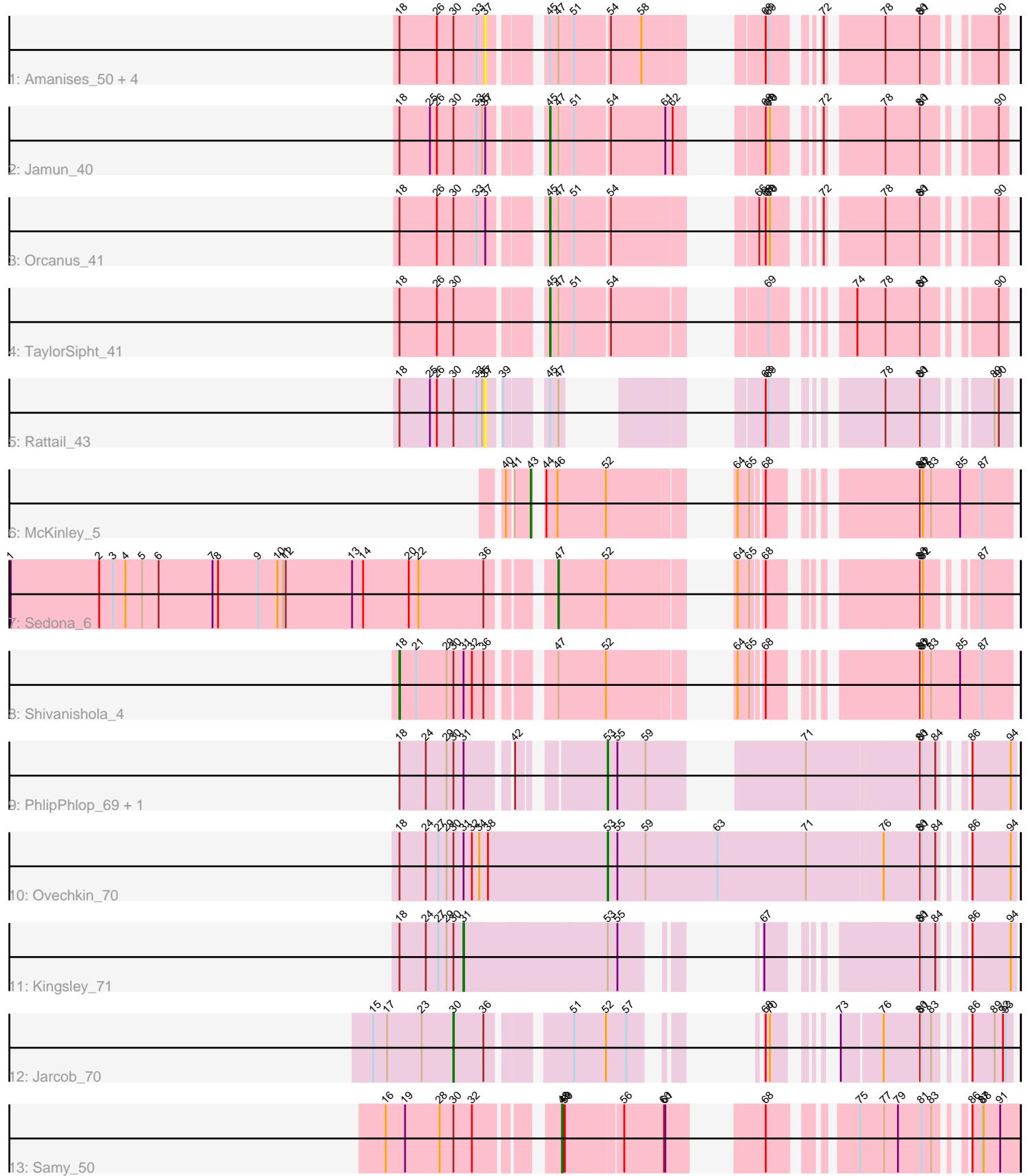


# Pham 280930



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 280930 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280930 has 18 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Amanises\_50, KendraB23\_51, Gravel\_50, Westrich\_49, Pelletreau\_50
- Track 2 : Jamun\_40
- Track 3 : Orcanus\_41
- Track 4 : TaylorSipht\_41
- Track 5 : Rattail\_43
- Track 6 : McKinley\_5
- Track 7 : Sedona\_6
- Track 8 : Shivanishola\_4
- Track 9 : PhlipPhlop\_69, EmiMonkey\_67
- Track 10 : Ovechkin\_70
- Track 11 : Kingsley\_71
- Track 12 : Jarcob\_70
- Track 13 : Samy\_50

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

The start number called the most often in the published annotations is 45, it was called in 3 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Jamun\_40, Orcanus\_41, TaylorSipht\_41,

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

- Amanises\_50, Gravel\_50, KendraB23\_51, Pelletreau\_50, Rattail\_43, Westrich\_49,

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

- EmiMonkey\_67, Jarcob\_70, Kingsley\_71, McKinley\_5, Ovechkin\_70, PhlipPhlop\_69, Samy\_50, Sedona\_6, Shivanishola\_4,

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

Start 18:

- Found in 14 of 18 ( 77.8% ) of genes in pham
- Manual Annotations of this start: 1 of 11

- Called 7.1% of time when present
- Phage (with cluster) where this start called: Shivanishola\_4 (DE1),

Start 30:

- Found in 16 of 18 ( 88.9% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Jarcob\_70 (F1),

Start 31:

- Found in 5 of 18 ( 27.8% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Kingsley\_71 (F1),

Start 37:

- Found in 8 of 18 ( 44.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Amanises\_50 (AS1), Gravel\_50 (AS1), KendraB23\_51 (AS1), Pelletreau\_50 (AS1), Rattail\_43 (AS3), Westrich\_49 (AS1),

Start 43:

- Found in 1 of 18 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: McKinley\_5 (DE1),

Start 45:

- Found in 9 of 18 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 3 of 11
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Jamun\_40 (AS1), Orcanus\_41 (AS1), TaylorSipt\_41 (AS1),

Start 47:

- Found in 11 of 18 ( 61.1% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Sedona\_6 (DE1),

Start 48:

- Found in 1 of 18 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Samy\_50 (singleton),

Start 53:

- Found in 4 of 18 ( 22.2% ) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 75.0% of time when present
- Phage (with cluster) where this start called: EmiMonkey\_67 (F1), Ovechkin\_70 (F1), PhlipPhlop\_69 (F1),

## **Summary by clusters:**

There are 5 clusters represented in this pham: AS3, F1, AS1, singleton, DE1,

Info for manual annotations of cluster AS1:

- Start number 45 was manually annotated 3 times for cluster AS1.

Info for manual annotations of cluster DE1:

- Start number 18 was manually annotated 1 time for cluster DE1.
- Start number 43 was manually annotated 1 time for cluster DE1.
- Start number 47 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster F1:

- Start number 30 was manually annotated 1 time for cluster F1.
- Start number 31 was manually annotated 1 time for cluster F1.
- Start number 53 was manually annotated 2 times for cluster F1.

## ***Gene Information:***

Gene: Amanises\_50 Start: 28732, Stop: 29547, Start Num: 37

Candidate Starts for Amanises\_50:

(Start: 18 @28549 has 1 MA's), (26, 28630), (Start: 30 @28666 has 1 MA's), (33, 28714), (37, 28732), (Start: 45 @28825 has 3 MA's), (Start: 47 @28843 has 1 MA's), (51, 28873), (54, 28945), (58, 29011), (68, 29158), (69, 29164), (72, 29230), (78, 29332), (80, 29407), (81, 29410), (90, 29527),

Gene: EmiMonkey\_67 Start: 47844, Stop: 48557, Start Num: 53

Candidate Starts for EmiMonkey\_67:

(Start: 18 @47481 has 1 MA's), (24, 47538), (29, 47580), (Start: 30 @47595 has 1 MA's), (Start: 31 @47616 has 1 MA's), (42, 47697), (Start: 53 @47844 has 2 MA's), (55, 47865), (59, 47925), (71, 48165), (80, 48405), (81, 48408), (84, 48438), (86, 48465), (94, 48546),

Gene: Gravel\_50 Start: 28545, Stop: 29360, Start Num: 37

Candidate Starts for Gravel\_50:

(Start: 18 @28362 has 1 MA's), (26, 28443), (Start: 30 @28479 has 1 MA's), (33, 28527), (37, 28545), (Start: 45 @28638 has 3 MA's), (Start: 47 @28656 has 1 MA's), (51, 28686), (54, 28758), (58, 28824), (68, 28971), (69, 28977), (72, 29043), (78, 29145), (80, 29220), (81, 29223), (90, 29340),

Gene: Jamun\_40 Start: 27823, Stop: 28545, Start Num: 45

Candidate Starts for Jamun\_40:

(Start: 18 @27547 has 1 MA's), (25, 27613), (26, 27628), (Start: 30 @27664 has 1 MA's), (33, 27712), (35, 27724), (37, 27730), (Start: 45 @27823 has 3 MA's), (Start: 47 @27841 has 1 MA's), (51, 27871), (54, 27943), (61, 28057), (62, 28069), (68, 28156), (69, 28162), (70, 28165), (72, 28228), (78, 28330), (80, 28405), (81, 28408), (90, 28525),

Gene: Jacob\_70 Start: 45803, Stop: 46582, Start Num: 30

Candidate Starts for Jacob\_70:

(15, 45638), (17, 45668), (23, 45740), (Start: 30 @45803 has 1 MA's), (36, 45866), (51, 46013), (52, 46082), (57, 46124), (68, 46208), (70, 46217), (73, 46280), (76, 46361), (80, 46439), (81, 46442), (83, 46463), (86, 46499), (89, 46547), (92, 46565), (93, 46571),

Gene: KendraB23\_51 Start: 28732, Stop: 29547, Start Num: 37

Candidate Starts for KendraB23\_51:

(Start: 18 @28549 has 1 MA's), (26, 28630), (Start: 30 @28666 has 1 MA's), (33, 28714), (37, 28732), (Start: 45 @28825 has 3 MA's), (Start: 47 @28843 has 1 MA's), (51, 28873), (54, 28945), (58, 29011), (68, 29158), (69, 29164), (72, 29230), (78, 29332), (80, 29407), (81, 29410), (90, 29527),

Gene: Kingsley\_71 Start: 46661, Stop: 47491, Start Num: 31

Candidate Starts for Kingsley\_71:

(Start: 18 @46526 has 1 MA's), (24, 46583), (27, 46607), (29, 46625), (Start: 30 @46640 has 1 MA's), (Start: 31 @46661 has 1 MA's), (Start: 53 @46967 has 2 MA's), (55, 46988), (67, 47090), (80, 47339), (81, 47342), (84, 47372), (86, 47399), (94, 47480),

Gene: McKinley\_5 Start: 3198, Stop: 3983, Start Num: 43

Candidate Starts for McKinley\_5:

(40, 3156), (41, 3165), (Start: 43 @3198 has 1 MA's), (44, 3204), (46, 3228), (52, 3327), (64, 3495), (65, 3516), (68, 3537), (80, 3786), (81, 3789), (82, 3792), (83, 3810), (85, 3873), (87, 3921),

Gene: Orcanus\_41 Start: 28182, Stop: 28904, Start Num: 45

Candidate Starts for Orcanus\_41:

(Start: 18 @27906 has 1 MA's), (26, 27987), (Start: 30 @28023 has 1 MA's), (33, 28071), (37, 28089), (Start: 45 @28182 has 3 MA's), (Start: 47 @28200 has 1 MA's), (51, 28230), (54, 28302), (66, 28503), (68, 28515), (69, 28521), (70, 28524), (72, 28587), (78, 28689), (80, 28764), (81, 28767), (90, 28884),

Gene: Ovechkin\_70 Start: 44498, Stop: 45319, Start Num: 53

Candidate Starts for Ovechkin\_70:

(Start: 18 @44057 has 1 MA's), (24, 44114), (27, 44138), (29, 44156), (Start: 30 @44171 has 1 MA's), (Start: 31 @44192 has 1 MA's), (32, 44210), (34, 44225), (38, 44243), (Start: 53 @44498 has 2 MA's), (55, 44519), (59, 44579), (63, 44735), (71, 44927), (76, 45089), (80, 45167), (81, 45170), (84, 45200), (86, 45227), (94, 45308),

Gene: Pelletreau\_50 Start: 28545, Stop: 29360, Start Num: 37

Candidate Starts for Pelletreau\_50:

(Start: 18 @28362 has 1 MA's), (26, 28443), (Start: 30 @28479 has 1 MA's), (33, 28527), (37, 28545), (Start: 45 @28638 has 3 MA's), (Start: 47 @28656 has 1 MA's), (51, 28686), (54, 28758), (58, 28824), (68, 28971), (69, 28977), (72, 29043), (78, 29145), (80, 29220), (81, 29223), (90, 29340),

Gene: PhlipPhlop\_69 Start: 47844, Stop: 48557, Start Num: 53

Candidate Starts for PhlipPhlop\_69:

(Start: 18 @47481 has 1 MA's), (24, 47538), (29, 47580), (Start: 30 @47595 has 1 MA's), (Start: 31 @47616 has 1 MA's), (42, 47697), (Start: 53 @47844 has 2 MA's), (55, 47865), (59, 47925), (71, 48165), (80, 48405), (81, 48408), (84, 48438), (86, 48465), (94, 48546),

Gene: Rattail\_43 Start: 27437, Stop: 28150, Start Num: 37

Candidate Starts for Rattail\_43:

(Start: 18 @27254 has 1 MA's), (25, 27320), (26, 27335), (Start: 30 @27371 has 1 MA's), (33, 27419), (35, 27431), (37, 27437), (39, 27461), (Start: 45 @27530 has 3 MA's), (Start: 47 @27548 has 1 MA's), (68, 27752), (69, 27758), (78, 27926), (80, 28001), (81, 28004), (89, 28112), (90, 28121),

Gene: Samy\_50 Start: 33615, Stop: 34364, Start Num: 48

Candidate Starts for Samy\_50:

(16, 33303), (19, 33345), (28, 33414), (Start: 30 @33444 has 1 MA's), (32, 33483), (Start: 48 @33615 has 1 MA's), (49, 33618), (50, 33621), (56, 33735), (60, 33819), (61, 33822), (68, 33933), (75, 34071),

(77, 34122), (79, 34152), (81, 34203), (83, 34224), (86, 34260), (87, 34281), (88, 34284), (91, 34320),

Gene: Sedona\_6 Start: 4350, Stop: 5051, Start Num: 47

Candidate Starts for Sedona\_6:

(1, 3228), (2, 3420), (3, 3450), (4, 3477), (5, 3513), (6, 3549), (7, 3666), (8, 3678), (9, 3765), (10, 3807), (11, 3819), (12, 3825), (13, 3969), (14, 3993), (20, 4089), (22, 4110), (36, 4245), (Start: 47 @4350 has 1 MA's), (52, 4446), (64, 4614), (65, 4635), (68, 4656), (80, 4905), (81, 4908), (82, 4911), (87, 4989),

Gene: Shivanishola\_4 Start: 2785, Stop: 3819, Start Num: 18

Candidate Starts for Shivanishola\_4:

(Start: 18 @2785 has 1 MA's), (21, 2821), (29, 2884), (Start: 30 @2899 has 1 MA's), (Start: 31 @2920 has 1 MA's), (32, 2938), (36, 2962), (Start: 47 @3067 has 1 MA's), (52, 3163), (64, 3331), (65, 3352), (68, 3373), (80, 3622), (81, 3625), (82, 3628), (83, 3646), (85, 3709), (87, 3757),

Gene: TaylorSipht\_41 Start: 27587, Stop: 28306, Start Num: 45

Candidate Starts for TaylorSipht\_41:

(Start: 18 @27311 has 1 MA's), (26, 27392), (Start: 30 @27428 has 1 MA's), (Start: 45 @27587 has 3 MA's), (Start: 47 @27605 has 1 MA's), (51, 27635), (54, 27707), (69, 27923), (74, 28034), (78, 28091), (80, 28166), (81, 28169), (90, 28286),

Gene: Westrich\_49 Start: 28469, Stop: 29284, Start Num: 37

Candidate Starts for Westrich\_49:

(Start: 18 @28286 has 1 MA's), (26, 28367), (Start: 30 @28403 has 1 MA's), (33, 28451), (37, 28469), (Start: 45 @28562 has 3 MA's), (Start: 47 @28580 has 1 MA's), (51, 28610), (54, 28682), (58, 28748), (68, 28895), (69, 28901), (72, 28967), (78, 29069), (80, 29144), (81, 29147), (90, 29264),