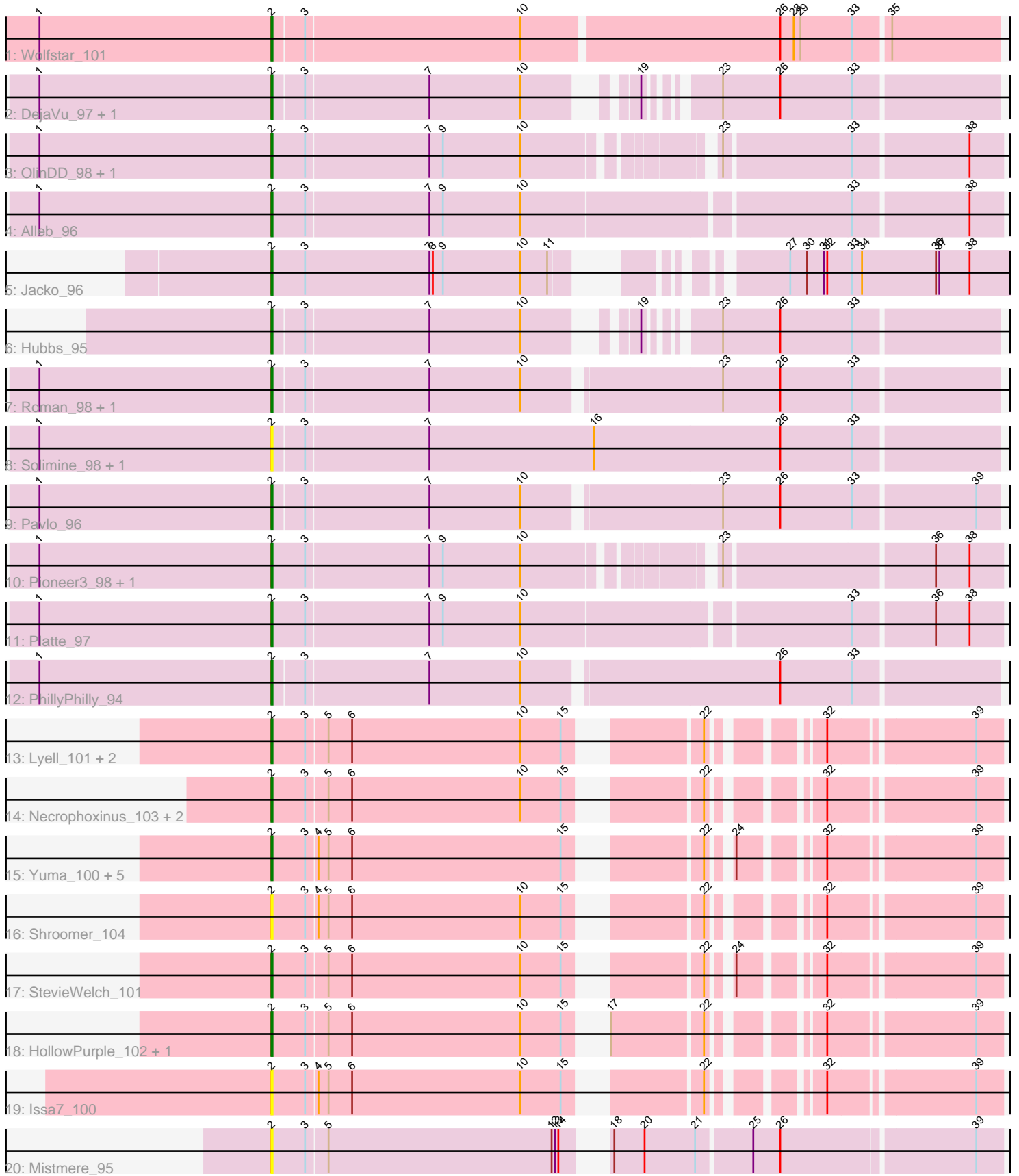


Pham 301558



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 301558 Report

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

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 301558 has 35 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar\_101
- Track 2 : DejaVu\_97, Lupine\_96
- Track 3 : OlinDD\_98, Hortus1\_98
- Track 4 : Alleb\_96
- Track 5 : Jacko\_96
- Track 6 : Hubbs\_95
- Track 7 : Roman\_98, Saradis\_98
- Track 8 : Solimine\_98, Uterion\_101
- Track 9 : Pavlo\_96
- Track 10 : Pioneer3\_98, Tandem\_98
- Track 11 : Platte\_97
- Track 12 : PhillyPhilly\_94
- Track 13 : Lyell\_101, ASegato\_99, Fork\_97
- Track 14 : Necrophoxinus\_103, Erenyeager\_101, Welcome\_103
- Track 15 : Yuma\_100, Musetta\_100, RunningBrook\_103, DustyDino\_105, Casablanacas\_102, Deschain\_102
- Track 16 : Shroomer\_104
- Track 17 : StevieWelch\_101
- Track 18 : HollowPurple\_102, SteakFry\_100
- Track 19 : Issa7\_100
- Track 20 : Mistmere\_95

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

The start number called the most often in the published annotations is 2, it was called in 27 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato\_99, Alleb\_96, Casablanacas\_102, DejaVu\_97, Deschain\_102, DustyDino\_105, Erenyeager\_101, Fork\_97, HollowPurple\_102, Hortus1\_98,

Hubbs\_95, Issa7\_100, Jacko\_96, Lupine\_96, Lyell\_101, Mistmere\_95, Musetta\_100, Necrophoxinus\_103, OlinDD\_98, Pavlo\_96, PhillyPhilly\_94, Pioneer3\_98, Platte\_97, Roman\_98, RunningBrook\_103, Saradis\_98, Shroomer\_104, Solimine\_98, SteakFry\_100, StevieWelch\_101, Tandem\_98, Uterion\_101, Welcome\_103, Wolfstar\_101, Yuma\_100,

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

- 

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

- 

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

Start 2:

- Found in 35 of 35 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 27 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASegato\_99 (ED2), Alleb\_96 (ED1), Casablanco\_102 (ED2), DejaVu\_97 (ED1), Deschain\_102 (ED2), DustyDino\_105 (ED2), Erenyeager\_101 (ED2), Fork\_97 (ED2), HollowPurple\_102 (ED2), Hortus1\_98 (ED1), Hubbs\_95 (ED1), Issa7\_100 (ED2), Jacko\_96 (ED1), Lupine\_96 (ED1), Lyell\_101 (ED2), Mistmere\_95 (ED3), Musetta\_100 (ED2), Necrophoxinus\_103 (ED2), OlinDD\_98 (ED1), Pavlo\_96 (ED1), PhillyPhilly\_94 (ED1), Pioneer3\_98 (ED1), Platte\_97 (ED1), Roman\_98 (ED1), RunningBrook\_103 (ED2), Saradis\_98 (ED1), Shroomer\_104 (ED2), Solimine\_98 (ED1), SteakFry\_100 (ED2), StevieWelch\_101 (ED2), Tandem\_98 (ED1), Uterion\_101 (ED1), Welcome\_103 (ED2), Wolfstar\_101 (ED), Yuma\_100 (ED2),

### **Summary by clusters:**

There are 4 clusters represented in this pham: ED2, ED3, ED1, ED,

Info for manual annotations of cluster ED:

- Start number 2 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:

- Start number 2 was manually annotated 13 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 2 was manually annotated 13 times for cluster ED2.

### **Gene Information:**

Gene: ASegato\_99 Start: 53663, Stop: 53103, Start Num: 2

Candidate Starts for ASegato\_99:

(Start: 2 @53663 has 27 MA's), (3, 53633), (5, 53615), (6, 53594), (10, 53444), (15, 53408), (22, 53318), (32, 53246), (39, 53126),

Gene: Alleb\_96 Start: 54715, Stop: 54089, Start Num: 2

Candidate Starts for Alleb\_96:

(1, 54922), (Start: 2 @54715 has 27 MA's), (3, 54685), (7, 54577), (9, 54565), (10, 54496), (33, 54217), (38, 54118),

Gene: Casablanacas\_102 Start: 53582, Stop: 53022, Start Num: 2

Candidate Starts for Casablanacas\_102:

(Start: 2 @53582 has 27 MA's), (3, 53552), (4, 53543), (5, 53534), (6, 53513), (15, 53327), (22, 53237), (24, 53225), (32, 53165), (39, 53045),

Gene: DejaVu\_97 Start: 53875, Stop: 53306, Start Num: 2

Candidate Starts for DejaVu\_97:

(1, 54082), (Start: 2 @53875 has 27 MA's), (3, 53848), (7, 53740), (10, 53659), (19, 53590), (23, 53545), (26, 53494), (33, 53431),

Gene: Deschain\_102 Start: 54246, Stop: 53686, Start Num: 2

Candidate Starts for Deschain\_102:

(Start: 2 @54246 has 27 MA's), (3, 54216), (4, 54207), (5, 54198), (6, 54177), (15, 53991), (22, 53901), (24, 53889), (32, 53829), (39, 53709),

Gene: DustyDino\_105 Start: 54805, Stop: 54245, Start Num: 2

Candidate Starts for DustyDino\_105:

(Start: 2 @54805 has 27 MA's), (3, 54775), (4, 54766), (5, 54757), (6, 54736), (15, 54550), (22, 54460), (24, 54448), (32, 54388), (39, 54268),

Gene: Erenyeager\_101 Start: 53588, Stop: 53028, Start Num: 2

Candidate Starts for Erenyeager\_101:

(Start: 2 @53588 has 27 MA's), (3, 53558), (5, 53540), (6, 53519), (10, 53369), (15, 53333), (22, 53243), (32, 53171), (39, 53051),

Gene: Fork\_97 Start: 53541, Stop: 52981, Start Num: 2

Candidate Starts for Fork\_97:

(Start: 2 @53541 has 27 MA's), (3, 53511), (5, 53493), (6, 53472), (10, 53322), (15, 53286), (22, 53196), (32, 53124), (39, 53004),

Gene: HollowPurple\_102 Start: 54202, Stop: 53642, Start Num: 2

Candidate Starts for HollowPurple\_102:

(Start: 2 @54202 has 27 MA's), (3, 54172), (5, 54154), (6, 54133), (10, 53983), (15, 53947), (17, 53935), (22, 53857), (32, 53785), (39, 53665),

Gene: Hortus1\_98 Start: 55260, Stop: 54664, Start Num: 2

Candidate Starts for Hortus1\_98:

(1, 55467), (Start: 2 @55260 has 27 MA's), (3, 55230), (7, 55122), (9, 55110), (10, 55041), (23, 54900), (33, 54792), (38, 54693),

Gene: Hubbs\_95 Start: 53921, Stop: 53352, Start Num: 2

Candidate Starts for Hubbs\_95:

(Start: 2 @53921 has 27 MA's), (3, 53894), (7, 53786), (10, 53705), (19, 53636), (23, 53591), (26, 53540), (33, 53477),

Gene: Issa7\_100 Start: 53556, Stop: 52996, Start Num: 2

Candidate Starts for Issa7\_100:

(Start: 2 @53556 has 27 MA's), (3, 53526), (4, 53517), (5, 53508), (6, 53487), (10, 53337), (15, 53301), (22, 53211), (32, 53139), (39, 53019),

Gene: Jacko\_96 Start: 53144, Stop: 52578, Start Num: 2

Candidate Starts for Jacko\_96:

(Start: 2 @53144 has 27 MA's), (3, 53114), (7, 53003), (8, 53000), (9, 52991), (10, 52922), (11, 52898), (27, 52772), (30, 52757), (31, 52742), (32, 52739), (33, 52718), (34, 52709), (36, 52643), (37, 52640), (38, 52613),

Gene: Lupine\_96 Start: 53934, Stop: 53365, Start Num: 2

Candidate Starts for Lupine\_96:

(1, 54141), (Start: 2 @53934 has 27 MA's), (3, 53907), (7, 53799), (10, 53718), (19, 53649), (23, 53604), (26, 53553), (33, 53490),

Gene: Lyell\_101 Start: 53752, Stop: 53192, Start Num: 2

Candidate Starts for Lyell\_101:

(Start: 2 @53752 has 27 MA's), (3, 53722), (5, 53704), (6, 53683), (10, 53533), (15, 53497), (22, 53407), (32, 53335), (39, 53215),

Gene: Mistmere\_95 Start: 52321, Stop: 51722, Start Num: 2

Candidate Starts for Mistmere\_95:

(Start: 2 @52321 has 27 MA's), (3, 52291), (5, 52273), (12, 52075), (13, 52072), (14, 52069), (18, 52051), (20, 52024), (21, 51979), (25, 51934), (26, 51910), (39, 51745),

Gene: Musetta\_100 Start: 54094, Stop: 53534, Start Num: 2

Candidate Starts for Musetta\_100:

(Start: 2 @54094 has 27 MA's), (3, 54064), (4, 54055), (5, 54046), (6, 54025), (15, 53839), (22, 53749), (24, 53737), (32, 53677), (39, 53557),

Gene: Necrophoxinus\_103 Start: 54441, Stop: 53881, Start Num: 2

Candidate Starts for Necrophoxinus\_103:

(Start: 2 @54441 has 27 MA's), (3, 54411), (5, 54393), (6, 54372), (10, 54222), (15, 54186), (22, 54096), (32, 54024), (39, 53904),

Gene: OlinDD\_98 Start: 55265, Stop: 54669, Start Num: 2

Candidate Starts for OlinDD\_98:

(1, 55472), (Start: 2 @55265 has 27 MA's), (3, 55235), (7, 55127), (9, 55115), (10, 55046), (23, 54905), (33, 54797), (38, 54698),

Gene: Pavlo\_96 Start: 54070, Stop: 53450, Start Num: 2

Candidate Starts for Pavlo\_96:

(1, 54277), (Start: 2 @54070 has 27 MA's), (3, 54043), (7, 53935), (10, 53854), (23, 53689), (26, 53638), (33, 53575), (39, 53470),

Gene: PhillyPhilly\_94 Start: 53535, Stop: 52915, Start Num: 2

Candidate Starts for PhillyPhilly\_94:

(1, 53742), (Start: 2 @53535 has 27 MA's), (3, 53508), (7, 53400), (10, 53319), (26, 53103), (33, 53040),

Gene: Pioneer3\_98 Start: 55063, Stop: 54467, Start Num: 2

Candidate Starts for Pioneer3\_98:

(1, 55270), (Start: 2 @55063 has 27 MA's), (3, 55033), (7, 54925), (9, 54913), (10, 54844), (23, 54703), (36, 54526), (38, 54496),

Gene: Platte\_97 Start: 54862, Stop: 54236, Start Num: 2

Candidate Starts for Platte\_97:

(1, 55069), (Start: 2 @54862 has 27 MA's), (3, 54832), (7, 54724), (9, 54712), (10, 54643), (33, 54364), (36, 54295), (38, 54265),

Gene: Roman\_98 Start: 54586, Stop: 53966, Start Num: 2

Candidate Starts for Roman\_98:

(1, 54793), (Start: 2 @54586 has 27 MA's), (3, 54559), (7, 54451), (10, 54370), (23, 54205), (26, 54154), (33, 54091),

Gene: RunningBrook\_103 Start: 54805, Stop: 54245, Start Num: 2

Candidate Starts for RunningBrook\_103:

(Start: 2 @54805 has 27 MA's), (3, 54775), (4, 54766), (5, 54757), (6, 54736), (15, 54550), (22, 54460), (24, 54448), (32, 54388), (39, 54268),

Gene: Saradis\_98 Start: 53547, Stop: 52927, Start Num: 2

Candidate Starts for Saradis\_98:

(1, 53754), (Start: 2 @53547 has 27 MA's), (3, 53520), (7, 53412), (10, 53331), (23, 53166), (26, 53115), (33, 53052),

Gene: Shroomer\_104 Start: 54042, Stop: 53482, Start Num: 2

Candidate Starts for Shroomer\_104:

(Start: 2 @54042 has 27 MA's), (3, 54012), (4, 54003), (5, 53994), (6, 53973), (10, 53823), (15, 53787), (22, 53697), (32, 53625), (39, 53505),

Gene: Solimine\_98 Start: 54458, Stop: 53823, Start Num: 2

Candidate Starts for Solimine\_98:

(1, 54665), (Start: 2 @54458 has 27 MA's), (3, 54431), (7, 54323), (16, 54176), (26, 54011), (33, 53948),

Gene: SteakFry\_100 Start: 54202, Stop: 53642, Start Num: 2

Candidate Starts for SteakFry\_100:

(Start: 2 @54202 has 27 MA's), (3, 54172), (5, 54154), (6, 54133), (10, 53983), (15, 53947), (17, 53935), (22, 53857), (32, 53785), (39, 53665),

Gene: StevieWelch\_101 Start: 53725, Stop: 53165, Start Num: 2

Candidate Starts for StevieWelch\_101:

(Start: 2 @53725 has 27 MA's), (3, 53695), (5, 53677), (6, 53656), (10, 53506), (15, 53470), (22, 53380), (24, 53368), (32, 53308), (39, 53188),

Gene: Tandem\_98 Start: 55143, Stop: 54547, Start Num: 2

Candidate Starts for Tandem\_98:

(1, 55350), (Start: 2 @55143 has 27 MA's), (3, 55113), (7, 55005), (9, 54993), (10, 54924), (23, 54783), (36, 54606), (38, 54576),

Gene: Uterion\_101 Start: 53974, Stop: 53339, Start Num: 2

Candidate Starts for Uterion\_101:

(1, 54181), (Start: 2 @53974 has 27 MA's), (3, 53947), (7, 53839), (16, 53692), (26, 53527), (33, 53464),

Gene: Welcome\_103 Start: 54356, Stop: 53796, Start Num: 2

Candidate Starts for Welcome\_103:

(Start: 2 @54356 has 27 MA's), (3, 54326), (5, 54308), (6, 54287), (10, 54137), (15, 54101), (22, 54011), (32, 53939), (39, 53819),

Gene: Wolfstar\_101 Start: 55980, Stop: 55354, Start Num: 2

Candidate Starts for Wolfstar\_101:

(1, 56187), (Start: 2 @55980 has 27 MA's), (3, 55953), (10, 55764), (26, 55542), (28, 55530), (29, 55524), (33, 55479), (35, 55449),

Gene: Yuma\_100 Start: 53766, Stop: 53206, Start Num: 2

Candidate Starts for Yuma\_100:

(Start: 2 @53766 has 27 MA's), (3, 53736), (4, 53727), (5, 53718), (6, 53697), (15, 53511), (22, 53421), (24, 53409), (32, 53349), (39, 53229),