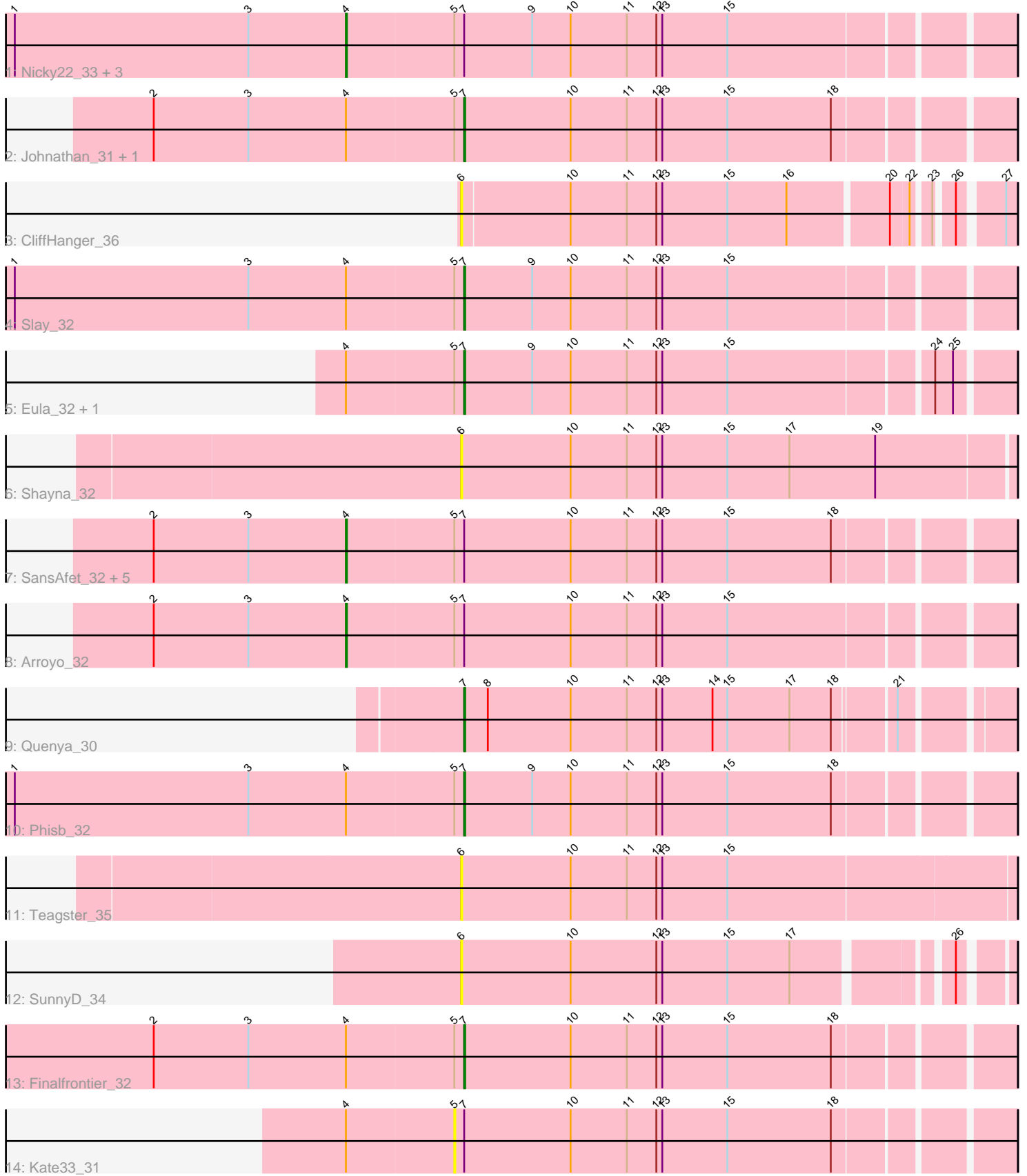


Pham 182560



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 182560 Report

This analysis was run 11/02/24 on database version 579.

Pham number 182560 has 24 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Nicky22\_33, Jovita\_32, Swervy\_32, SarBear\_31
- Track 2 : Johnathan\_31, Abigail\_31
- Track 3 : CliffHanger\_36
- Track 4 : Slay\_32
- Track 5 : Eula\_32, QMacho\_33
- Track 6 : Shayna\_32
- Track 7 : SansAfet\_32, Burritobowl\_31, DickRichards\_31, Avocadoman\_31, Doobus\_31, LimaBean\_31
- Track 8 : Arroyo\_32
- Track 9 : Quenya\_30
- Track 10 : Phisb\_32
- Track 11 : Teagster\_35
- Track 12 : SunnyD\_34
- Track 13 : Finalfrontier\_32
- Track 14 : Kate33\_31

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

The start number called the most often in the published annotations is 4, it was called in 11 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arroyo\_32, Avocadoman\_31, Burritobowl\_31, DickRichards\_31, Doobus\_31, Jovita\_32, LimaBean\_31, Nicky22\_33, SansAfet\_32, SarBear\_31, Swervy\_32,

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

- Abigail\_31, Eula\_32, Finalfrontier\_32, Johnathan\_31, Kate33\_31, Phisb\_32, QMacho\_33, Slay\_32,

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

- CliffHanger\_36, Quenya\_30, Shayna\_32, SunnyD\_34, Teagster\_35,

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

Start 4:

- Found in 19 of 24 ( 79.2% ) of genes in pham
- Manual Annotations of this start: 11 of 19
- Called 57.9% of time when present
- Phage (with cluster) where this start called: Arroyo\_32 (EB), Avocadoman\_31 (EB), Burritobowl\_31 (EB), DickRichards\_31 (EB), Doobus\_31 (EB), Jovita\_32 (EB), LimaBean\_31 (EB), Nicky22\_33 (EB), SansAfet\_32 (EB), SarBear\_31 (EB), Swervy\_32 (EB),

Start 5:

- Found in 19 of 24 ( 79.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Kate33\_31 (EB),

Start 6:

- Found in 4 of 24 ( 16.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CliffHanger\_36 (EB), Shayna\_32 (EB), SunnyD\_34 (EB), Teagster\_35 (EB),

Start 7:

- Found in 20 of 24 ( 83.3% ) of genes in pham
- Manual Annotations of this start: 8 of 19
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Abigail\_31 (EB), Eula\_32 (EB), Finalfrontier\_32 (EB), Johnathan\_31 (EB), Phisb\_32 (EB), QMacho\_33 (EB), Quenya\_30 (EB), Slay\_32 (EB),

**Summary by clusters:**

There is one cluster represented in this pham: EB

Info for manual annotations of cluster EB:

- Start number 4 was manually annotated 11 times for cluster EB.
- Start number 7 was manually annotated 8 times for cluster EB.

**Gene Information:**

Gene: Abigail\_31 Start: 22628, Stop: 23164, Start Num: 7

Candidate Starts for Abigail\_31:

(2, 22316), (3, 22412), (Start: 4 @22511 has 11 MA's), (5, 22619), (Start: 7 @22628 has 8 MA's), (10, 22736), (11, 22793), (12, 22823), (13, 22829), (15, 22895), (18, 23000),

Gene: Arroyo\_32 Start: 23288, Stop: 23941, Start Num: 4

Candidate Starts for Arroyo\_32:

(2, 23093), (3, 23189), (Start: 4 @23288 has 11 MA's), (5, 23396), (Start: 7 @23405 has 8 MA's), (10, 23513), (11, 23570), (12, 23600), (13, 23606), (15, 23672),

Gene: Avocadoman\_31 Start: 22453, Stop: 23106, Start Num: 4

Candidate Starts for Avocadoman\_31:

(2, 22258), (3, 22354), (Start: 4 @22453 has 11 MA's), (5, 22561), (Start: 7 @22570 has 8 MA's), (10, 22678), (11, 22735), (12, 22765), (13, 22771), (15, 22837), (18, 22942),

Gene: Burritobowl\_31 Start: 22845, Stop: 23498, Start Num: 4

Candidate Starts for Burritobowl\_31:

(2, 22650), (3, 22746), (Start: 4 @22845 has 11 MA's), (5, 22953), (Start: 7 @22962 has 8 MA's), (10, 23070), (11, 23127), (12, 23157), (13, 23163), (15, 23229), (18, 23334),

Gene: CliffHanger\_36 Start: 22466, Stop: 22987, Start Num: 6

Candidate Starts for CliffHanger\_36:

(6, 22466), (10, 22574), (11, 22631), (12, 22661), (13, 22667), (15, 22733), (16, 22793), (20, 22889), (22, 22907), (23, 22922), (26, 22937), (27, 22976),

Gene: DickRichards\_31 Start: 23174, Stop: 23827, Start Num: 4

Candidate Starts for DickRichards\_31:

(2, 22979), (3, 23075), (Start: 4 @23174 has 11 MA's), (5, 23282), (Start: 7 @23291 has 8 MA's), (10, 23399), (11, 23456), (12, 23486), (13, 23492), (15, 23558), (18, 23663),

Gene: Doobus\_31 Start: 22620, Stop: 23273, Start Num: 4

Candidate Starts for Doobus\_31:

(2, 22425), (3, 22521), (Start: 4 @22620 has 11 MA's), (5, 22728), (Start: 7 @22737 has 8 MA's), (10, 22845), (11, 22902), (12, 22932), (13, 22938), (15, 23004), (18, 23109),

Gene: Eula\_32 Start: 23053, Stop: 23589, Start Num: 7

Candidate Starts for Eula\_32:

(Start: 4 @22936 has 11 MA's), (5, 23044), (Start: 7 @23053 has 8 MA's), (9, 23122), (10, 23161), (11, 23218), (12, 23248), (13, 23254), (15, 23320), (24, 23515), (25, 23533),

Gene: Finalfrontier\_32 Start: 23664, Stop: 24200, Start Num: 7

Candidate Starts for Finalfrontier\_32:

(2, 23352), (3, 23448), (Start: 4 @23547 has 11 MA's), (5, 23655), (Start: 7 @23664 has 8 MA's), (10, 23772), (11, 23829), (12, 23859), (13, 23865), (15, 23931), (18, 24036),

Gene: Johnathan\_31 Start: 22510, Stop: 23046, Start Num: 7

Candidate Starts for Johnathan\_31:

(2, 22198), (3, 22294), (Start: 4 @22393 has 11 MA's), (5, 22501), (Start: 7 @22510 has 8 MA's), (10, 22618), (11, 22675), (12, 22705), (13, 22711), (15, 22777), (18, 22882),

Gene: Jovita\_32 Start: 23039, Stop: 23692, Start Num: 4

Candidate Starts for Jovita\_32:

(1, 22703), (3, 22940), (Start: 4 @23039 has 11 MA's), (5, 23147), (Start: 7 @23156 has 8 MA's), (9, 23225), (10, 23264), (11, 23321), (12, 23351), (13, 23357), (15, 23423),

Gene: Kate33\_31 Start: 22762, Stop: 23307, Start Num: 5

Candidate Starts for Kate33\_31:

(Start: 4 @22654 has 11 MA's), (5, 22762), (Start: 7 @22771 has 8 MA's), (10, 22879), (11, 22936), (12, 22966), (13, 22972), (15, 23038), (18, 23143),

Gene: LimaBean\_31 Start: 22389, Stop: 23042, Start Num: 4

Candidate Starts for LimaBean\_31:

(2, 22194), (3, 22290), (Start: 4 @22389 has 11 MA's), (5, 22497), (Start: 7 @22506 has 8 MA's), (10, 22614), (11, 22671), (12, 22701), (13, 22707), (15, 22773), (18, 22878),

Gene: Nicky22\_33 Start: 23401, Stop: 24054, Start Num: 4

Candidate Starts for Nicky22\_33:

(1, 23065), (3, 23302), (Start: 4 @23401 has 11 MA's), (5, 23509), (Start: 7 @23518 has 8 MA's), (9, 23587), (10, 23626), (11, 23683), (12, 23713), (13, 23719), (15, 23785),

Gene: Phisb\_32 Start: 23109, Stop: 23645, Start Num: 7

Candidate Starts for Phisb\_32:

(1, 22656), (3, 22893), (Start: 4 @22992 has 11 MA's), (5, 23100), (Start: 7 @23109 has 8 MA's), (9, 23178), (10, 23217), (11, 23274), (12, 23304), (13, 23310), (15, 23376), (18, 23481),

Gene: QMacho\_33 Start: 23536, Stop: 24072, Start Num: 7

Candidate Starts for QMacho\_33:

(Start: 4 @23419 has 11 MA's), (5, 23527), (Start: 7 @23536 has 8 MA's), (9, 23605), (10, 23644), (11, 23701), (12, 23731), (13, 23737), (15, 23803), (24, 23998), (25, 24016),

Gene: Quenya\_30 Start: 23232, Stop: 23762, Start Num: 7

Candidate Starts for Quenya\_30:

(Start: 7 @23232 has 8 MA's), (8, 23256), (10, 23340), (11, 23397), (12, 23427), (13, 23433), (14, 23484), (15, 23499), (17, 23562), (18, 23604), (21, 23661),

Gene: SansAfet\_32 Start: 22861, Stop: 23514, Start Num: 4

Candidate Starts for SansAfet\_32:

(2, 22666), (3, 22762), (Start: 4 @22861 has 11 MA's), (5, 22969), (Start: 7 @22978 has 8 MA's), (10, 23086), (11, 23143), (12, 23173), (13, 23179), (15, 23245), (18, 23350),

Gene: SarBear\_31 Start: 22749, Stop: 23402, Start Num: 4

Candidate Starts for SarBear\_31:

(1, 22413), (3, 22650), (Start: 4 @22749 has 11 MA's), (5, 22857), (Start: 7 @22866 has 8 MA's), (9, 22935), (10, 22974), (11, 23031), (12, 23061), (13, 23067), (15, 23133),

Gene: Shayna\_32 Start: 22699, Stop: 23253, Start Num: 6

Candidate Starts for Shayna\_32:

(6, 22699), (10, 22810), (11, 22867), (12, 22897), (13, 22903), (15, 22969), (17, 23032), (19, 23119),

Gene: Slay\_32 Start: 23514, Stop: 24050, Start Num: 7

Candidate Starts for Slay\_32:

(1, 23061), (3, 23298), (Start: 4 @23397 has 11 MA's), (5, 23505), (Start: 7 @23514 has 8 MA's), (9, 23583), (10, 23622), (11, 23679), (12, 23709), (13, 23715), (15, 23781),

Gene: SunnyD\_34 Start: 22741, Stop: 23256, Start Num: 6

Candidate Starts for SunnyD\_34:

(6, 22741), (10, 22852), (12, 22939), (13, 22945), (15, 23011), (17, 23074), (26, 23212),

Gene: Swervy\_32 Start: 22916, Stop: 23569, Start Num: 4

Candidate Starts for Swervy\_32:

(1, 22580), (3, 22817), (Start: 4 @22916 has 11 MA's), (5, 23024), (Start: 7 @23033 has 8 MA's), (9, 23102), (10, 23141), (11, 23198), (12, 23228), (13, 23234), (15, 23300),

Gene: Teagster\_35 Start: 23532, Stop: 24086, Start Num: 6

Candidate Starts for Teagster\_35:

(6, 23532), (10, 23643), (11, 23700), (12, 23730), (13, 23736), (15, 23802),