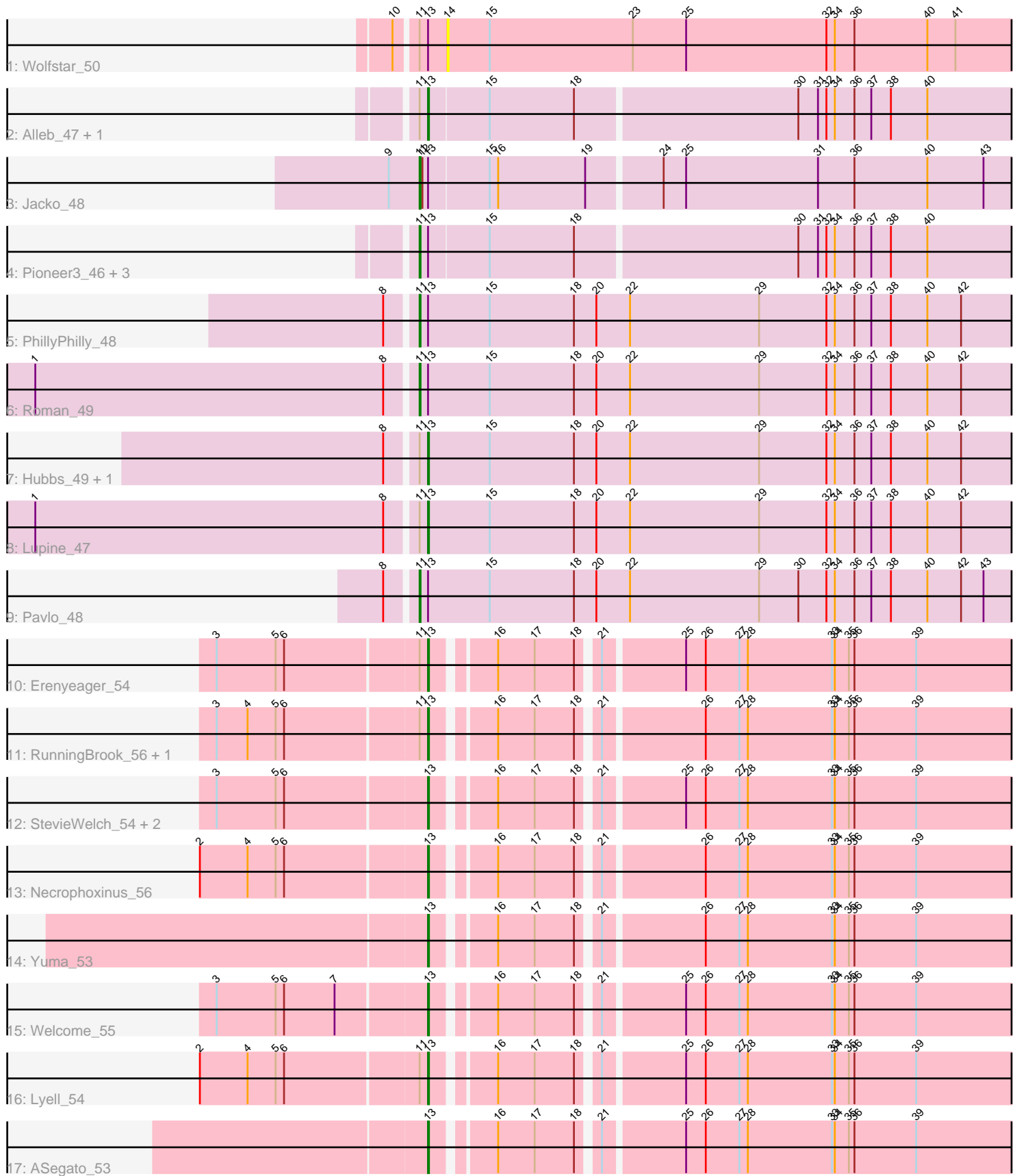


## Pham 86371



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 86371 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 86371 has 25 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar\_50
- Track 2 : Alleb\_47, Platte\_46
- Track 3 : Jacko\_48
- Track 4 : Pioneer3\_46, Tandem\_46, OlinDD\_46, Hortus1\_46
- Track 5 : PhillyPhilly\_48
- Track 6 : Roman\_49
- Track 7 : Hubbs\_49, DejaVu\_50
- Track 8 : Lupine\_47
- Track 9 : Pavlo\_48
- Track 10 : Erenyeager\_54
- Track 11 : RunningBrook\_56, DustyDino\_57
- Track 12 : StevieWelch\_54, Fork\_50, Musetta\_54
- Track 13 : Necrophoxinus\_56
- Track 14 : Yuma\_53
- Track 15 : Welcome\_55
- Track 16 : Lyell\_54
- Track 17 : ASegato\_53

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

The start number called the most often in the published annotations is 13, it was called in 14 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato\_53, Alleb\_47, DejaVu\_50, DustyDino\_57, Erenyeager\_54, Fork\_50, Hubbs\_49, Lupine\_47, Lyell\_54, Musetta\_54, Necrophoxinus\_56, Platte\_46, RunningBrook\_56, StevieWelch\_54, Welcome\_55, Yuma\_53,

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

- Hortus1\_46, Jacko\_48, OlinDD\_46, Pavlo\_48, PhillyPhilly\_48, Pioneer3\_46, Roman\_49, Tandem\_46, Wolfstar\_50,

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

- 

### Summary by start number:

Start 11:

- Found in 18 of 25 ( 72.0% ) of genes in pham
- Manual Annotations of this start: 8 of 22
- Called 44.4% of time when present
- Phage (with cluster) where this start called: Hortus1\_46 (ED1), Jacko\_48 (ED1), OlinDD\_46 (ED1), Pavlo\_48 (ED1), PhillyPhilly\_48 (ED1), Pioneer3\_46 (ED1), Roman\_49 (ED1), Tandem\_46 (ED1),

Start 13:

- Found in 25 of 25 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 14 of 22
- Called 64.0% of time when present
- Phage (with cluster) where this start called: ASegato\_53 (ED2), Alleb\_47 (ED1), DejaVu\_50 (ED1), DustyDino\_57 (ED2), Erenyeager\_54 (ED2), Fork\_50 (ED2), Hubbs\_49 (ED1), Lupine\_47 (ED1), Lyell\_54 (ED2), Musetta\_54 (ED2), Necrophoxinus\_56 (ED2), Platte\_46 (ED1), RunningBrook\_56 (ED2), StevieWelch\_54 (ED2), Welcome\_55 (ED2), Yuma\_53 (ED2),

Start 14:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wolfstar\_50 (ED),

### Summary by clusters:

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

Info for manual annotations of cluster ED1:

- Start number 11 was manually annotated 8 times for cluster ED1.
- Start number 13 was manually annotated 5 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 13 was manually annotated 9 times for cluster ED2.

### Gene Information:

Gene: ASegato\_53 Start: 25411, Stop: 26022, Start Num: 13

Candidate Starts for ASegato\_53:

(Start: 13 @25411 has 14 MA's), (16, 25468), (17, 25507), (18, 25549), (21, 25567), (25, 25648), (26, 25669), (27, 25705), (28, 25714), (33, 25804), (34, 25807), (35, 25822), (36, 25828), (39, 25894),

Gene: Alleb\_47 Start: 24469, Stop: 25107, Start Num: 13

Candidate Starts for Alleb\_47:

(Start: 11 @24460 has 8 MA's), (Start: 13 @24469 has 14 MA's), (15, 24532), (18, 24622), (30, 24853), (31, 24874), (32, 24883), (34, 24892), (36, 24913), (37, 24931), (38, 24952), (40, 24991),

Gene: DejaVu\_50 Start: 24677, Stop: 25327, Start Num: 13

Candidate Starts for DejaVu\_50:

(8, 24638), (Start: 11 @24668 has 8 MA's), (Start: 13 @24677 has 14 MA's), (15, 24743), (18, 24833), (20, 24857), (22, 24893), (29, 25031), (32, 25103), (34, 25112), (36, 25133), (37, 25151), (38, 25172), (40, 25211), (42, 25247),

Gene: DustyDino\_57 Start: 26354, Stop: 26965, Start Num: 13

Candidate Starts for DustyDino\_57:

(3, 26135), (4, 26168), (5, 26198), (6, 26207), (Start: 11 @26345 has 8 MA's), (Start: 13 @26354 has 14 MA's), (16, 26411), (17, 26450), (18, 26492), (21, 26510), (26, 26612), (27, 26648), (28, 26657), (33, 26747), (34, 26750), (35, 26765), (36, 26771), (39, 26837),

Gene: Erenyeager\_54 Start: 25746, Stop: 26357, Start Num: 13

Candidate Starts for Erenyeager\_54:

(3, 25527), (5, 25590), (6, 25599), (Start: 11 @25737 has 8 MA's), (Start: 13 @25746 has 14 MA's), (16, 25803), (17, 25842), (18, 25884), (21, 25902), (25, 25983), (26, 26004), (27, 26040), (28, 26049), (33, 26139), (34, 26142), (35, 26157), (36, 26163), (39, 26229),

Gene: Fork\_50 Start: 25061, Stop: 25672, Start Num: 13

Candidate Starts for Fork\_50:

(3, 24842), (5, 24905), (6, 24914), (Start: 13 @25061 has 14 MA's), (16, 25118), (17, 25157), (18, 25199), (21, 25217), (25, 25298), (26, 25319), (27, 25355), (28, 25364), (33, 25454), (34, 25457), (35, 25472), (36, 25478), (39, 25544),

Gene: Hortus1\_46 Start: 24450, Stop: 25097, Start Num: 11

Candidate Starts for Hortus1\_46:

(Start: 11 @24450 has 8 MA's), (Start: 13 @24459 has 14 MA's), (15, 24522), (18, 24612), (30, 24843), (31, 24864), (32, 24873), (34, 24882), (36, 24903), (37, 24921), (38, 24942), (40, 24981),

Gene: Hubbs\_49 Start: 24889, Stop: 25539, Start Num: 13

Candidate Starts for Hubbs\_49:

(8, 24850), (Start: 11 @24880 has 8 MA's), (Start: 13 @24889 has 14 MA's), (15, 24955), (18, 25045), (20, 25069), (22, 25105), (29, 25243), (32, 25315), (34, 25324), (36, 25345), (37, 25363), (38, 25384), (40, 25423), (42, 25459),

Gene: Jacko\_48 Start: 22655, Stop: 23302, Start Num: 11

Candidate Starts for Jacko\_48:

(9, 22622), (Start: 11 @22655 has 8 MA's), (12, 22658), (Start: 13 @22664 has 14 MA's), (15, 22727), (16, 22736), (19, 22829), (24, 22904), (25, 22928), (31, 23069), (36, 23108), (40, 23186), (43, 23246),

Gene: Lupine\_47 Start: 24091, Stop: 24741, Start Num: 13

Candidate Starts for Lupine\_47:

(1, 23680), (8, 24052), (Start: 11 @24082 has 8 MA's), (Start: 13 @24091 has 14 MA's), (15, 24157), (18, 24247), (20, 24271), (22, 24307), (29, 24445), (32, 24517), (34, 24526), (36, 24547), (37, 24565), (38, 24586), (40, 24625), (42, 24661),

Gene: Lyell\_54 Start: 25665, Stop: 26276, Start Num: 13

Candidate Starts for Lyell\_54:

(2, 25428), (4, 25479), (5, 25509), (6, 25518), (Start: 11 @25656 has 8 MA's), (Start: 13 @25665 has 14 MA's), (16, 25722), (17, 25761), (18, 25803), (21, 25821), (25, 25902), (26, 25923), (27, 25959), (28, 25968), (33, 26058), (34, 26061), (35, 26076), (36, 26082), (39, 26148),

Gene: Musetta\_54 Start: 25781, Stop: 26392, Start Num: 13

Candidate Starts for Musetta\_54:

(3, 25562), (5, 25625), (6, 25634), (Start: 13 @25781 has 14 MA's), (16, 25838), (17, 25877), (18, 25919), (21, 25937), (25, 26018), (26, 26039), (27, 26075), (28, 26084), (33, 26174), (34, 26177), (35, 26192), (36, 26198), (39, 26264),

Gene: Necrophoxinus\_56 Start: 26360, Stop: 26971, Start Num: 13

Candidate Starts for Necrophoxinus\_56:

(2, 26123), (4, 26174), (5, 26204), (6, 26213), (Start: 13 @26360 has 14 MA's), (16, 26417), (17, 26456), (18, 26498), (21, 26516), (26, 26618), (27, 26654), (28, 26663), (33, 26753), (34, 26756), (35, 26771), (36, 26777), (39, 26843),

Gene: OlinDD\_46 Start: 24449, Stop: 25096, Start Num: 11

Candidate Starts for OlinDD\_46:

(Start: 11 @24449 has 8 MA's), (Start: 13 @24458 has 14 MA's), (15, 24521), (18, 24611), (30, 24842), (31, 24863), (32, 24872), (34, 24881), (36, 24902), (37, 24920), (38, 24941), (40, 24980),

Gene: Pavlo\_48 Start: 24727, Stop: 25386, Start Num: 11

Candidate Starts for Pavlo\_48:

(8, 24697), (Start: 11 @24727 has 8 MA's), (Start: 13 @24736 has 14 MA's), (15, 24802), (18, 24892), (20, 24916), (22, 24952), (29, 25090), (30, 25132), (32, 25162), (34, 25171), (36, 25192), (37, 25210), (38, 25231), (40, 25270), (42, 25306), (43, 25330),

Gene: PhillyPhilly\_48 Start: 24261, Stop: 24920, Start Num: 11

Candidate Starts for PhillyPhilly\_48:

(8, 24231), (Start: 11 @24261 has 8 MA's), (Start: 13 @24270 has 14 MA's), (15, 24336), (18, 24426), (20, 24450), (22, 24486), (29, 24624), (32, 24696), (34, 24705), (36, 24726), (37, 24744), (38, 24765), (40, 24804), (42, 24840),

Gene: Pioneer3\_46 Start: 24457, Stop: 25104, Start Num: 11

Candidate Starts for Pioneer3\_46:

(Start: 11 @24457 has 8 MA's), (Start: 13 @24466 has 14 MA's), (15, 24529), (18, 24619), (30, 24850), (31, 24871), (32, 24880), (34, 24889), (36, 24910), (37, 24928), (38, 24949), (40, 24988),

Gene: Platte\_46 Start: 24251, Stop: 24889, Start Num: 13

Candidate Starts for Platte\_46:

(Start: 11 @24242 has 8 MA's), (Start: 13 @24251 has 14 MA's), (15, 24314), (18, 24404), (30, 24635), (31, 24656), (32, 24665), (34, 24674), (36, 24695), (37, 24713), (38, 24734), (40, 24773),

Gene: Roman\_49 Start: 24728, Stop: 25387, Start Num: 11

Candidate Starts for Roman\_49:

(1, 24326), (8, 24698), (Start: 11 @24728 has 8 MA's), (Start: 13 @24737 has 14 MA's), (15, 24803), (18, 24893), (20, 24917), (22, 24953), (29, 25091), (32, 25163), (34, 25172), (36, 25193), (37, 25211), (38, 25232), (40, 25271), (42, 25307),

Gene: RunningBrook\_56 Start: 26354, Stop: 26965, Start Num: 13

Candidate Starts for RunningBrook\_56:

(3, 26135), (4, 26168), (5, 26198), (6, 26207), (Start: 11 @26345 has 8 MA's), (Start: 13 @26354 has 14 MA's), (16, 26411), (17, 26450), (18, 26492), (21, 26510), (26, 26612), (27, 26648), (28, 26657),

(33, 26747), (34, 26750), (35, 26765), (36, 26771), (39, 26837),

Gene: StevieWelch\_54 Start: 25746, Stop: 26357, Start Num: 13

Candidate Starts for StevieWelch\_54:

(3, 25527), (5, 25590), (6, 25599), (Start: 13 @25746 has 14 MA's), (16, 25803), (17, 25842), (18, 25884), (21, 25902), (25, 25983), (26, 26004), (27, 26040), (28, 26049), (33, 26139), (34, 26142), (35, 26157), (36, 26163), (39, 26229),

Gene: Tandem\_46 Start: 24396, Stop: 25043, Start Num: 11

Candidate Starts for Tandem\_46:

(Start: 11 @24396 has 8 MA's), (Start: 13 @24405 has 14 MA's), (15, 24468), (18, 24558), (30, 24789), (31, 24810), (32, 24819), (34, 24828), (36, 24849), (37, 24867), (38, 24888), (40, 24927),

Gene: Welcome\_55 Start: 25766, Stop: 26377, Start Num: 13

Candidate Starts for Welcome\_55:

(3, 25547), (5, 25610), (6, 25619), (7, 25673), (Start: 13 @25766 has 14 MA's), (16, 25823), (17, 25862), (18, 25904), (21, 25922), (25, 26003), (26, 26024), (27, 26060), (28, 26069), (33, 26159), (34, 26162), (35, 26177), (36, 26183), (39, 26249),

Gene: Wolfstar\_50 Start: 24667, Stop: 25296, Start Num: 14

Candidate Starts for Wolfstar\_50:

(10, 24616), (Start: 11 @24637 has 8 MA's), (Start: 13 @24646 has 14 MA's), (14, 24667), (15, 24712), (23, 24865), (25, 24922), (32, 25072), (34, 25081), (36, 25102), (40, 25180), (41, 25210),

Gene: Yuma\_53 Start: 25680, Stop: 26291, Start Num: 13

Candidate Starts for Yuma\_53:

(Start: 13 @25680 has 14 MA's), (16, 25737), (17, 25776), (18, 25818), (21, 25836), (26, 25938), (27, 25974), (28, 25983), (33, 26073), (34, 26076), (35, 26091), (36, 26097), (39, 26163),