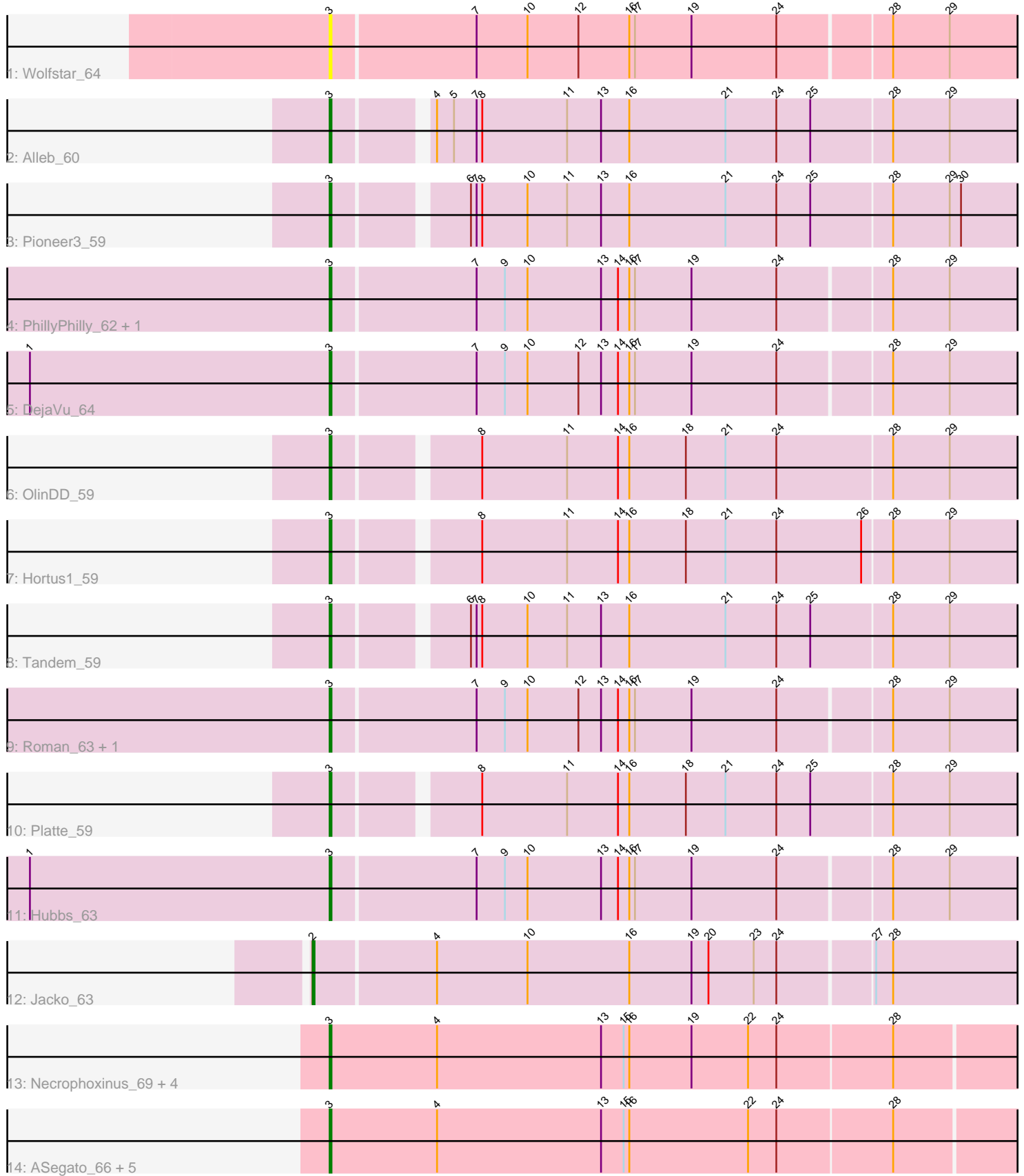


# Pham 3555



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 3555 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 3555 has 25 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar\_64
- Track 2 : Alleb\_60
- Track 3 : Pioneer3\_59
- Track 4 : PhillyPhilly\_62, Pavlo\_62
- Track 5 : DejaVu\_64
- Track 6 : OlinDD\_59
- Track 7 : Hortus1\_59
- Track 8 : Tandem\_59
- Track 9 : Roman\_63, Lupine\_61
- Track 10 : Platte\_59
- Track 11 : Hubbs\_63
- Track 12 : Jacko\_63
- Track 13 : Necrophoxinus\_69, Fork\_63, Musetta\_67, Lyell\_67, Welcome\_68
- Track 14 : ASegato\_66, Yuma\_66, DustyDino\_70, RunningBrook\_70, Erenyeager\_67, StevieWelch\_67

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

The start number called the most often in the published annotations is 3, it was called in 21 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato\_66, Alleb\_60, DejaVu\_64, DustyDino\_70, Erenyeager\_67, Fork\_63, Hortus1\_59, Hubbs\_63, Lupine\_61, Lyell\_67, Musetta\_67, Necrophoxinus\_69, OlinDD\_59, Pavlo\_62, PhillyPhilly\_62, Pioneer3\_59, Platte\_59, Roman\_63, RunningBrook\_70, StevieWelch\_67, Tandem\_59, Welcome\_68, Wolfstar\_64, Yuma\_66,

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

-

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

- Jacko\_63,

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

Start 2:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jacko\_63 (ED1),

Start 3:

- Found in 24 of 25 ( 96.0% ) of genes in pham
- Manual Annotations of this start: 21 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASegato\_66 (ED2), Alleb\_60 (ED1), DejaVu\_64 (ED1), DustyDino\_70 (ED2), Erenyeager\_67 (ED2), Fork\_63 (ED2), Hortus1\_59 (ED1), Hubbs\_63 (ED1), Lupine\_61 (ED1), Lyell\_67 (ED2), Musetta\_67 (ED2), Necrophoxinus\_69 (ED2), OlinDD\_59 (ED1), Pavlo\_62 (ED1), PhillyPhilly\_62 (ED1), Pioneer3\_59 (ED1), Platte\_59 (ED1), Roman\_63 (ED1), RunningBrook\_70 (ED2), StevieWelch\_67 (ED2), Tandem\_59 (ED1), Welcome\_68 (ED2), Wolfstar\_64 (ED), Yuma\_66 (ED2),

### **Summary by clusters:**

There are 3 clusters represented in this pham: ED2, ED, ED1,

Info for manual annotations of cluster ED1:

- Start number 2 was manually annotated 1 time for cluster ED1.
- Start number 3 was manually annotated 12 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 3 was manually annotated 9 times for cluster ED2.

### **Gene Information:**

Gene: ASegato\_66 Start: 37638, Stop: 37264, Start Num: 3

Candidate Starts for ASegato\_66:

(Start: 3 @37638 has 21 MA's), (4, 37581), (13, 37494), (15, 37482), (16, 37479), (22, 37416), (24, 37401), (28, 37341),

Gene: Alleb\_60 Start: 37560, Stop: 37192, Start Num: 3

Candidate Starts for Alleb\_60:

(Start: 3 @37560 has 21 MA's), (4, 37515), (5, 37506), (7, 37494), (8, 37491), (11, 37446), (13, 37428), (16, 37413), (21, 37362), (24, 37335), (25, 37317), (28, 37275), (29, 37245),

Gene: DejaVu\_64 Start: 37715, Stop: 37341, Start Num: 3

Candidate Starts for DejaVu\_64:

(1, 37874), (Start: 3 @37715 has 21 MA's), (7, 37640), (9, 37625), (10, 37613), (12, 37586), (13, 37574), (14, 37565), (16, 37559), (17, 37556), (19, 37526), (24, 37481), (28, 37424), (29, 37394),

Gene: DustyDino\_70 Start: 38601, Stop: 38227, Start Num: 3

Candidate Starts for DustyDino\_70:

(Start: 3 @38601 has 21 MA's), (4, 38544), (13, 38457), (15, 38445), (16, 38442), (22, 38379), (24, 38364), (28, 38304),

Gene: Erenyeager\_67 Start: 37633, Stop: 37259, Start Num: 3

Candidate Starts for Erenyeager\_67:

(Start: 3 @37633 has 21 MA's), (4, 37576), (13, 37489), (15, 37477), (16, 37474), (22, 37411), (24, 37396), (28, 37336),

Gene: Fork\_63 Start: 37288, Stop: 36914, Start Num: 3

Candidate Starts for Fork\_63:

(Start: 3 @37288 has 21 MA's), (4, 37231), (13, 37144), (15, 37132), (16, 37129), (19, 37096), (22, 37066), (24, 37051), (28, 36991),

Gene: Hortus1\_59 Start: 37715, Stop: 37347, Start Num: 3

Candidate Starts for Hortus1\_59:

(Start: 3 @37715 has 21 MA's), (8, 37646), (11, 37601), (14, 37574), (16, 37568), (18, 37538), (21, 37517), (24, 37490), (26, 37445), (28, 37430), (29, 37400),

Gene: Hubbs\_63 Start: 37923, Stop: 37549, Start Num: 3

Candidate Starts for Hubbs\_63:

(1, 38082), (Start: 3 @37923 has 21 MA's), (7, 37848), (9, 37833), (10, 37821), (13, 37782), (14, 37773), (16, 37767), (17, 37764), (19, 37734), (24, 37689), (28, 37632), (29, 37602),

Gene: Jacko\_63 Start: 36648, Stop: 36265, Start Num: 2

Candidate Starts for Jacko\_63:

(Start: 2 @36648 has 1 MA's), (4, 36585), (10, 36537), (16, 36483), (19, 36450), (20, 36441), (23, 36417), (24, 36405), (27, 36357), (28, 36348),

Gene: Lupine\_61 Start: 37129, Stop: 36755, Start Num: 3

Candidate Starts for Lupine\_61:

(Start: 3 @37129 has 21 MA's), (7, 37054), (9, 37039), (10, 37027), (12, 37000), (13, 36988), (14, 36979), (16, 36973), (17, 36970), (19, 36940), (24, 36895), (28, 36838), (29, 36808),

Gene: Lyell\_67 Start: 37547, Stop: 37173, Start Num: 3

Candidate Starts for Lyell\_67:

(Start: 3 @37547 has 21 MA's), (4, 37490), (13, 37403), (15, 37391), (16, 37388), (19, 37355), (22, 37325), (24, 37310), (28, 37250),

Gene: Musetta\_67 Start: 38008, Stop: 37634, Start Num: 3

Candidate Starts for Musetta\_67:

(Start: 3 @38008 has 21 MA's), (4, 37951), (13, 37864), (15, 37852), (16, 37849), (19, 37816), (22, 37786), (24, 37771), (28, 37711),

Gene: Necrophoxinus\_69 Start: 38242, Stop: 37868, Start Num: 3

Candidate Starts for Necrophoxinus\_69:

(Start: 3 @38242 has 21 MA's), (4, 38185), (13, 38098), (15, 38086), (16, 38083), (19, 38050), (22, 38020), (24, 38005), (28, 37945),

Gene: OlinDD\_59 Start: 37714, Stop: 37346, Start Num: 3

Candidate Starts for OlinDD\_59:

(Start: 3 @37714 has 21 MA's), (8, 37645), (11, 37600), (14, 37573), (16, 37567), (18, 37537), (21, 37516), (24, 37489), (28, 37429), (29, 37399),

Gene: Pavlo\_62 Start: 37774, Stop: 37400, Start Num: 3

Candidate Starts for Pavlo\_62:

(Start: 3 @37774 has 21 MA's), (7, 37699), (9, 37684), (10, 37672), (13, 37633), (14, 37624), (16, 37618), (17, 37615), (19, 37585), (24, 37540), (28, 37483), (29, 37453),

Gene: PhillyPhilly\_62 Start: 37308, Stop: 36934, Start Num: 3

Candidate Starts for PhillyPhilly\_62:

(Start: 3 @37308 has 21 MA's), (7, 37233), (9, 37218), (10, 37206), (13, 37167), (14, 37158), (16, 37152), (17, 37149), (19, 37119), (24, 37074), (28, 37017), (29, 36987),

Gene: Pioneer3\_59 Start: 37557, Stop: 37189, Start Num: 3

Candidate Starts for Pioneer3\_59:

(Start: 3 @37557 has 21 MA's), (6, 37494), (7, 37491), (8, 37488), (10, 37464), (11, 37443), (13, 37425), (16, 37410), (21, 37359), (24, 37332), (25, 37314), (28, 37272), (29, 37242), (30, 37236),

Gene: Platte\_59 Start: 37507, Stop: 37139, Start Num: 3

Candidate Starts for Platte\_59:

(Start: 3 @37507 has 21 MA's), (8, 37438), (11, 37393), (14, 37366), (16, 37360), (18, 37330), (21, 37309), (24, 37282), (25, 37264), (28, 37222), (29, 37192),

Gene: Roman\_63 Start: 37771, Stop: 37397, Start Num: 3

Candidate Starts for Roman\_63:

(Start: 3 @37771 has 21 MA's), (7, 37696), (9, 37681), (10, 37669), (12, 37642), (13, 37630), (14, 37621), (16, 37615), (17, 37612), (19, 37582), (24, 37537), (28, 37480), (29, 37450),

Gene: RunningBrook\_70 Start: 38601, Stop: 38227, Start Num: 3

Candidate Starts for RunningBrook\_70:

(Start: 3 @38601 has 21 MA's), (4, 38544), (13, 38457), (15, 38445), (16, 38442), (22, 38379), (24, 38364), (28, 38304),

Gene: StevieWelch\_67 Start: 37633, Stop: 37259, Start Num: 3

Candidate Starts for StevieWelch\_67:

(Start: 3 @37633 has 21 MA's), (4, 37576), (13, 37489), (15, 37477), (16, 37474), (22, 37411), (24, 37396), (28, 37336),

Gene: Tandem\_59 Start: 37655, Stop: 37287, Start Num: 3

Candidate Starts for Tandem\_59:

(Start: 3 @37655 has 21 MA's), (6, 37592), (7, 37589), (8, 37586), (10, 37562), (11, 37541), (13, 37523), (16, 37508), (21, 37457), (24, 37430), (25, 37412), (28, 37370), (29, 37340),

Gene: Welcome\_68 Start: 37993, Stop: 37619, Start Num: 3

Candidate Starts for Welcome\_68:

(Start: 3 @37993 has 21 MA's), (4, 37936), (13, 37849), (15, 37837), (16, 37834), (19, 37801), (22, 37771), (24, 37756), (28, 37696),

Gene: Wolfstar\_64 Start: 38817, Stop: 38440, Start Num: 3

Candidate Starts for Wolfstar\_64:

(Start: 3 @38817 has 21 MA's), (7, 38742), (10, 38715), (12, 38688), (16, 38661), (17, 38658), (19, 38628), (24, 38583), (28, 38526), (29, 38496),

Gene: Yuma\_66 Start: 37562, Stop: 37188, Start Num: 3

Candidate Starts for Yuma\_66:

(Start: 3 @37562 has 21 MA's), (4, 37505), (13, 37418), (15, 37406), (16, 37403), (22, 37340), (24, 37325), (28, 37265),