

Candidate Starts for Pumpkin\_143:

(Start: 1 @73591 has 21 MA's), (Start: 2 @73579 has 4 MA's), (3, 73543), (4, 73453), (5, 73450), (6, 73423),