

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 203374 Report

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

Pham number 203374 has 17 members, 5 are drafts.

Phages represented in each track:

- Track 1: Walrus 41
- Track 2 : TillyBobJoe 49
- Track 3 : Gusanita\_40
- Track 4 : Zaheer 43, Cole 40
- Track 5 : Ichiang 40
- Track 6 : QuinnAvery\_43
- Track 7 : AllBusiness 39
- Track 8 : IsHungry\_37
- Track 9 : Elesar 37
- Track 10 : Popper 41
- Track 11 : Halloweekend 38
- Track 12 : Ryan 43, Nandita 43
- Track 13: Lenoxika 43
- Track 14 : QueenHazel\_30, Xula\_29

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

The start number called the most often in the published annotations is 15, it was called in 2 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Gusanita\_40, Lenoxika\_43, QuinnAvery\_43,

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

• AllBusiness\_39, Cole\_40, Elesar\_37, Halloweekend\_38, Ichiang\_40, IsHungry\_37, Nandita\_43, Popper\_41, QueenHazel\_30, Ryan\_43, TillyBobJoe\_49, Xula\_29, Zaheer\_43,

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

Walrus\_41,

## Summary by start number:

Start 5:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Elesar\_37 (FF),

## Start 14:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 66.7% of time when present
- Phage (with cluster) where this start called: AllBusiness\_39 (FF), Popper\_41 (FF),

## Start 15:

- Found in 16 of 17 (94.1%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 18.8% of time when present
- Phage (with cluster) where this start called: Gusanita\_40 (FF), Lenoxika\_43 (FF), QuinnAvery\_43 (FF),

## Start 20:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Walrus\_41 (CV),

### Start 24:

- Found in 5 of 17 (29.4%) of genes in pham
- No Manual Annotations of this start.
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Halloweekend 38 (FF), Ichiang 40 (FF),

#### Start 26:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TillyBobJoe\_49 (DC1),

### Start 27:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: QueenHazel\_30 (I1), Xula\_29 (I1),

## Start 30:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Nandita\_43 (FF), Ryan\_43 (FF),

#### Start 31:

- Found in 5 of 17 (29.4%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Cole 40 (FF), Zaheer 43 (FF),

### Start 33:

- Found in 2 of 17 (11.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: IsHungry\_37 (FF),

# Summary by clusters:

There are 4 clusters represented in this pham: I1, CV, FF, DC1,

Info for manual annotations of cluster CV:

•Start number 20 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DC1:

•Start number 26 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster FF:

- •Start number 5 was manually annotated 1 time for cluster FF.
- •Start number 14 was manually annotated 1 time for cluster FF.
- •Start number 15 was manually annotated 2 times for cluster FF.
- •Start number 30 was manually annotated 2 times for cluster FF.
- •Start number 31 was manually annotated 2 times for cluster FF.

Info for manual annotations of cluster I1:

•Start number 27 was manually annotated 2 times for cluster I1.

### Gene Information:

Gene: AllBusiness 39 Start: 31057, Stop: 30608, Start Num: 14

Candidate Starts for AllBusiness\_39:

(1, 31183), (Start: 5 @31135 has 1 MA's), (6, 31111), (8, 31099), (Start: 14 @31057 has 1 MA's), (Start: 15 @31045 has 2 MA's), (22, 30976), (25, 30961), (32, 30892), (41, 30811), (46, 30718), (51, 30625),

Gene: Cole 40 Start: 29705, Stop: 29412, Start Num: 31

Candidate Starts for Cole 40:

(3, 29933), (10, 29867), (Start: 15 @29831 has 2 MA's), (19, 29777), (24, 29747), (Start: 31 @29705 has 2 MA's), (37, 29624), (42, 29585), (46, 29516),

Gene: Elesar 37 Start: 30914, Stop: 30393, Start Num: 5

Candidate Starts for Elesar\_37:

(Start: 5 @30914 has 1 MA's), (6, 30890), (8, 30878), (Start: 14 @30836 has 1 MA's), (Start: 15 @30824 has 2 MA's), (22, 30755), (25, 30740), (35, 30638), (41, 30590), (46, 30497),

Gene: Gusanita 40 Start: 30510, Stop: 30103, Start Num: 15

Candidate Starts for Gusanita 40:

(Start: 15 @30510 has 2 MA's), (17, 30495), (33, 30354), (44, 30270), (46, 30201),

Gene: Halloweekend 38 Start: 29380, Stop: 29045, Start Num: 24

Candidate Starts for Halloweekend\_38:

(3, 29566), (10, 29500), (Start: 15 @29464 has 2 MA's), (19, 29410), (24, 29380), (Start: 31 @29338 has 2 MA's), (37, 29257), (42, 29218), (46, 29149),

Gene: Ichiang\_40 Start: 29399, Stop: 29064, Start Num: 24

Candidate Starts for Ichiang\_40:

(3, 29585), (10, 29519), (Start: 15 @29483 has 2 MA's), (19, 29429), (21, 29417), (24, 29399), (28, 29363), (Start: 31 @29357 has 2 MA's), (37, 29276), (42, 29237), (46, 29168),

Gene: IsHungry\_37 Start: 28541, Stop: 28293, Start Num: 33

Candidate Starts for IsHungry 37:

(Start: 15 @28697 has 2 MA's), (17, 28682), (18, 28655), (33, 28541), (39, 28490), (46, 28388), (50, 28334),

Gene: Lenoxika\_43 Start: 30210, Stop: 29782, Start Num: 15

Candidate Starts for Lenoxika\_43:

(2, 30324), (4, 30300), (12, 30228), (Start: 15 @30210 has 2 MA's), (Start: 30 @30096 has 2 MA's), (44, 29961), (45, 29898), (46, 29892),

Gene: Nandita 43 Start: 29959, Stop: 29645, Start Num: 30

Candidate Starts for Nandita\_43:

(2, 30187), (4, 30163), (12, 30091), (Start: 15 @30073 has 2 MA's), (Start: 30 @29959 has 2 MA's), (44, 29824), (45, 29761), (46, 29755),

Gene: Popper\_41 Start: 29991, Stop: 29548, Start Num: 14

Candidate Starts for Popper\_41:

(Start: 5 @30069 has 1 MA's), (6, 30045), (8, 30033), (Start: 14 @29991 has 1 MA's), (Start: 15 @29979 has 2 MA's), (22, 29910), (25, 29895), (41, 29745), (46, 29652),

Gene: QueenHazel\_30 Start: 27405, Stop: 27109, Start Num: 27

Candidate Starts for QueenHazel\_30:

(7, 27561), (10, 27540), (11, 27531), (13, 27522), (Start: 15 @27504 has 2 MA's), (23, 27444), (25, 27432), (Start: 27 @27405 has 2 MA's), (32, 27363), (36, 27318), (40, 27291), (41, 27282), (47, 27204), (48, 27162),

Gene: QuinnAvery\_43 Start: 30914, Stop: 30495, Start Num: 15

Candidate Starts for QuinnAvery 43:

(3, 31016), (10, 30950), (Start: 15 @30914 has 2 MA's), (19, 30860), (24, 30830), (Start: 31 @30788 has 2 MA's), (37, 30707), (42, 30668), (46, 30599),

Gene: Ryan\_43 Start: 30508, Stop: 30194, Start Num: 30

Candidate Starts for Ryan 43:

(2, 30736), (4, 30712), (12, 30640), (Start: 15 @30622 has 2 MA's), (Start: 30 @30508 has 2 MA's), (44, 30373), (45, 30310), (46, 30304),

Gene: TillyBobJoe 49 Start: 39897, Stop: 39586, Start Num: 26

Candidate Starts for TillyBobJoe 49:

(Start: 15 @39981 has 2 MA's), (16, 39969), (Start: 26 @39897 has 1 MA's), (29, 39870), (40, 39768), (48, 39645),

Gene: Walrus 41 Start: 32609, Stop: 32277, Start Num: 20

Candidate Starts for Walrus 41:

(9, 32699), (Start: 20 @32609 has 1 MA's), (34, 32504), (38, 32474), (43, 32441), (49, 32318),

Gene: Xula\_29 Start: 26929, Stop: 26633, Start Num: 27

Candidate Starts for Xula\_29:

(7, 27085), (10, 27064), (11, 27055), (13, 27046), (Start: 15 @27028 has 2 MA's), (23, 26968), (25, 26956), (Start: 27 @26929 has 2 MA's), (32, 26887), (36, 26842), (40, 26815), (41, 26806), (47, 26728), (48, 26686),

Gene: Zaheer\_43 Start: 31154, Stop: 30861, Start Num: 31

Candidate Starts for Zaheer\_43:

 $(3,\,31382),\,(10,\,31316),\,(Start:\,15\,\,@\,31280\,\,has\,\,2\,\,MA's),\,(19,\,31226),\,(24,\,31196),\,(Start:\,31\,\,@\,31154),\,(24,\,31196)$ 

has 2 MA's), (37, 31073), (42, 31034), (46, 30965),