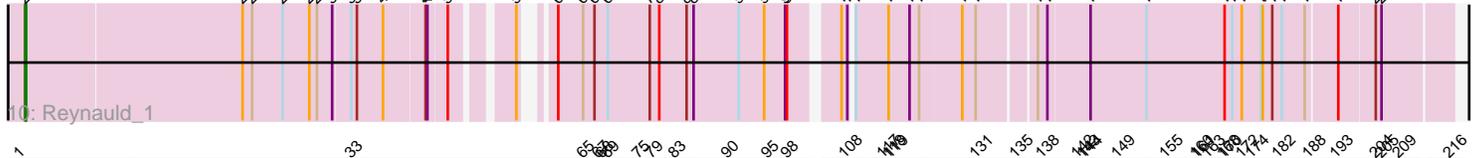
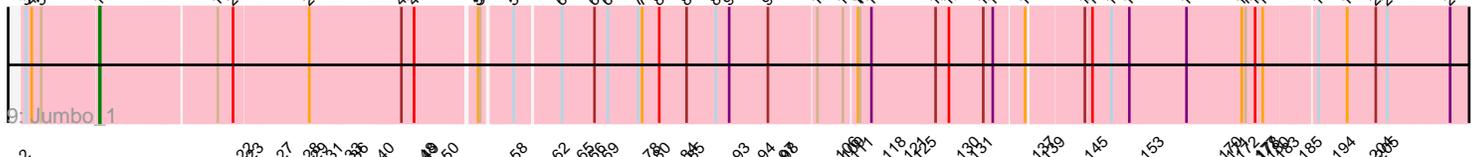
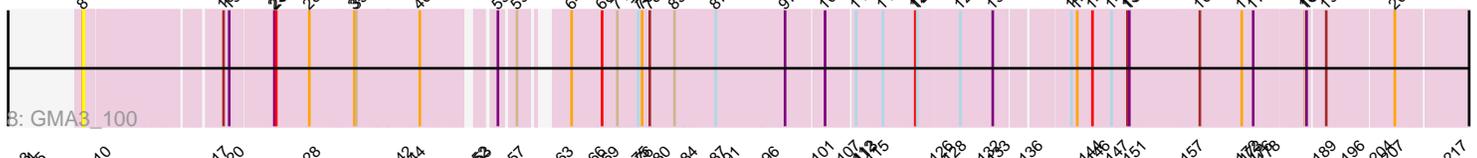
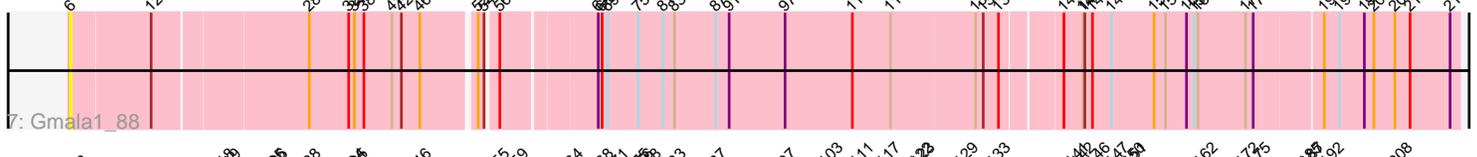
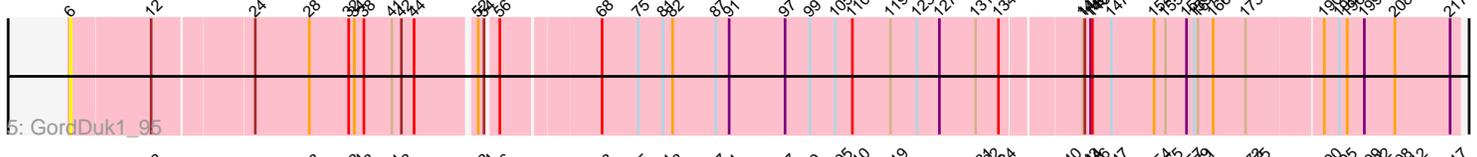
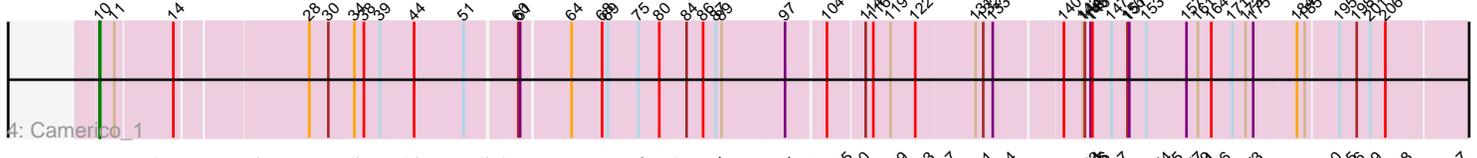
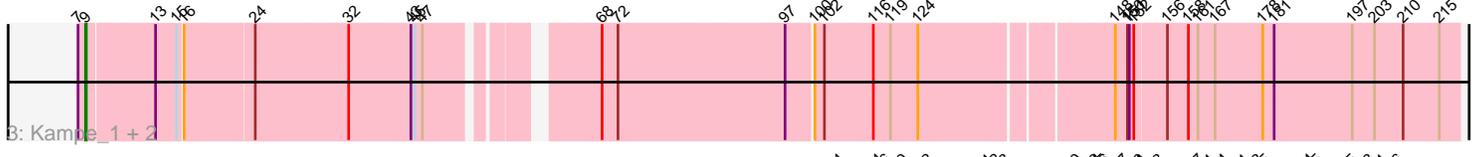
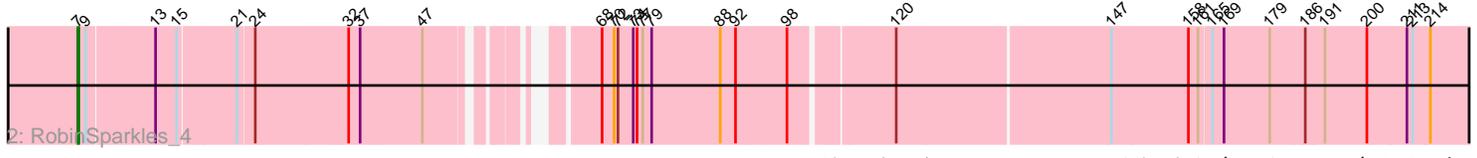
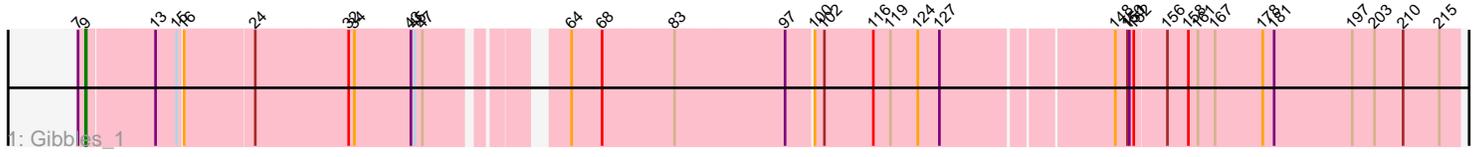


Pham 163096



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 163096 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163096 has 13 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Gibbles\_1
- Track 2 : RobinSparkles\_4
- Track 3 : Kampe\_1, Orchid\_1, PatrickStar\_1
- Track 4 : Camerico\_1
- Track 5 : GordDuk1\_95
- Track 6 : GordTnk2\_96
- Track 7 : Gmala1\_88
- Track 8 : GMA3\_100
- Track 9 : Jumbo\_1
- Track 10 : Reynauld\_1
- Track 11 : Mbo2\_110

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

The start number called the most often in the published annotations is 9, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Gibbles\_1, Kampe\_1, Orchid\_1, PatrickStar\_1,

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

- RobinSparkles\_4,

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

- Camerico\_1, GMA3\_100, Gmala1\_88, GordDuk1\_95, GordTnk2\_96, Jumbo\_1, Mbo2\_110, Reynauld\_1,

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

Start 1:

- Found in 1 of 13 ( 7.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mbo2\_110 (singleton),

Start 2:

- Found in 1 of 13 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Reynauld\_1 (singleton),

Start 6:

- Found in 3 of 13 ( 23.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gmala1\_88 (DF1), GordDuk1\_95 (DF1), GordTnk2\_96 (DF1),

Start 7:

- Found in 5 of 13 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 20.0% of time when present
- Phage (with cluster) where this start called: RobinSparkles\_4 (CX),

Start 8:

- Found in 1 of 13 ( 7.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA3\_100 (DF2),

Start 9:

- Found in 5 of 13 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Gibbles\_1 (CX), Kampe\_1 (CX), Orchid\_1 (CX), PatrickStar\_1 (CX),

Start 10:

- Found in 2 of 13 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Camerico\_1 (DF), Jumbo\_1 (DF3),

**Summary by clusters:**

There are 6 clusters represented in this pham: singleton, DF, DF1, DF3, DF2, CX,

Info for manual annotations of cluster CX:

- Start number 7 was manually annotated 1 time for cluster CX.
- Start number 9 was manually annotated 4 times for cluster CX.

Info for manual annotations of cluster DF:

- Start number 10 was manually annotated 1 time for cluster DF.

Info for manual annotations of cluster DF3:

- Start number 10 was manually annotated 1 time for cluster DF3.

### **Gene Information:**

Gene: Camerico\_1 Start: 3035, Stop: 1032, Start Num: 10

Candidate Starts for Camerico\_1:

(Start: 10 @3035 has 2 MA's), (11, 3014), (14, 2933), (28, 2741), (30, 2711), (34, 2672), (38, 2657), (39, 2636), (44, 2585), (51, 2507), (60, 2432), (61, 2429), (64, 2357), (68, 2309), (69, 2300), (75, 2255), (80, 2222), (84, 2180), (86, 2156), (87, 2138), (89, 2129), (97, 2030), (104, 1973), (114, 1919), (116, 1907), (119, 1880), (122, 1841), (131, 1751), (132, 1739), (133, 1724), (140, 1625), (143, 1598), (144, 1595), (145, 1586), (146, 1583), (147, 1556), (150, 1535), (151, 1532), (153, 1508), (157, 1448), (161, 1433), (164, 1412), (171, 1379), (173, 1358), (175, 1346), (184, 1283), (185, 1271), (195, 1223), (198, 1196), (201, 1175), (206, 1151),

Gene: GMA3\_100 Start: 75102, Stop: 73141, Start Num: 8

Candidate Starts for GMA3\_100:

(8, 75102), (18, 74913), (19, 74904), (25, 74838), (26, 74835), (28, 74784), (34, 74715), (35, 74712), (46, 74619), (55, 74529), (59, 74508), (64, 74463), (68, 74415), (71, 74391), (75, 74361), (76, 74355), (78, 74343), (83, 74304), (87, 74244), (97, 74136), (103, 74079), (111, 74037), (117, 73995), (122, 73944), (123, 73941), (129, 73878), (133, 73827), (141, 73722), (142, 73716), (146, 73692), (147, 73665), (150, 73647), (151, 73644), (162, 73542), (172, 73476), (175, 73458), (185, 73386), (187, 73383), (192, 73359), (208, 73257),

Gene: Gibbles\_1 Start: 2768, Stop: 786, Start Num: 9

Candidate Starts for Gibbles\_1:

(Start: 7 @2780 has 1 MA's), (Start: 9 @2768 has 4 MA's), (13, 2672), (15, 2639), (16, 2633), (24, 2531), (32, 2390), (34, 2381), (43, 2297), (45, 2291), (47, 2279), (64, 2111), (68, 2063), (83, 1952), (97, 1787), (100, 1748), (102, 1733), (116, 1658), (119, 1631), (124, 1589), (127, 1556), (148, 1307), (150, 1292), (151, 1289), (152, 1283), (156, 1238), (158, 1205), (161, 1190), (167, 1163), (178, 1088), (181, 1070), (197, 947), (203, 914), (210, 869), (215, 815),

Gene: Gmala1\_88 Start: 73511, Stop: 71493, Start Num: 6

Candidate Starts for Gmala1\_88:

(6, 73511), (12, 73397), (28, 73172), (32, 73112), (34, 73103), (38, 73088), (41, 73046), (42, 73031), (46, 73004), (52, 72926), (54, 72917), (56, 72902), (67, 72770), (68, 72764), (69, 72755), (75, 72710), (81, 72671), (83, 72653), (87, 72593), (91, 72572), (97, 72485), (110, 72380), (119, 72320), (131, 72191), (132, 72179), (134, 72155), (140, 72071), (143, 72044), (144, 72041), (146, 72029), (147, 72002), (154, 71945), (155, 71927), (157, 71897), (159, 71888), (161, 71882), (173, 71807), (175, 71795), (190, 71699), (195, 71675), (199, 71636), (202, 71621), (208, 71588), (212, 71564), (217, 71507),

Gene: GordDuk1\_95 Start: 74616, Stop: 72598, Start Num: 6

Candidate Starts for GordDuk1\_95:

(6, 74616), (12, 74502), (24, 74358), (28, 74277), (32, 74217), (34, 74208), (38, 74193), (41, 74151), (42, 74136), (44, 74118), (52, 74031), (54, 74022), (56, 74007), (68, 73869), (75, 73815), (81, 73776), (82, 73761), (87, 73698), (91, 73677), (97, 73590), (99, 73551), (105, 73512), (110, 73485), (119, 73425), (123, 73383), (127, 73353), (131, 73296), (134, 73260), (143, 73149), (144, 73146), (145, 73137), (146, 73134), (147, 73107), (154, 73050), (155, 73032), (157, 73002), (159, 72993), (161, 72987), (166, 72963), (173, 72912), (190, 72804), (195, 72780), (196, 72768), (199, 72741), (208, 72693), (217, 72612),

Gene: GordTnk2\_96 Start: 74328, Stop: 72310, Start Num: 6

Candidate Starts for GordTnk2\_96:

(6, 74328), (12, 74214), (28, 73989), (32, 73929), (34, 73920), (38, 73905), (41, 73863), (42, 73848), (52, 73743), (54, 73734), (56, 73719), (68, 73581), (75, 73527), (81, 73488), (82, 73473), (87, 73410), (91, 73389), (97, 73302), (99, 73263), (105, 73224), (110, 73197), (119, 73137), (131, 73008), (132, 72996), (134, 72972), (140, 72888), (143, 72861), (144, 72858), (146, 72846), (147, 72819), (154, 72762), (155, 72744), (157, 72714), (159, 72705), (161, 72699), (173, 72624), (175, 72612), (190, 72516), (195, 72492), (199, 72453), (202, 72438), (208, 72405), (212, 72381), (217, 72324),

Gene: Jumbo\_1 Start: 3224, Stop: 1203, Start Num: 10

Candidate Starts for Jumbo\_1:

(3, 3335), (4, 3326), (5, 3311), (Start: 10 @3224 has 2 MA's), (17, 3053), (20, 3029), (28, 2918), (42, 2780), (44, 2762), (52, 2672), (53, 2669), (57, 2630), (63, 2567), (66, 2516), (69, 2495), (75, 2450), (76, 2444), (80, 2417), (84, 2375), (87, 2333), (91, 2312), (96, 2252), (101, 2180), (107, 2141), (112, 2126), (113, 2123), (115, 2105), (126, 2009), (128, 1988), (132, 1934), (133, 1919), (136, 1874), (144, 1796), (146, 1784), (147, 1757), (151, 1733), (157, 1649), (172, 1565), (173, 1559), (176, 1544), (178, 1532), (189, 1460), (196, 1415), (204, 1370), (207, 1352), (217, 1259),

Gene: Kampe\_1 Start: 2767, Stop: 785, Start Num: 9

Candidate Starts for Kampe\_1:

(Start: 7 @2779 has 1 MA's), (Start: 9 @2767 has 4 MA's), (13, 2671), (15, 2638), (16, 2632), (24, 2530), (32, 2389), (43, 2296), (45, 2290), (47, 2278), (68, 2062), (72, 2038), (97, 1786), (100, 1747), (102, 1732), (116, 1657), (119, 1630), (124, 1588), (148, 1306), (150, 1291), (151, 1288), (152, 1282), (156, 1237), (158, 1204), (161, 1189), (167, 1162), (178, 1087), (181, 1069), (197, 946), (203, 913), (210, 868), (215, 814),

Gene: Mbo2\_110 Start: 79722, Stop: 77578, Start Num: 1

Candidate Starts for Mbo2\_110:

(1, 79722), (33, 79203), (65, 78840), (67, 78816), (68, 78810), (69, 78801), (75, 78756), (79, 78735), (83, 78699), (90, 78621), (95, 78561), (98, 78531), (108, 78468), (117, 78423), (118, 78414), (119, 78411), (131, 78282), (135, 78228), (138, 78195), (142, 78147), (143, 78138), (144, 78135), (149, 78087), (155, 78021), (160, 77976), (161, 77973), (163, 77958), (168, 77934), (170, 77931), (172, 77904), (174, 77889), (182, 77847), (188, 77802), (193, 77766), (204, 77703), (205, 77694), (209, 77667), (216, 77598),

Gene: Orchid\_1 Start: 2767, Stop: 785, Start Num: 9

Candidate Starts for Orchid\_1:

(Start: 7 @2779 has 1 MA's), (Start: 9 @2767 has 4 MA's), (13, 2671), (15, 2638), (16, 2632), (24, 2530), (32, 2389), (43, 2296), (45, 2290), (47, 2278), (68, 2062), (72, 2038), (97, 1786), (100, 1747), (102, 1732), (116, 1657), (119, 1630), (124, 1588), (148, 1306), (150, 1291), (151, 1288), (152, 1282), (156, 1237), (158, 1204), (161, 1189), (167, 1162), (178, 1087), (181, 1069), (197, 946), (203, 913), (210, 868), (215, 814),

Gene: PatrickStar\_1 Start: 2767, Stop: 785, Start Num: 9

Candidate Starts for PatrickStar\_1:

(Start: 7 @2779 has 1 MA's), (Start: 9 @2767 has 4 MA's), (13, 2671), (15, 2638), (16, 2632), (24, 2530), (32, 2389), (43, 2296), (45, 2290), (47, 2278), (68, 2062), (72, 2038), (97, 1786), (100, 1747), (102, 1732), (116, 1657), (119, 1630), (124, 1588), (148, 1306), (150, 1291), (151, 1288), (152, 1282), (156, 1237), (158, 1204), (161, 1189), (167, 1162), (178, 1087), (181, 1069), (197, 946), (203, 913), (210, 868), (215, 814),

Gene: Reynauld\_1 Start: 3050, Stop: 1041, Start Num: 2

Candidate Starts for Reynauld\_1:

(Start: 2 @3050 has 1 MA's), (22, 2720), (23, 2705), (27, 2657), (28, 2615), (29, 2603), (31, 2579), (33, 2555), (36, 2546), (40, 2507), (48, 2450), (49, 2447), (50, 2420), (58, 2351), (62, 2330), (65, 2291), (66, 2273), (69, 2252), (78, 2189), (80, 2174), (84, 2132), (85, 2123), (93, 2057), (94, 2018), (97, 1985), (98, 1982), (106, 1919), (109, 1910), (111, 1907), (118, 1859), (121, 1826), (125, 1811), (130, 1748), (131, 1727), (137, 1646), (139, 1631), (145, 1571), (153, 1493), (170, 1376), (171, 1364), (172, 1349), (177, 1319), (178, 1316), (180, 1301), (183, 1286), (185, 1250), (194, 1205), (204, 1151), (205, 1142),

Gene: RobinSparkles\_4 Start: 3076, Stop: 1076, Start Num: 7

Candidate Starts for RobinSparkles\_4:

(Start: 7 @3076 has 1 MA's), (Start: 9 @3064 has 4 MA's), (13, 2968), (15, 2935), (21, 2851), (24, 2827), (32, 2686), (37, 2668), (47, 2575), (68, 2392), (70, 2374), (72, 2368), (73, 2344), (74, 2338), (77, 2329), (79, 2317), (88, 2209), (92, 2185), (98, 2110), (120, 1963), (147, 1636), (158, 1516), (161, 1501), (165, 1483), (169, 1465), (179, 1393), (186, 1339), (191, 1309), (200, 1243), (211, 1183), (213, 1174), (214, 1147),