

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 203466 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203466 has 13 members, 4 are drafts.

Phages represented in each track:

Track 1: LittleFortune 92

Track 2: CrazyRich\_89, PhedwardCullen\_88

Track 3 : SirFrank\_91, NoodlelyBoi\_91

• Track 4 : Glorp\_93

Track 5 : Shrubaron 93

• Track 6 : Metamorphoo\_90

Track 7 : Yeti\_93

Track 8 : Piperis\_91

Track 9 : Honeyfin\_90

Track 10 : Phorgeous\_90

Track 11 : Tyrumbra\_89

# 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 7 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 CrazyRich\_89, Glorp\_93, Honeyfin\_90, LittleFortune\_92, NoodlelyBoi\_91, PhedwardCullen\_88, Phorgeous\_90, Piperis\_91, Shrubaron\_93, SirFrank\_91, Yeti\_93,

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

Metamorphoo\_90, Tyrumbra\_89,

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

## Summary by start number:

## Start 8:

- Found in 3 of 13 (23.1%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 33.3% of time when present

Phage (with cluster) where this start called: Tyrumbra\_89 (EC),

#### Start 9:

- Found in 13 of 13 (100.0%) of genes in pham
- Manual Annotations of this start: 7 of 9
- Called 84.6% of time when present
- Phage (with cluster) where this start called: CrazyRich\_89 (EC), Glorp\_93 (EC), Honeyfin\_90 (EC), LittleFortune\_92 (EC), NoodlelyBoi\_91 (EC), PhedwardCullen\_88 (EC), Phorgeous\_90 (EC), Piperis\_91 (EC), Shrubaron\_93 (EC), SirFrank\_91 (EC), Yeti\_93 (EC),

### Start 10:

- Found in 1 of 13 (7.7%) 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: Metamorphoo\_90 (EC),

# Summary by clusters:

There is one cluster represented in this pham: EC

Info for manual annotations of cluster EC:

- •Start number 8 was manually annotated 1 time for cluster EC.
- •Start number 9 was manually annotated 7 times for cluster EC.
- Start number 10 was manually annotated 1 time for cluster EC.

## Gene Information:

Gene: CrazyRich\_89 Start: 52561, Stop: 52902, Start Num: 9

Candidate Starts for CrazyRich 89:

(5, 52276), (7, 52492), (Start: 9 @52561 has 7 MA's), (11, 52588), (12, 52597), (14, 52660), (18, 52744), (21, 52813),

Gene: Glorp\_93 Start: 53057, Stop: 53398, Start Num: 9

Candidate Starts for Glorp\_93:

(5, 52772), (7, 52988), (Start: 9 @53057 has 7 MA's), (11, 53084), (12, 53093), (14, 53156), (18, 53240), (21, 53309),

Gene: Honeyfin 90 Start: 52391, Stop: 52735, Start Num: 9

Candidate Starts for Honeyfin 90:

(5, 52106), (7, 52322), (Start: 9 @52391 has 7 MA's), (12, 52427), (14, 52490), (18, 52574), (21, 52643), (22, 52715),

Gene: LittleFortune\_92 Start: 52772, Stop: 53113, Start Num: 9

Candidate Starts for LittleFortune\_92:

(7, 52703), (Start: 9 @52772 has 7 MA's), (12, 52808), (14, 52871), (18, 52955), (21, 53024),

Gene: Metamorphoo 90 Start: 53069, Stop: 53395, Start Num: 10

Candidate Starts for Metamorphoo 90:

(Start: 8 @53060 has 1 MA's), (Start: 9 @53066 has 7 MA's), (Start: 10 @53069 has 1 MA's), (15, 53174), (16, 53186), (17, 53207), (19, 53258), (21, 53309),

Gene: NoodlelyBoi\_91 Start: 53225, Stop: 53566, Start Num: 9

Candidate Starts for NoodlelyBoi 91:

(5, 52940), (7, 53156), (Start: 9 @53225 has 7 MA's), (12, 53261), (14, 53324), (18, 53408), (21, 53477),

Gene: PhedwardCullen\_88 Start: 52308, Stop: 52649, Start Num: 9

Candidate Starts for PhedwardCullen 88:

(5, 52023), (7, 52239), (Start: 9 @52308 has 7 MA's), (11, 52335), (12, 52344), (14, 52407), (18, 52491), (21, 52560),

Gene: Phorgeous\_90 Start: 52432, Stop: 52776, Start Num: 9

Candidate Starts for Phorgeous\_90:

(5, 52147), (7, 52363), (Start: 9 @52432 has 7 MA's), (12, 52468), (14, 52531), (18, 52615), (21, 52684), (23, 52759),

Gene: Piperis\_91 Start: 52475, Stop: 52819, Start Num: 9

Candidate Starts for Piperis\_91:

(1, 51695), (2, 51704), (3, 51746), (4, 52031), (5, 52190), (7, 52406), (Start: 9 @52475 has 7 MA's), (11, 52502), (12, 52511), (14, 52574), (18, 52658), (21, 52727), (22, 52799),

Gene: Shrubaron\_93 Start: 53259, Stop: 53561, Start Num: 9

Candidate Starts for Shrubaron\_93:

(6, 53112), (Start: 8 @53253 has 1 MA's), (Start: 9 @53259 has 7 MA's), (13, 53289), (16, 53352), (17, 53373), (20, 53436), (21, 53475),

Gene: SirFrank\_91 Start: 52811, Stop: 53152, Start Num: 9

Candidate Starts for SirFrank 91:

(5, 52526), (7, 52742), (Start: 9 @52811 has 7 MA's), (12, 52847), (14, 52910), (18, 52994), (21, 53063),

Gene: Tyrumbra\_89 Start: 53038, Stop: 53346, Start Num: 8

Candidate Starts for Tyrumbra\_89:

(Start: 8 @53038 has 1 MA's), (Start: 9 @53044 has 7 MA's), (13, 53074), (15, 53125), (17, 53158), (20, 53221), (21, 53260),

Gene: Yeti\_93 Start: 52628, Stop: 52972, Start Num: 9

Candidate Starts for Yeti\_93:

(5, 52343), (7, 52559), (Start: 9 @52628 has 7 MA's), (12, 52664), (14, 52727), (18, 52811), (21, 52880), (22, 52952),