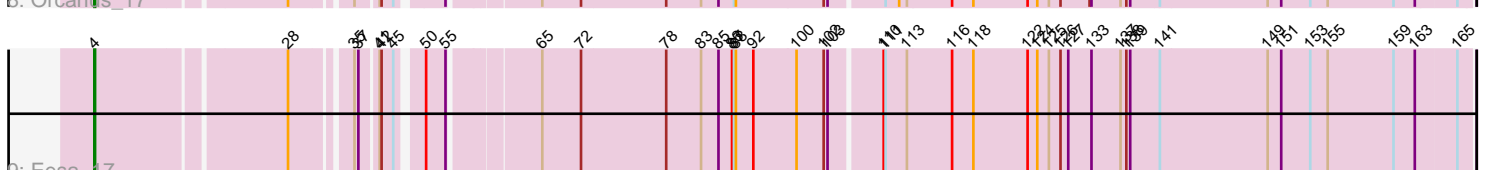
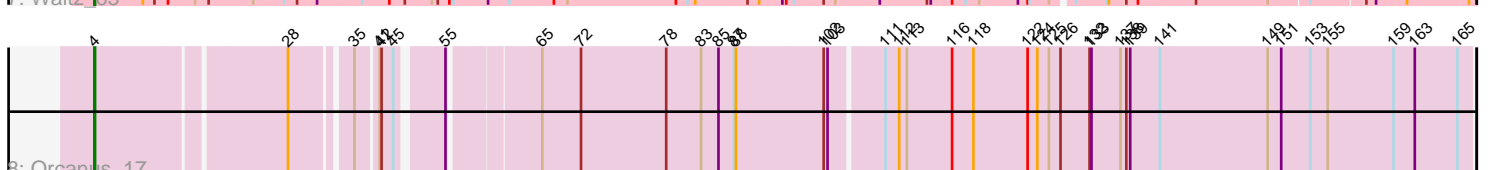
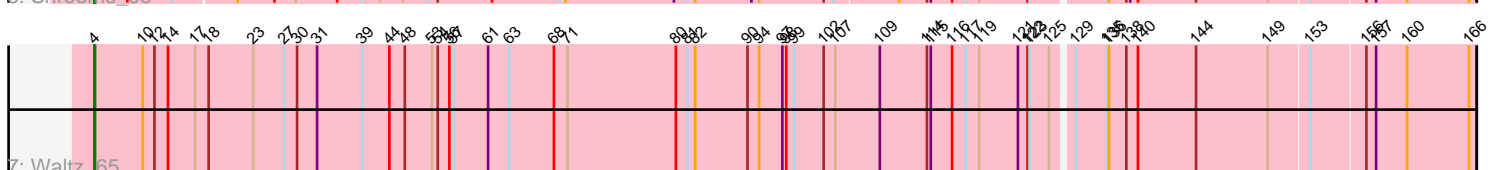
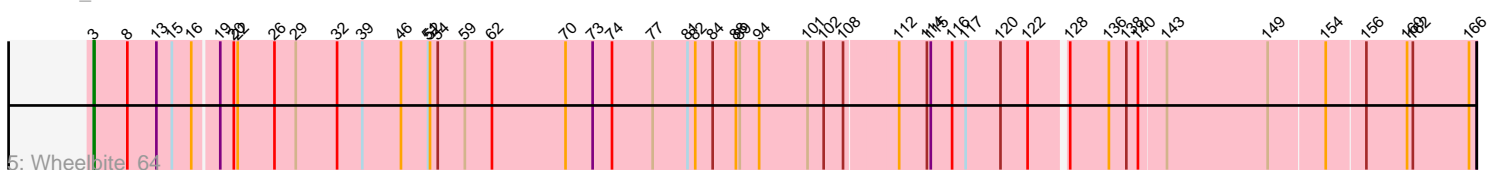
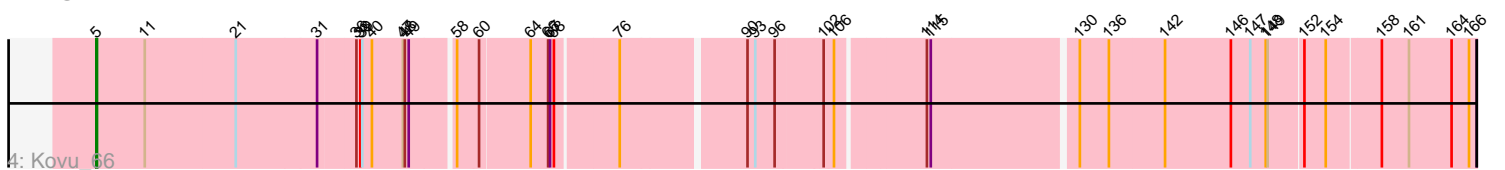
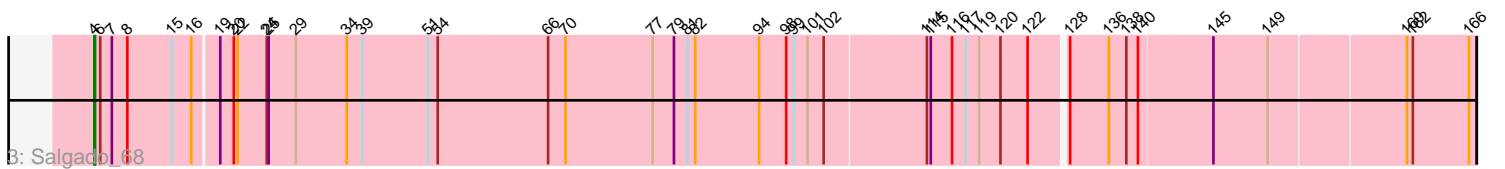
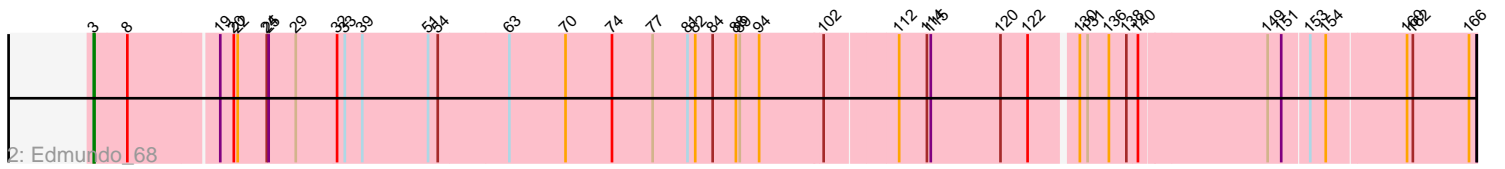
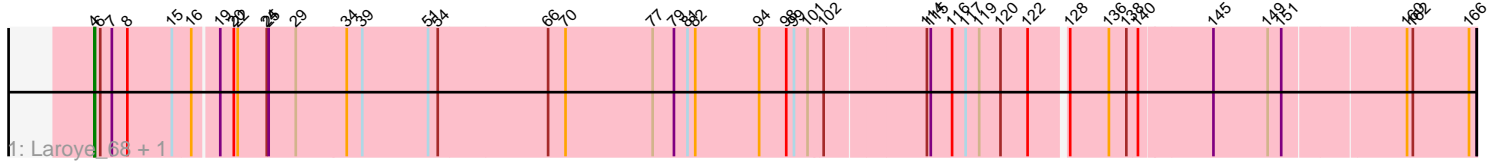


# Pham 180941



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 180941 Report

This analysis was run 11/02/24 on database version 579.

Pham number 180941 has 12 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Laroye\_68, LiSara\_65
- Track 2 : Edmundo\_68
- Track 3 : Salgado\_68
- Track 4 : Kovu\_66
- Track 5 : Wheelbite\_64
- Track 6 : Shrooms\_66
- Track 7 : Waltz\_65
- Track 8 : Orcanus\_17
- Track 9 : Eesa\_17
- Track 10 : Ottawa\_44, Kharcho\_44

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

The start number called the most often in the published annotations is 4, it was called in 7 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Eesa\_17, Laroye\_68, LiSara\_65, Orcanus\_17, Salgado\_68, Shrooms\_66, Waltz\_65,

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

- 

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

- Edmundo\_68, Kharcho\_44, Kovu\_66, Ottawa\_44, Wheelbite\_64,

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

Start 3:

- Found in 2 of 12 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Edmundo\_68 (AL), Wheelbite\_64 (AL),

#### Start 4:

- Found in 7 of 12 ( 58.3% ) of genes in pham
- Manual Annotations of this start: 7 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Eesa\_17 (AS1), Laroye\_68 (AL), LiSara\_65 (AL), Orcanus\_17 (AS1), Salgado\_68 (AL), Shrooms\_66 (AL), Waltz\_65 (AL),

#### Start 5:

- Found in 3 of 12 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kharcho\_44 (FM), Kovu\_66 (AL), Ottawa\_44 (FM),

### Summary by clusters:

There are 3 clusters represented in this pham: AS1, AL, FM,

Info for manual annotations of cluster AL:

- Start number 3 was manually annotated 2 times for cluster AL.
- Start number 4 was manually annotated 5 times for cluster AL.
- Start number 5 was manually annotated 1 time for cluster AL.

Info for manual annotations of cluster AS1:

- Start number 4 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster FM:

- Start number 5 was manually annotated 2 times for cluster FM.

### Gene Information:

Gene: Edmundo\_68 Start: 40159, Stop: 42213, Start Num: 3

Candidate Starts for Edmundo\_68:

(Start: 3 @40159 has 2 MA's), (8, 40204), (19, 40336), (20, 40357), (22, 40363), (24, 40408), (25, 40411), (29, 40453), (32, 40516), (33, 40528), (39, 40555), (51, 40657), (54, 40672), (63, 40777), (70, 40864), (74, 40936), (77, 40999), (81, 41053), (82, 41065), (84, 41092), (88, 41128), (89, 41134), (94, 41164), (102, 41260), (112, 41365), (114, 41407), (115, 41413), (120, 41521), (122, 41563), (130, 41629), (131, 41641), (136, 41674), (138, 41701), (140, 41716), (149, 41908), (151, 41929), (153, 41968), (154, 41989), (160, 42106), (162, 42115), (166, 42202),

Gene: Eesa\_17 Start: 12627, Stop: 14621, Start Num: 4

Candidate Starts for Eesa\_17:

(Start: 4 @12627 has 7 MA's), (28, 12900), (35, 12978), (37, 12984), (41, 13008), (42, 13011), (45, 13029), (50, 13059), (55, 13089), (65, 13212), (72, 13272), (78, 13401), (83, 13455), (85, 13482), (86, 13503), (87, 13506), (88, 13509), (92, 13536), (100, 13602), (102, 13644), (103, 13650), (110, 13725), (111, 13728), (113, 13761), (116, 13830), (118, 13863), (122, 13947), (124, 13962), (125, 13980), (126, 13998), (127, 14010), (133, 14046), (137, 14091), (138, 14100), (139, 14106), (141, 14148), (149, 14313), (151, 14334), (153, 14379), (155, 14406), (159, 14508), (163, 14541), (165, 14601),

Gene: Kharcho\_44 Start: 22045, Stop: 24006, Start Num: 5

Candidate Starts for Kharcho\_44:

(1, 21937), (2, 21949), (Start: 5 @22045 has 3 MA's), (9, 22111), (21, 22252), (25, 22303), (31, 22378), (43, 22477), (54, 22546), (75, 22777), (95, 22969), (102, 23056), (104, 23065), (114, 23194), (117, 23251), (123, 23350), (132, 23428), (134, 23434), (136, 23458), (149, 23701), (150, 23719),

Gene: Kovu\_66 Start: 40087, Stop: 42081, Start Num: 5

Candidate Starts for Kovu\_66:

(Start: 5 @40087 has 3 MA's), (11, 40159), (21, 40297), (31, 40420), (36, 40474), (38, 40480), (39, 40483), (40, 40498), (47, 40546), (48, 40549), (49, 40555), (58, 40612), (60, 40645), (64, 40717), (66, 40744), (67, 40747), (68, 40753), (76, 40843), (90, 41023), (93, 41035), (96, 41065), (102, 41131), (106, 41146), (114, 41269), (115, 41275), (130, 41488), (136, 41533), (142, 41617), (146, 41719), (147, 41749), (148, 41773), (149, 41776), (152, 41827), (154, 41857), (158, 41935), (161, 41977), (164, 42043), (166, 42070),

Gene: Laroye\_68 Start: 39550, Stop: 41604, Start Num: 4

Candidate Starts for Laroye\_68:

(Start: 4 @39550 has 7 MA's), (6, 39556), (7, 39571), (8, 39595), (15, 39664), (16, 39691), (19, 39727), (20, 39748), (22, 39754), (24, 39799), (25, 39802), (29, 39844), (34, 39922), (39, 39946), (51, 40048), (54, 40063), (66, 40228), (70, 40255), (77, 40390), (79, 40423), (81, 40444), (82, 40456), (94, 40555), (98, 40597), (99, 40609), (101, 40630), (102, 40651), (114, 40798), (115, 40804), (116, 40837), (117, 40858), (119, 40879), (120, 40912), (122, 40954), (128, 41005), (136, 41065), (138, 41092), (140, 41107), (145, 41215), (149, 41299), (151, 41320), (160, 41497), (162, 41506), (166, 41593),

Gene: LiSara\_65 Start: 39712, Stop: 41766, Start Num: 4

Candidate Starts for LiSara\_65:

(Start: 4 @39712 has 7 MA's), (6, 39718), (7, 39733), (8, 39757), (15, 39826), (16, 39853), (19, 39889), (20, 39910), (22, 39916), (24, 39961), (25, 39964), (29, 40006), (34, 40084), (39, 40108), (51, 40210), (54, 40225), (66, 40390), (70, 40417), (77, 40552), (79, 40585), (81, 40606), (82, 40618), (94, 40717), (98, 40759), (99, 40771), (101, 40792), (102, 40813), (114, 40960), (115, 40966), (116, 40999), (117, 41020), (119, 41041), (120, 41074), (122, 41116), (128, 41167), (136, 41227), (138, 41254), (140, 41269), (145, 41377), (149, 41461), (151, 41482), (160, 41659), (162, 41668), (166, 41755),

Gene: Orcanus\_17 Start: 12327, Stop: 14321, Start Num: 4

Candidate Starts for Orcanus\_17:

(Start: 4 @12327 has 7 MA's), (28, 12600), (35, 12678), (41, 12708), (42, 12711), (45, 12729), (55, 12789), (65, 12912), (72, 12972), (78, 13101), (83, 13155), (85, 13182), (87, 13206), (88, 13209), (102, 13344), (103, 13350), (111, 13428), (112, 13449), (113, 13461), (116, 13530), (118, 13563), (122, 13647), (124, 13662), (125, 13680), (126, 13698), (132, 13743), (133, 13746), (137, 13791), (138, 13800), (139, 13806), (141, 13848), (149, 14013), (151, 14034), (153, 14079), (155, 14106), (159, 14208), (163, 14241), (165, 14301),

Gene: Ottawa\_44 Start: 22043, Stop: 24004, Start Num: 5

Candidate Starts for Ottawa\_44:

(1, 21935), (2, 21947), (Start: 5 @22043 has 3 MA's), (9, 22109), (21, 22250), (25, 22301), (31, 22376), (43, 22475), (54, 22544), (75, 22775), (95, 22967), (102, 23054), (104, 23063), (114, 23192), (117, 23249), (123, 23348), (132, 23426), (134, 23432), (136, 23456), (149, 23699), (150, 23717),

Gene: Salgado\_68 Start: 39366, Stop: 41420, Start Num: 4

Candidate Starts for Salgado\_68:

(Start: 4 @39366 has 7 MA's), (6, 39372), (7, 39387), (8, 39411), (15, 39480), (16, 39507), (19, 39543), (20, 39564), (22, 39570), (24, 39615), (25, 39618), (29, 39660), (34, 39738), (39, 39762), (51,

39864), (54, 39879), (66, 40044), (70, 40071), (77, 40206), (79, 40239), (81, 40260), (82, 40272), (94, 40371), (98, 40413), (99, 40425), (101, 40446), (102, 40467), (114, 40614), (115, 40620), (116, 40653), (117, 40674), (119, 40695), (120, 40728), (122, 40770), (128, 40821), (136, 40881), (138, 40908), (140, 40923), (145, 41031), (149, 41115), (160, 41313), (162, 41322), (166, 41409),

Gene: Shrooms\_66 Start: 37884, Stop: 39941, Start Num: 4

Candidate Starts for Shrooms\_66:

(Start: 4 @37884 has 7 MA's), (8, 37929), (15, 37998), (22, 38088), (26, 38145), (29, 38178), (32, 38241), (39, 38280), (41, 38307), (47, 38343), (51, 38382), (54, 38397), (62, 38475), (69, 38580), (70, 38589), (79, 38757), (81, 38778), (82, 38790), (91, 38877), (94, 38889), (102, 38985), (105, 39000), (112, 39090), (114, 39132), (115, 39138), (116, 39171), (117, 39192), (119, 39213), (122, 39288), (123, 39291), (135, 39396), (136, 39399), (138, 39426), (139, 39432), (140, 39441), (144, 39525), (149, 39636), (153, 39696), (156, 39771), (157, 39786), (160, 39834), (166, 39930),

Gene: Waltz\_65 Start: 37882, Stop: 39954, Start Num: 4

Candidate Starts for Waltz\_65:

(Start: 4 @37882 has 7 MA's), (10, 37951), (12, 37969), (14, 37990), (17, 38032), (18, 38053), (23, 38122), (27, 38167), (30, 38185), (31, 38215), (39, 38284), (44, 38326), (48, 38350), (53, 38389), (54, 38398), (56, 38416), (57, 38422), (61, 38476), (63, 38509), (68, 38578), (71, 38599), (80, 38767), (81, 38785), (82, 38797), (90, 38878), (94, 38896), (97, 38932), (98, 38938), (99, 38950), (102, 38992), (107, 39010), (109, 39076), (114, 39145), (115, 39151), (116, 39184), (117, 39205), (119, 39226), (121, 39286), (122, 39301), (123, 39304), (125, 39334), (129, 39361), (135, 39409), (136, 39412), (138, 39439), (140, 39454), (144, 39538), (149, 39649), (153, 39709), (156, 39784), (157, 39799), (160, 39847), (166, 39943),

Gene: Wheelbite\_64 Start: 39523, Stop: 41577, Start Num: 3

Candidate Starts for Wheelbite\_64:

(Start: 3 @39523 has 2 MA's), (8, 39568), (13, 39613), (15, 39637), (16, 39664), (19, 39700), (20, 39721), (22, 39727), (26, 39784), (29, 39817), (32, 39880), (39, 39919), (46, 39979), (51, 40021), (52, 40024), (54, 40036), (59, 40075), (62, 40114), (70, 40228), (73, 40270), (74, 40300), (77, 40363), (81, 40417), (82, 40429), (84, 40456), (88, 40492), (89, 40498), (94, 40528), (101, 40603), (102, 40624), (108, 40654), (112, 40729), (114, 40771), (115, 40777), (116, 40810), (117, 40831), (120, 40885), (122, 40927), (128, 40978), (136, 41038), (138, 41065), (140, 41080), (143, 41119), (149, 41272), (154, 41353), (156, 41407), (160, 41470), (162, 41479), (166, 41566),