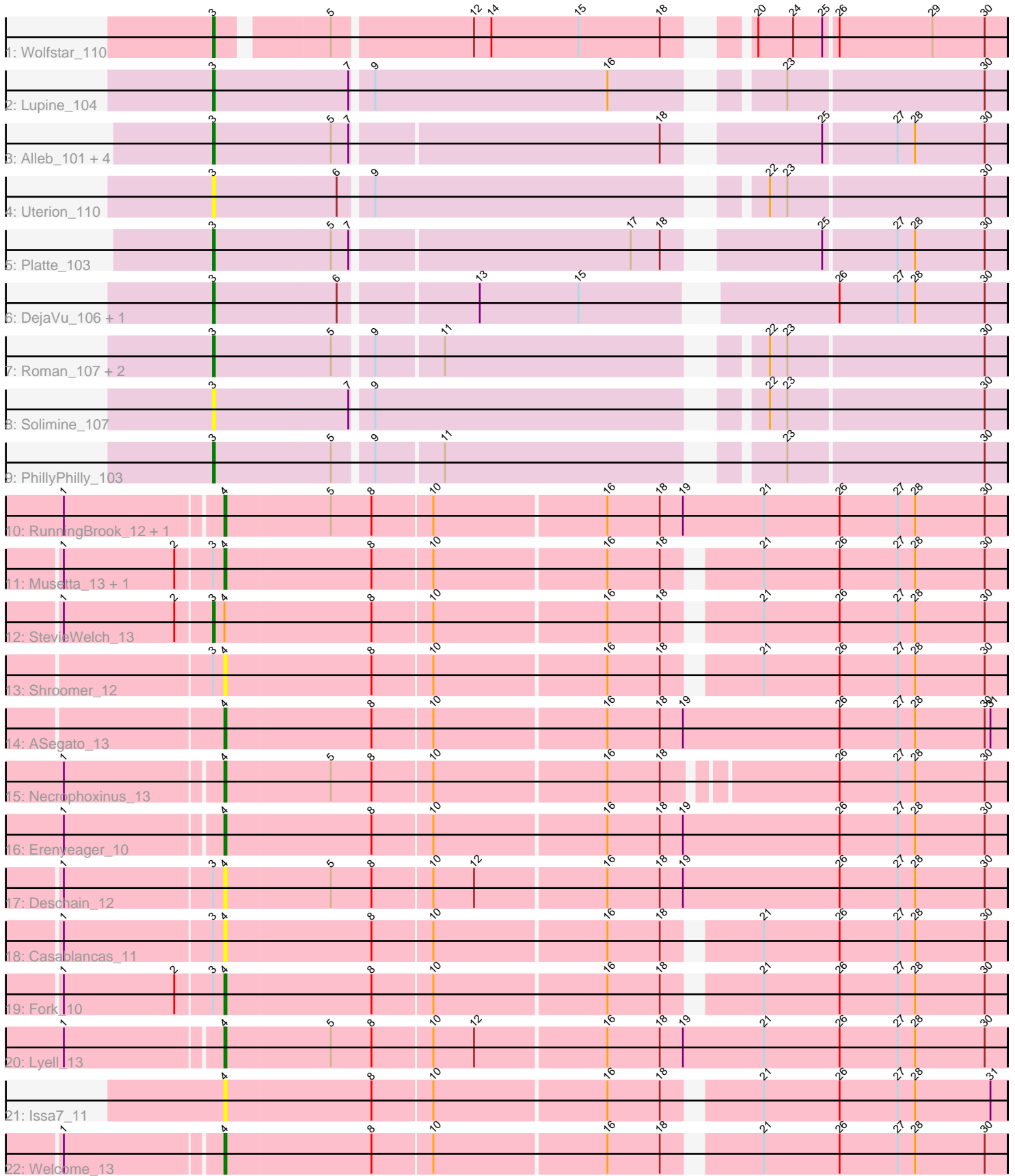


# Pham 293029



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 293029 Report

This analysis was run 04/18/26 on database version 643.

Pham number 293029 has 31 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar\_110
- Track 2 : Lupine\_104
- Track 3 : Alleb\_101, OlinDD\_104, Tandem\_104, Pioneer3\_104, Hortus1\_104
- Track 4 : Uterion\_110
- Track 5 : Platte\_103
- Track 6 : DejaVu\_106, Saradis\_107
- Track 7 : Roman\_107, Pavlo\_106, Hubbs\_105
- Track 8 : Solimine\_107
- Track 9 : PhillyPhilly\_103
- Track 10 : RunningBrook\_12, DustyDino\_13
- Track 11 : Musetta\_13, Yuma\_13
- Track 12 : StevieWelch\_13
- Track 13 : Shroomer\_12
- Track 14 : ASegato\_13
- Track 15 : Necrophoxinus\_13
- Track 16 : Erenyeager\_10
- Track 17 : Deschain\_12
- Track 18 : Casablancas\_11
- Track 19 : Fork\_10
- Track 20 : Lyell\_13
- Track 21 : Issa7\_11
- Track 22 : Welcome\_13

### ***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 14 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alleb\_101, DejaVu\_106, Hortus1\_104, Hubbs\_105, Lupine\_104, OlinDD\_104, Pavlo\_106, PhillyPhilly\_103, Pioneer3\_104, Platte\_103, Roman\_107, Saradis\_107, Solimine\_107, StevieWelch\_13, Tandem\_104, Uterion\_110, Wolfstar\_110,

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

- Casablanacas\_11, Deschain\_12, Fork\_10, Musetta\_13, Shroomer\_12, Yuma\_13,

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

- ASegato\_13, DustyDino\_13, Erenyeager\_10, Issa7\_11, Lyell\_13, Necrophoxinus\_13, RunningBrook\_12, Welcome\_13,

### Summary by start number:

Start 3:

- Found in 23 of 31 ( 74.2% ) of genes in pham
- Manual Annotations of this start: 14 of 24
- Called 73.9% of time when present
- Phage (with cluster) where this start called: Alleb\_101 (ED1), DejaVu\_106 (ED1), Hortus1\_104 (ED1), Hubbs\_105 (ED1), Lupine\_104 (ED1), OlinDD\_104 (ED1), Pavlo\_106 (ED1), PhillyPhilly\_103 (ED1), Pioneer3\_104 (ED1), Platte\_103 (ED1), Roman\_107 (ED1), Saradis\_107 (ED1), Solimine\_107 (ED1), StevieWelch\_13 (ED2), Tandem\_104 (ED1), Uterion\_110 (ED1), Wolfstar\_110 (ED),

Start 4:

- Found in 15 of 31 ( 48.4% ) of genes in pham
- Manual Annotations of this start: 10 of 24
- Called 93.3% of time when present
- Phage (with cluster) where this start called: ASegato\_13 (ED2), Casablanacas\_11 (ED2), Deschain\_12 (ED2), DustyDino\_13 (ED2), Erenyeager\_10 (ED2), Fork\_10 (ED2), Issa7\_11 (ED2), Lyell\_13 (ED2), Musetta\_13 (ED2), Necrophoxinus\_13 (ED2), RunningBrook\_12 (ED2), Shroomer\_12 (ED2), Welcome\_13 (ED2), Yuma\_13 (ED2),

### Summary by clusters:

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

Info for manual annotations of cluster ED:

- Start number 3 was manually annotated 1 time for cluster ED.

Info for manual annotations of 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 1 time for cluster ED2.
- Start number 4 was manually annotated 10 times for cluster ED2.

### Gene Information:

Gene: ASegato\_13 Start: 4659, Stop: 5057, Start Num: 4

Candidate Starts for ASegato\_13:

(Start: 4 @4659 has 10 MA's), (8, 4734), (10, 4764), (16, 4851), (18, 4878), (19, 4890), (26, 4971), (27, 5001), (28, 5010), (30, 5046), (31, 5049),

Gene: Alleb\_101 Start: 56509, Stop: 56129, Start Num: 3

Candidate Starts for Alleb\_101:

(Start: 3 @56509 has 14 MA's), (5, 56449), (7, 56440), (18, 56287), (25, 56221), (27, 56185), (28, 56176), (30, 56140),

Gene: Casablanacas\_11 Start: 4232, Stop: 4618, Start Num: 4

Candidate Starts for Casablanacas\_11:

(1, 4151), (Start: 3 @4226 has 14 MA's), (Start: 4 @4232 has 10 MA's), (8, 4307), (10, 4337), (16, 4424), (18, 4451), (21, 4493), (26, 4532), (27, 4562), (28, 4571), (30, 4607),

Gene: DejaVu\_106 Start: 56615, Stop: 56235, Start Num: 3

Candidate Starts for DejaVu\_106:

(Start: 3 @56615 has 14 MA's), (6, 56552), (13, 56486), (15, 56435), (26, 56321), (27, 56291), (28, 56282), (30, 56246),

Gene: Deschain\_12 Start: 4576, Stop: 4974, Start Num: 4

Candidate Starts for Deschain\_12:

(1, 4495), (Start: 3 @4570 has 14 MA's), (Start: 4 @4576 has 10 MA's), (5, 4630), (8, 4651), (10, 4681), (12, 4702), (16, 4768), (18, 4795), (19, 4807), (26, 4888), (27, 4918), (28, 4927), (30, 4963),

Gene: DustyDino\_13 Start: 4681, Stop: 5079, Start Num: 4

Candidate Starts for DustyDino\_13:

(1, 4603), (Start: 4 @4681 has 10 MA's), (5, 4735), (8, 4756), (10, 4786), (16, 4873), (18, 4900), (19, 4912), (21, 4954), (26, 4993), (27, 5023), (28, 5032), (30, 5068),

Gene: Erenyeager\_10 Start: 4052, Stop: 4450, Start Num: 4

Candidate Starts for Erenyeager\_10:

(1, 3974), (Start: 4 @4052 has 10 MA's), (8, 4127), (10, 4157), (16, 4244), (18, 4271), (19, 4283), (26, 4364), (27, 4394), (28, 4403), (30, 4439),

Gene: Fork\_10 Start: 3946, Stop: 4332, Start Num: 4

Candidate Starts for Fork\_10:

(1, 3865), (2, 3922), (Start: 3 @3940 has 14 MA's), (Start: 4 @3946 has 10 MA's), (8, 4021), (10, 4051), (16, 4138), (18, 4165), (21, 4207), (26, 4246), (27, 4276), (28, 4285), (30, 4321),

Gene: Hortus1\_104 Start: 57265, Stop: 56885, Start Num: 3

Candidate Starts for Hortus1\_104:

(Start: 3 @57265 has 14 MA's), (5, 57205), (7, 57196), (18, 57043), (25, 56977), (27, 56941), (28, 56932), (30, 56896),

Gene: Hubbs\_105 Start: 56879, Stop: 56505, Start Num: 3

Candidate Starts for Hubbs\_105:

(Start: 3 @56879 has 14 MA's), (5, 56819), (9, 56801), (11, 56768), (22, 56624), (23, 56615), (30, 56516),

Gene: Issa7\_11 Start: 3876, Stop: 4262, Start Num: 4

Candidate Starts for Issa7\_11:

(Start: 4 @3876 has 10 MA's), (8, 3951), (10, 3981), (16, 4068), (18, 4095), (21, 4137), (26, 4176), (27, 4206), (28, 4215), (31, 4254),

Gene: Lupine\_104 Start: 56423, Stop: 56046, Start Num: 3

Candidate Starts for Lupine\_104:

(Start: 3 @56423 has 14 MA's), (7, 56354), (9, 56345), (16, 56225), (23, 56156), (30, 56057),

Gene: Lyell\_13 Start: 4396, Stop: 4794, Start Num: 4

Candidate Starts for Lyell\_13:

(1, 4318), (Start: 4 @4396 has 10 MA's), (5, 4450), (8, 4471), (10, 4501), (12, 4522), (16, 4588), (18, 4615), (19, 4627), (21, 4669), (26, 4708), (27, 4738), (28, 4747), (30, 4783),

Gene: Musetta\_13 Start: 4656, Stop: 5042, Start Num: 4

Candidate Starts for Musetta\_13:

(1, 4575), (2, 4632), (Start: 3 @4650 has 14 MA's), (Start: 4 @4656 has 10 MA's), (8, 4731), (10, 4761), (16, 4848), (18, 4875), (21, 4917), (26, 4956), (27, 4986), (28, 4995), (30, 5031),

Gene: Necrophoxinus\_13 Start: 4772, Stop: 5158, Start Num: 4

Candidate Starts for Necrophoxinus\_13:

(1, 4694), (Start: 4 @4772 has 10 MA's), (5, 4826), (8, 4847), (10, 4877), (16, 4964), (18, 4991), (26, 5072), (27, 5102), (28, 5111), (30, 5147),

Gene: OlinDD\_104 Start: 57270, Stop: 56890, Start Num: 3

Candidate Starts for OlinDD\_104:

(Start: 3 @57270 has 14 MA's), (5, 57210), (7, 57201), (18, 57048), (25, 56982), (27, 56946), (28, 56937), (30, 56901),

Gene: Pavlo\_106 Start: 57274, Stop: 56900, Start Num: 3

Candidate Starts for Pavlo\_106:

(Start: 3 @57274 has 14 MA's), (5, 57214), (9, 57196), (11, 57163), (22, 57019), (23, 57010), (30, 56911),

Gene: PhillyPhilly\_103 Start: 56263, Stop: 55889, Start Num: 3

Candidate Starts for PhillyPhilly\_103:

(Start: 3 @56263 has 14 MA's), (5, 56203), (9, 56185), (11, 56152), (23, 55999), (30, 55900),

Gene: Pioneer3\_104 Start: 57068, Stop: 56688, Start Num: 3

Candidate Starts for Pioneer3\_104:

(Start: 3 @57068 has 14 MA's), (5, 57008), (7, 56999), (18, 56846), (25, 56780), (27, 56744), (28, 56735), (30, 56699),

Gene: Platte\_103 Start: 56852, Stop: 56472, Start Num: 3

Candidate Starts for Platte\_103:

(Start: 3 @56852 has 14 MA's), (5, 56792), (7, 56783), (17, 56645), (18, 56630), (25, 56564), (27, 56528), (28, 56519), (30, 56483),

Gene: Roman\_107 Start: 57323, Stop: 56949, Start Num: 3

Candidate Starts for Roman\_107:

(Start: 3 @57323 has 14 MA's), (5, 57263), (9, 57245), (11, 57212), (22, 57068), (23, 57059), (30, 56960),

Gene: RunningBrook\_12 Start: 4681, Stop: 5079, Start Num: 4

Candidate Starts for RunningBrook\_12:

(1, 4603), (Start: 4 @4681 has 10 MA's), (5, 4735), (8, 4756), (10, 4786), (16, 4873), (18, 4900), (19, 4912), (21, 4954), (26, 4993), (27, 5023), (28, 5032), (30, 5068),

Gene: Saradis\_107 Start: 56290, Stop: 55910, Start Num: 3

Candidate Starts for Saradis\_107:

(Start: 3 @56290 has 14 MA's), (6, 56227), (13, 56161), (15, 56110), (26, 55996), (27, 55966), (28, 55957), (30, 55921),

Gene: Shroomer\_12 Start: 4005, Stop: 4391, Start Num: 4

Candidate Starts for Shroomer\_12:

(Start: 3 @3999 has 14 MA's), (Start: 4 @4005 has 10 MA's), (8, 4080), (10, 4110), (16, 4197), (18, 4224), (21, 4266), (26, 4305), (27, 4335), (28, 4344), (30, 4380),

Gene: Solimine\_107 Start: 57198, Stop: 56821, Start Num: 3

Candidate Starts for Solimine\_107:

(Start: 3 @57198 has 14 MA's), (7, 57129), (9, 57120), (22, 56940), (23, 56931), (30, 56832),

Gene: StevieWelch\_13 Start: 4567, Stop: 4959, Start Num: 3

Candidate Starts for StevieWelch\_13:

(1, 4492), (2, 4549), (Start: 3 @4567 has 14 MA's), (Start: 4 @4573 has 10 MA's), (8, 4648), (10, 4678), (16, 4765), (18, 4792), (21, 4834), (26, 4873), (27, 4903), (28, 4912), (30, 4948),

Gene: Tandem\_104 Start: 57148, Stop: 56768, Start Num: 3

Candidate Starts for Tandem\_104:

(Start: 3 @57148 has 14 MA's), (5, 57088), (7, 57079), (18, 56926), (25, 56860), (27, 56824), (28, 56815), (30, 56779),

Gene: Uterion\_110 Start: 56720, Stop: 56343, Start Num: 3

Candidate Starts for Uterion\_110:

(Start: 3 @56720 has 14 MA's), (6, 56657), (9, 56642), (22, 56462), (23, 56453), (30, 56354),

Gene: Welcome\_13 Start: 4652, Stop: 5038, Start Num: 4

Candidate Starts for Welcome\_13:

(1, 4574), (Start: 4 @4652 has 10 MA's), (8, 4727), (10, 4757), (16, 4844), (18, 4871), (21, 4913), (26, 4952), (27, 4982), (28, 4991), (30, 5027),

Gene: Wolfstar\_110 Start: 58799, Stop: 58431, Start Num: 3

Candidate Starts for Wolfstar\_110:

(Start: 3 @58799 has 14 MA's), (5, 58748), (12, 58679), (14, 58670), (15, 58625), (18, 58583), (20, 58556), (24, 58538), (25, 58523), (26, 58517), (29, 58469), (30, 58442),

Gene: Yuma\_13 Start: 4555, Stop: 4941, Start Num: 4

Candidate Starts for Yuma\_13:

(1, 4474), (2, 4531), (Start: 3 @4549 has 14 MA's), (Start: 4 @4555 has 10 MA's), (8, 4630), (10, 4660), (16, 4747), (18, 4774), (21, 4816), (26, 4855), (27, 4885), (28, 4894), (30, 4930),