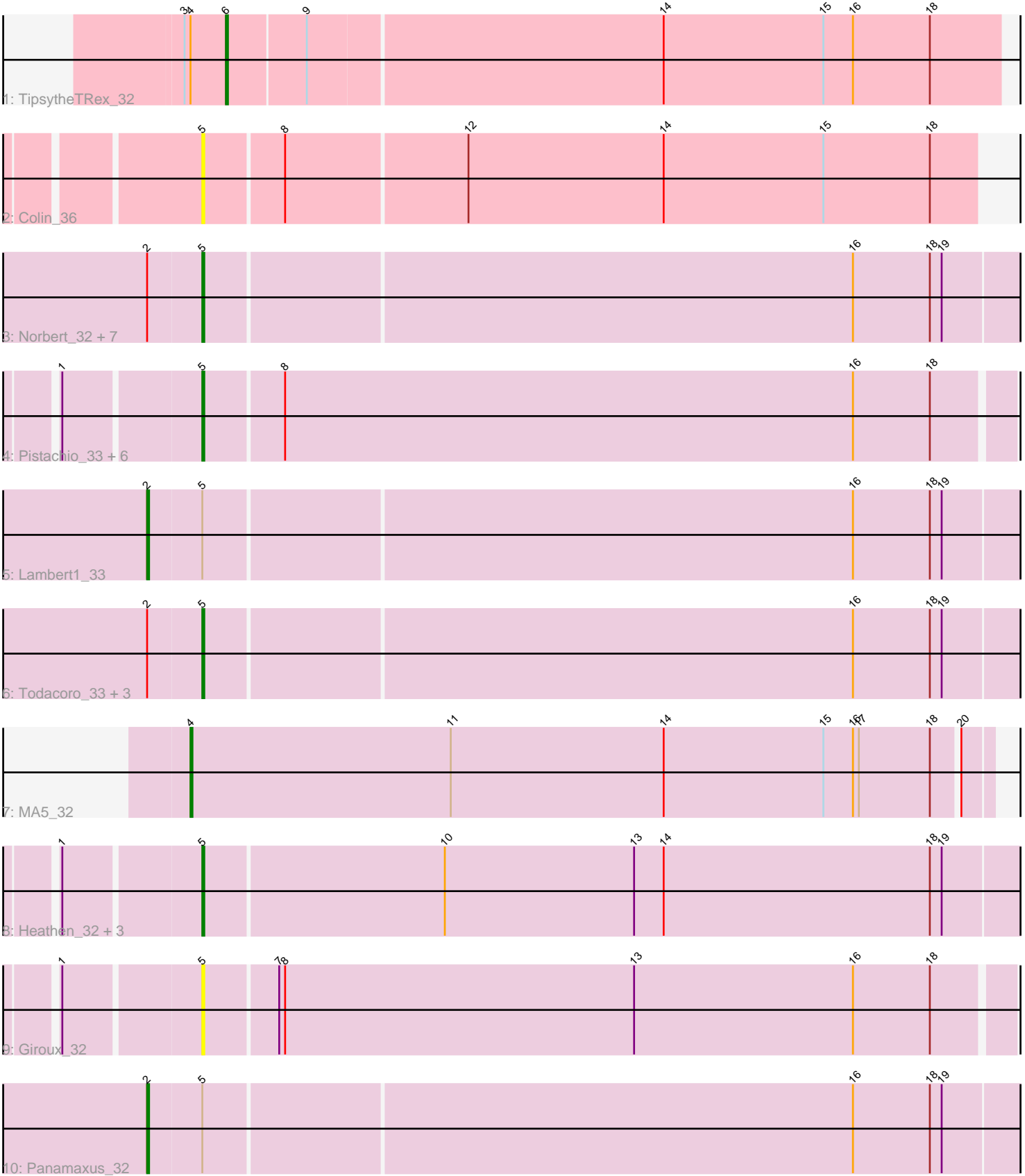


Pham 3145



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 3145 Report

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

Pham number 3145 has 29 members, 5 are drafts.

Phages represented in each track:

- Track 1 : TipsytheTRex\_32
- Track 2 : Colin\_36
- Track 3 : Norbert\_32, Noella\_33, ResDef\_33, Texage\_32, Popcicle\_33, Caviar\_33, Pocahontas\_33, Hookmount\_33
- Track 4 : Pistachio\_33, Bugatti\_32, SaturnRing\_32, TNguyen7\_32, Idleandcovert\_32, Puppy\_33, BlueBird\_33
- Track 5 : Lambert1\_33
- Track 6 : Todacoro\_33, QuinnKiro\_32, Margo\_33, Veracruz\_32
- Track 7 : MA5\_32
- Track 8 : Heathen\_32, Fred313\_32, Scout\_32, HelDan\_32
- Track 9 : Giroux\_32
- Track 10 : Panamaxus\_32

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

The start number called the most often in the published annotations is 5, it was called in 20 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlueBird\_33, Bugatti\_32, Caviar\_33, Colin\_36, Fred313\_32, Giroux\_32, Heathen\_32, HelDan\_32, Hookmount\_33, Idleandcovert\_32, Margo\_33, Noella\_33, Norbert\_32, Pistachio\_33, Pocahontas\_33, Popcicle\_33, Puppy\_33, QuinnKiro\_32, ResDef\_33, SaturnRing\_32, Scout\_32, TNguyen7\_32, Texage\_32, Todacoro\_33, Veracruz\_32,

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

- Lambert1\_33, Panamaxus\_32,

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

- MA5\_32, TipsytheTRex\_32,

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

Start 2:

- Found in 14 of 29 ( 48.3% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Lambert1\_33 (A3), Panamaxus\_32 (A3),

Start 4:

- Found in 2 of 29 ( 6.9% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MA5\_32 (A3),

Start 5:

- Found in 27 of 29 ( 93.1% ) of genes in pham
- Manual Annotations of this start: 20 of 24
- Called 92.6% of time when present
- Phage (with cluster) where this start called: BlueBird\_33 (A3), Bugatti\_32 (A3), Caviar\_33 (A3), Colin\_36 (A2), Fred313\_32 (A3), Giroux\_32 (A3), Heathen\_32 (A3), HelDan\_32 (A3), Hookmount\_33 (A3), Idleandcovert\_32 (A3), Margo\_33 (A3), Noella\_33 (A3), Norbert\_32 (A3), Pistachio\_33 (A3), Pocahontas\_33 (A3), Popcicle\_33 (A3), Puppy\_33 (A3), QuinnKiro\_32 (A3), ResDef\_33 (A3), SaturnRing\_32 (A3), Scout\_32 (A3), TNguyen7\_32 (A3), Texage\_32 (A3), Todacoro\_33 (A3), Veracruz\_32 (A3),

Start 6:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TopsytheTRex\_32 (A2),

### **Summary by clusters:**

There are 2 clusters represented in this pham: A3, A2,

Info for manual annotations of cluster A2:

- Start number 6 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A3:

- Start number 2 was manually annotated 2 times for cluster A3.
- Start number 4 was manually annotated 1 time for cluster A3.
- Start number 5 was manually annotated 20 times for cluster A3.

### **Gene Information:**

Gene: BlueBird\_33 Start: 25156, Stop: 24752, Start Num: 5

Candidate Starts for BlueBird\_33:

(1, 25222), (Start: 5 @25156 has 20 MA's), (8, 25117), (16, 24829), (18, 24790),

Gene: Bugatti\_32 Start: 25156, Stop: 24752, Start Num: 5

Candidate Starts for Bugatti\_32:

(1, 25222), (Start: 5 @25156 has 20 MA's), (8, 25117), (16, 24829), (18, 24790),

Gene: Caviar\_33 Start: 25697, Stop: 25290, Start Num: 5  
Candidate Starts for Caviar\_33:  
(Start: 2 @25724 has 2 MA's), (Start: 5 @25697 has 20 MA's), (16, 25373), (18, 25334), (19, 25328),

Gene: Colin\_36 Start: 26702, Stop: 26316, Start Num: 5  
Candidate Starts for Colin\_36:  
(Start: 5 @26702 has 20 MA's), (8, 26663), (12, 26573), (14, 26474), (15, 26393), (18, 26339),

Gene: Fred313\_32 Start: 24908, Stop: 24498, Start Num: 5  
Candidate Starts for Fred313\_32:  
(1, 24974), (Start: 5 @24908 has 20 MA's), (10, 24788), (13, 24692), (14, 24677), (18, 24542), (19, 24536),

Gene: Giroux\_32 Start: 25155, Stop: 24751, Start Num: 5  
Candidate Starts for Giroux\_32:  
(1, 25221), (Start: 5 @25155 has 20 MA's), (7, 25119), (8, 25116), (13, 24939), (16, 24828), (18, 24789),

Gene: Heathen\_32 Start: 24964, Stop: 24554, Start Num: 5  
Candidate Starts for Heathen\_32:  
(1, 25030), (Start: 5 @24964 has 20 MA's), (10, 24844), (13, 24748), (14, 24733), (18, 24598), (19, 24592),

Gene: HelDan\_32 Start: 25216, Stop: 24806, Start Num: 5  
Candidate Starts for HelDan\_32:  
(1, 25282), (Start: 5 @25216 has 20 MA's), (10, 25096), (13, 25000), (14, 24985), (18, 24850), (19, 24844),

Gene: Hookmount\_33 Start: 25698, Stop: 25291, Start Num: 5  
Candidate Starts for Hookmount\_33:  
(Start: 2 @25725 has 2 MA's), (Start: 5 @25698 has 20 MA's), (16, 25374), (18, 25335), (19, 25329),

Gene: Idleandcovert\_32 Start: 25156, Stop: 24752, Start Num: 5  
Candidate Starts for Idleandcovert\_32:  
(1, 25222), (Start: 5 @25156 has 20 MA's), (8, 25117), (16, 24829), (18, 24790),

Gene: Lambert1\_33 Start: 25724, Stop: 25290, Start Num: 2  
Candidate Starts for Lambert1\_33:  
(Start: 2 @25724 has 2 MA's), (Start: 5 @25697 has 20 MA's), (16, 25373), (18, 25334), (19, 25328),

Gene: MA5\_32 Start: 24773, Stop: 24372, Start Num: 4  
Candidate Starts for MA5\_32:  
(Start: 4 @24773 has 1 MA's), (11, 24641), (14, 24533), (15, 24452), (16, 24437), (17, 24434), (18, 24398), (20, 24386),

Gene: Margo\_33 Start: 25723, Stop: 25316, Start Num: 5  
Candidate Starts for Margo\_33:  
(Start: 2 @25750 has 2 MA's), (Start: 5 @25723 has 20 MA's), (16, 25399), (18, 25360), (19, 25354),

Gene: Noella\_33 Start: 25698, Stop: 25291, Start Num: 5  
Candidate Starts for Noella\_33:  
(Start: 2 @25725 has 2 MA's), (Start: 5 @25698 has 20 MA's), (16, 25374), (18, 25335), (19, 25329),

Gene: Norbert\_32 Start: 25697, Stop: 25290, Start Num: 5  
Candidate Starts for Norbert\_32:  
(Start: 2 @25724 has 2 MA's), (Start: 5 @25697 has 20 MA's), (16, 25373), (18, 25334), (19, 25328),

Gene: Panamaxus\_32 Start: 25724, Stop: 25290, Start Num: 2  
Candidate Starts for Panamaxus\_32:  
(Start: 2 @25724 has 2 MA's), (Start: 5 @25697 has 20 MA's), (16, 25373), (18, 25334), (19, 25328),

Gene: Pistachio\_33 Start: 24703, Stop: 24299, Start Num: 5  
Candidate Starts for Pistachio\_33:  
(1, 24769), (Start: 5 @24703 has 20 MA's), (8, 24664), (16, 24376), (18, 24337),

Gene: Pocahontas\_33 Start: 25694, Stop: 25287, Start Num: 5  
Candidate Starts for Pocahontas\_33:  
(Start: 2 @25721 has 2 MA's), (Start: 5 @25694 has 20 MA's), (16, 25370), (18, 25331), (19, 25325),

Gene: Popcicle\_33 Start: 25694, Stop: 25287, Start Num: 5  
Candidate Starts for Popcicle\_33:  
(Start: 2 @25721 has 2 MA's), (Start: 5 @25694 has 20 MA's), (16, 25370), (18, 25331), (19, 25325),

Gene: Puppy\_33 Start: 24773, Stop: 24369, Start Num: 5  
Candidate Starts for Puppy\_33:  
(1, 24839), (Start: 5 @24773 has 20 MA's), (8, 24734), (16, 24446), (18, 24407),

Gene: QuinnKiro\_32 Start: 25697, Stop: 25290, Start Num: 5  
Candidate Starts for QuinnKiro\_32:  
(Start: 2 @25724 has 2 MA's), (Start: 5 @25697 has 20 MA's), (16, 25373), (18, 25334), (19, 25328),

Gene: ResDef\_33 Start: 25697, Stop: 25290, Start Num: 5  
Candidate Starts for ResDef\_33:  
(Start: 2 @25724 has 2 MA's), (Start: 5 @25697 has 20 MA's), (16, 25373), (18, 25334), (19, 25328),

Gene: SaturnRing\_32 Start: 25156, Stop: 24752, Start Num: 5  
Candidate Starts for SaturnRing\_32:  
(1, 25222), (Start: 5 @25156 has 20 MA's), (8, 25117), (16, 24829), (18, 24790),

Gene: Scout\_32 Start: 24463, Stop: 24053, Start Num: 5  
Candidate Starts for Scout\_32:  
(1, 24529), (Start: 5 @24463 has 20 MA's), (10, 24343), (13, 24247), (14, 24232), (18, 24097), (19, 24091),

Gene: TNguyen7\_32 Start: 25124, Stop: 24720, Start Num: 5  
Candidate Starts for TNguyen7\_32:  
(1, 25190), (Start: 5 @25124 has 20 MA's), (8, 25085), (16, 24797), (18, 24758),

Gene: Texage\_32 Start: 25698, Stop: 25291, Start Num: 5  
Candidate Starts for Texage\_32:  
(Start: 2 @25725 has 2 MA's), (Start: 5 @25698 has 20 MA's), (16, 25374), (18, 25335), (19, 25329),

Gene: TipsytheTRex\_32 Start: 24818, Stop: 24432, Start Num: 6  
Candidate Starts for TipsytheTRex\_32:  
(3, 24839), (Start: 4 @24836 has 1 MA's), (Start: 6 @24818 has 1 MA's), (9, 24779), (14, 24602), (15, 24521), (16, 24506), (18, 24467),

Gene: Todacoro\_33 Start: 25697, Stop: 25290, Start Num: 5

Candidate Starts for Todacoro\_33:

(Start: 2 @25724 has 2 MA's), (Start: 5 @25697 has 20 MA's), (16, 25373), (18, 25334), (19, 25328),

Gene: Veracruz\_32 Start: 25697, Stop: 25290, Start Num: 5

Candidate Starts for Veracruz\_32:

(Start: 2 @25724 has 2 MA's), (Start: 5 @25697 has 20 MA's), (16, 25373), (18, 25334), (19, 25328),