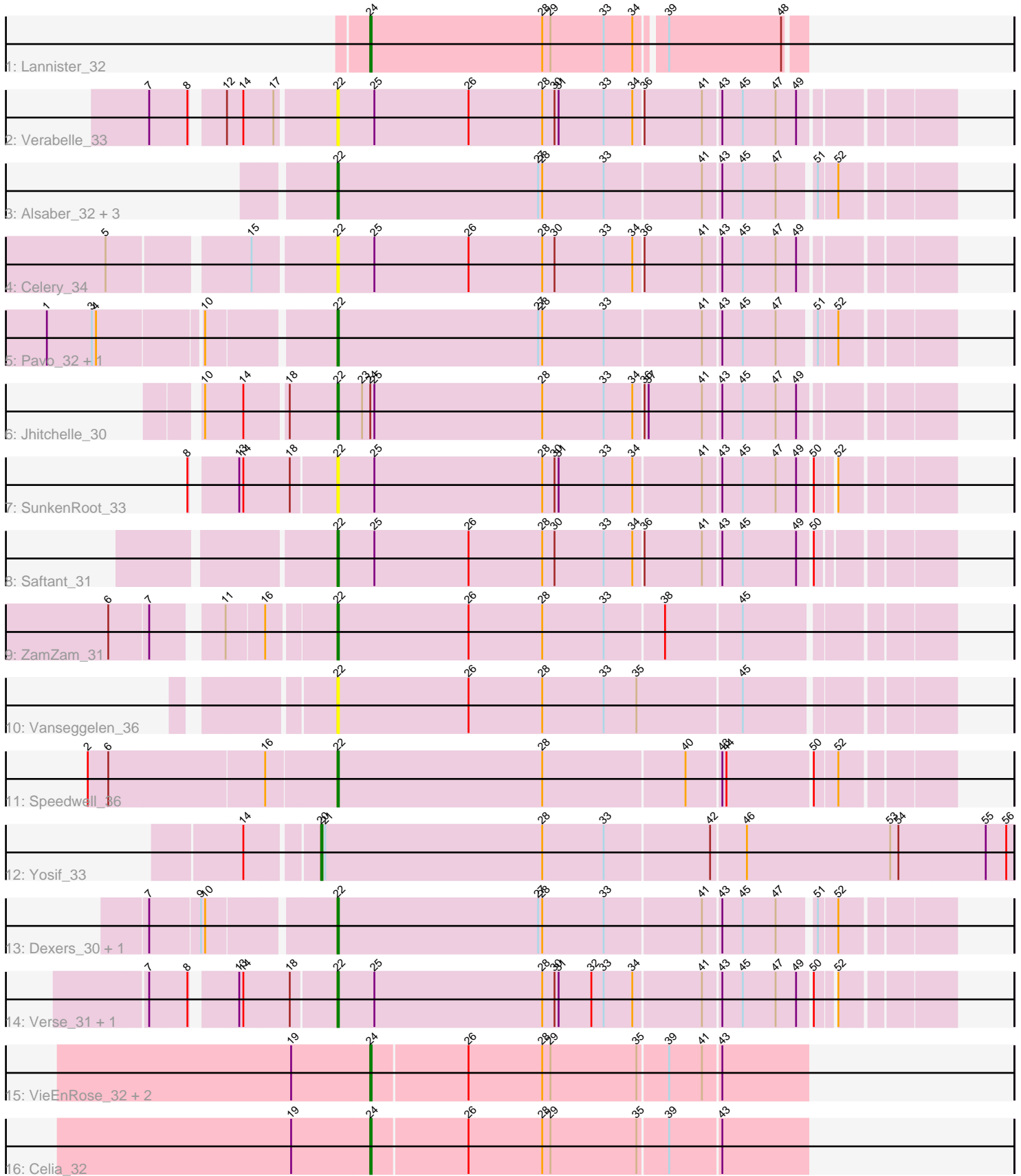


Pham 303640



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 303640 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303640 has 24 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Lannister\_32
- Track 2 : Verabelle\_33
- Track 3 : Alsaber\_32, Sudan\_31, Kaine\_31, ElGato\_32
- Track 4 : Celery\_34
- Track 5 : Pavo\_32, Conan\_32
- Track 6 : Jhitchelle\_30
- Track 7 : SunkenRoot\_33
- Track 8 : Saftant\_31
- Track 9 : ZamZam\_31
- Track 10 : Vanseggelen\_36
- Track 11 : Speedwell\_36
- Track 12 : Yosif\_33
- Track 13 : Dexers\_30, Provolone\_32
- Track 14 : Verse\_31, Amela\_31
- Track 15 : VieEnRose\_32, Itza\_32, Urza\_32
- Track 16 : Celia\_32

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

The start number called the most often in the published annotations is 22, it was called in 14 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alsaber\_32, Amela\_31, Celery\_34, Conan\_32, Dexers\_30, ElGato\_32, Jhitchelle\_30, Kaine\_31, Pavo\_32, Provolone\_32, Saftant\_31, Speedwell\_36, Sudan\_31, SunkenRoot\_33, Vanseggelen\_36, Verabelle\_33, Verse\_31, ZamZam\_31,

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

- 

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

- Celia\_32, Itza\_32, Lannister\_32, Urza\_32, VieEnRose\_32, Yosif\_33,

## Summary by start number:

### Start 20:

- Found in 1 of 24 ( 4.2% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yosif\_33 (BD3),

### Start 22:

- Found in 18 of 24 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 14 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alsaber\_32 (BD3), Amela\_31 (BD3), Celery\_34 (BD3), Conan\_32 (BD3), Dexers\_30 (BD3), ElGato\_32 (BD3), Jhitchelle\_30 (BD3), Kaine\_31 (BD3), Pavo\_32 (BD3), Provolone\_32 (BD3), Saftant\_31 (BD3), Speedwell\_36 (BD3), Sudan\_31 (BD3), SunkenRoot\_33 (BD3), Vanseggelen\_36 (BD3), Verabelle\_33 (BD3), Verse\_31 (BD3), ZamZam\_31 (BD3),

### Start 24:

- Found in 6 of 24 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 5 of 20
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Celia\_32 (BD6), Itza\_32 (BD6), Lannister\_32 (BD1), Urza\_32 (BD6), VieEnRose\_32 (BD6),

## Summary by clusters:

There are 3 clusters represented in this pham: BD6, BD1, BD3,

### Info for manual annotations of cluster BD1:

- Start number 24 was manually annotated 1 time for cluster BD1.

### Info for manual annotations of cluster BD3:

- Start number 20 was manually annotated 1 time for cluster BD3.
- Start number 22 was manually annotated 14 times for cluster BD3.

### Info for manual annotations of cluster BD6:

- Start number 24 was manually annotated 4 times for cluster BD6.

## Gene Information:

Gene: Alsaber\_32 Start: 25015, Stop: 25443, Start Num: 22

Candidate Starts for Alsaber\_32:

(Start: 22 @25015 has 14 MA's), (27, 25162), (28, 25165), (33, 25210), (41, 25279), (43, 25291), (45, 25306), (47, 25330), (51, 25354), (52, 25366),

Gene: Amela\_31 Start: 25848, Stop: 26276, Start Num: 22

Candidate Starts for Amela\_31:

(7, 25728), (8, 25755), (13, 25782), (14, 25785), (18, 25818), (Start: 22 @25848 has 14 MA's), (25, 25875), (28, 25998), (30, 26007), (31, 26010), (32, 26034), (33, 26043), (34, 26064), (41, 26112), (43, 26124), (45, 26139), (47, 26163), (49, 26178), (50, 26187), (52, 26199),

Gene: Celery\_34 Start: 24947, Stop: 25378, Start Num: 22

Candidate Starts for Celery\_34:

(5, 24800), (15, 24893), (Start: 22 @24947 has 14 MA's), (25, 24974), (26, 25043), (28, 25097), (30, 25106), (33, 25142), (34, 25163), (36, 25169), (41, 25211), (43, 25223), (45, 25238), (47, 25262), (49, 25277),

Gene: Celia\_32 Start: 24298, Stop: 24609, Start Num: 24

Candidate Starts for Celia\_32:

(19, 24241), (Start: 24 @24298 has 5 MA's), (26, 24367), (28, 24421), (29, 24427), (35, 24490), (39, 24511), (43, 24547),

Gene: Conan\_32 Start: 24911, Stop: 25339, Start Num: 22

Candidate Starts for Conan\_32:

(1, 24719), (3, 24752), (4, 24755), (10, 24827), (Start: 22 @24911 has 14 MA's), (27, 25058), (28, 25061), (33, 25106), (41, 25175), (43, 25187), (45, 25202), (47, 25226), (51, 25250), (52, 25262),

Gene: Dexers\_30 Start: 24937, Stop: 25365, Start Num: 22

Candidate Starts for Dexers\_30:

(7, 24814), (9, 24850), (10, 24853), (Start: 22 @24937 has 14 MA's), (27, 25084), (28, 25087), (33, 25132), (41, 25201), (43, 25213), (45, 25228), (47, 25252), (51, 25276), (52, 25288),

Gene: ElGato\_32 Start: 24575, Stop: 25003, Start Num: 22

Candidate Starts for ElGato\_32:

(Start: 22 @24575 has 14 MA's), (27, 24722), (28, 24725), (33, 24770), (41, 24839), (43, 24851), (45, 24866), (47, 24890), (51, 24914), (52, 24926),

Gene: Itza\_32 Start: 24212, Stop: 24523, Start Num: 24

Candidate Starts for Itza\_32:

(19, 24155), (Start: 24 @24212 has 5 MA's), (26, 24281), (28, 24335), (29, 24341), (35, 24404), (39, 24425), (41, 24449), (43, 24461),

Gene: Jhitchelle\_30 Start: 24461, Stop: 24892, Start Num: 22

Candidate Starts for Jhitchelle\_30:

(10, 24374), (14, 24401), (18, 24428), (Start: 22 @24461 has 14 MA's), (23, 24479), (Start: 24 @24485 has 5 MA's), (25, 24488), (28, 24611), (33, 24656), (34, 24677), (36, 24683), (37, 24686), (41, 24725), (43, 24737), (45, 24752), (47, 24776), (49, 24791),

Gene: Kaine\_31 Start: 24724, Stop: 25152, Start Num: 22

Candidate Starts for Kaine\_31:

(Start: 22 @24724 has 14 MA's), (27, 24871), (28, 24874), (33, 24919), (41, 24988), (43, 25000), (45, 25015), (47, 25039), (51, 25063), (52, 25075),

Gene: Lannister\_32 Start: 24234, Stop: 24539, Start Num: 24

Candidate Starts for Lannister\_32:

(Start: 24 @24234 has 5 MA's), (28, 24360), (29, 24366), (33, 24405), (34, 24426), (39, 24444), (48, 24525),

Gene: Pavo\_32 Start: 25184, Stop: 25612, Start Num: 22

Candidate Starts for Pavo\_32:

(1, 24992), (3, 25025), (4, 25028), (10, 25100), (Start: 22 @25184 has 14 MA's), (27, 25331), (28, 25334), (33, 25379), (41, 25448), (43, 25460), (45, 25475), (47, 25499), (51, 25523), (52, 25535),

Gene: Provolone\_32 Start: 24566, Stop: 24994, Start Num: 22

Candidate Starts for Provolone\_32:

(7, 24443), (9, 24479), (10, 24482), (Start: 22 @24566 has 14 MA's), (27, 24713), (28, 24716), (33, 24761), (41, 24830), (43, 24842), (45, 24857), (47, 24881), (51, 24905), (52, 24917),

Gene: Saftant\_31 Start: 25130, Stop: 25558, Start Num: 22

Candidate Starts for Saftant\_31:

(Start: 22 @25130 has 14 MA's), (25, 25157), (26, 25226), (28, 25280), (30, 25289), (33, 25325), (34, 25346), (36, 25352), (41, 25394), (43, 25406), (45, 25421), (49, 25460), (50, 25469),

Gene: Speedwell\_36 Start: 26449, Stop: 26880, Start Num: 22

Candidate Starts for Speedwell\_36:

(2, 26275), (6, 26290), (16, 26401), (Start: 22 @26449 has 14 MA's), (28, 26599), (40, 26701), (43, 26725), (44, 26728), (50, 26788), (52, 26803),

Gene: Sudan\_31 Start: 25011, Stop: 25439, Start Num: 22

Candidate Starts for Sudan\_31:

(Start: 22 @25011 has 14 MA's), (27, 25158), (28, 25161), (33, 25206), (41, 25275), (43, 25287), (45, 25302), (47, 25326), (51, 25350), (52, 25362),

Gene: SunkenRoot\_33 Start: 25648, Stop: 26076, Start Num: 22

Candidate Starts for SunkenRoot\_33:

(8, 25555), (13, 25582), (14, 25585), (18, 25618), (Start: 22 @25648 has 14 MA's), (25, 25675), (28, 25798), (30, 25807), (31, 25810), (33, 25843), (34, 25864), (41, 25912), (43, 25924), (45, 25939), (47, 25963), (49, 25978), (50, 25987), (52, 25999),

Gene: Urza\_32 Start: 24233, Stop: 24544, Start Num: 24

Candidate Starts for Urza\_32:

(19, 24176), (Start: 24 @24233 has 5 MA's), (26, 24302), (28, 24356), (29, 24362), (35, 24425), (39, 24446), (41, 24470), (43, 24482),

Gene: Vanseggelen\_36 Start: 24694, Stop: 25125, Start Num: 22

Candidate Starts for Vanseggelen\_36:

(Start: 22 @24694 has 14 MA's), (26, 24790), (28, 24844), (33, 24889), (35, 24913), (45, 24988),

Gene: Verabelle\_33 Start: 25098, Stop: 25529, Start Num: 22

Candidate Starts for Verabelle\_33:

(7, 24981), (8, 25008), (12, 25026), (14, 25038), (17, 25059), (Start: 22 @25098 has 14 MA's), (25, 25125), (26, 25194), (28, 25248), (30, 25257), (31, 25260), (33, 25293), (34, 25314), (36, 25320), (41, 25362), (43, 25374), (45, 25389), (47, 25413), (49, 25428),

Gene: Verse\_31 Start: 25842, Stop: 26270, Start Num: 22

Candidate Starts for Verse\_31:

(7, 25722), (8, 25749), (13, 25776), (14, 25779), (18, 25812), (Start: 22 @25842 has 14 MA's), (25, 25869), (28, 25992), (30, 26001), (31, 26004), (32, 26028), (33, 26037), (34, 26058), (41, 26106), (43, 26118), (45, 26133), (47, 26157), (49, 26172), (50, 26181), (52, 26193),

Gene: VieEnRose\_32 Start: 24310, Stop: 24621, Start Num: 24

Candidate Starts for VieEnRose\_32:

(19, 24253), (Start: 24 @24310 has 5 MA's), (26, 24379), (28, 24433), (29, 24439), (35, 24502), (39, 24523), (41, 24547), (43, 24559),

Gene: Yosif\_33 Start: 25462, Stop: 25962, Start Num: 20

Candidate Starts for Yosif\_33:

(14, 25414), (Start: 20 @25462 has 1 MA's), (21, 25465), (28, 25624), (33, 25669), (42, 25744), (46, 25768), (53, 25873), (54, 25879), (55, 25942), (56, 25957),

Gene: ZamZam\_31 Start: 25123, Stop: 25551, Start Num: 22

Candidate Starts for ZamZam\_31:

(6, 24982), (7, 25009), (11, 25051), (16, 25078), (Start: 22 @25123 has 14 MA's), (26, 25219), (28, 25273), (33, 25318), (38, 25360), (45, 25414),