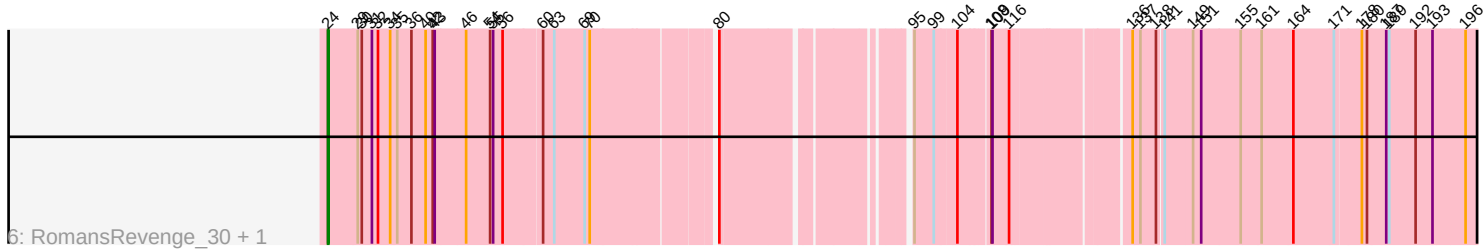
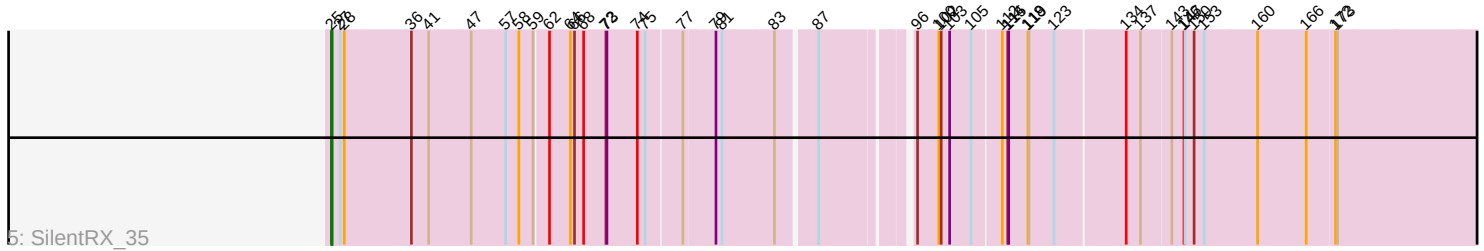
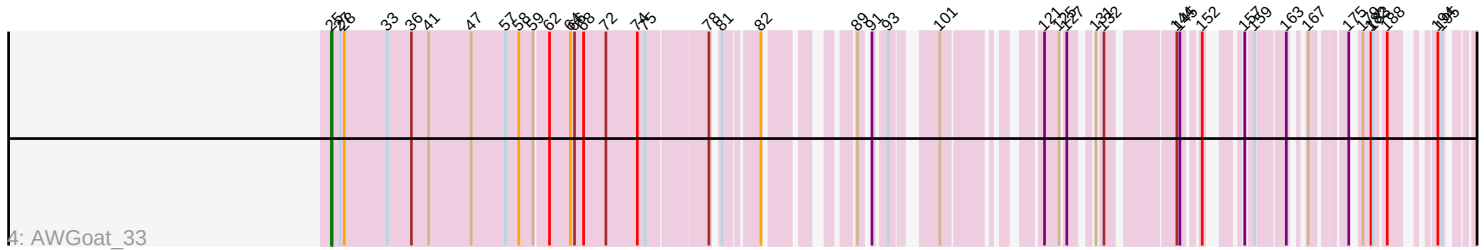
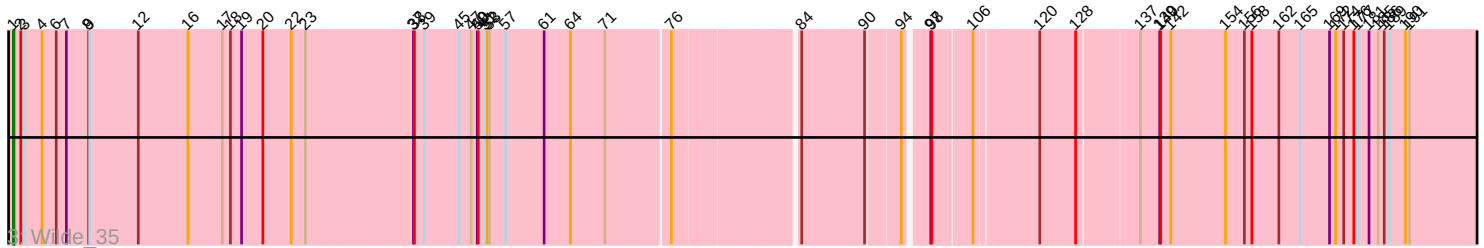
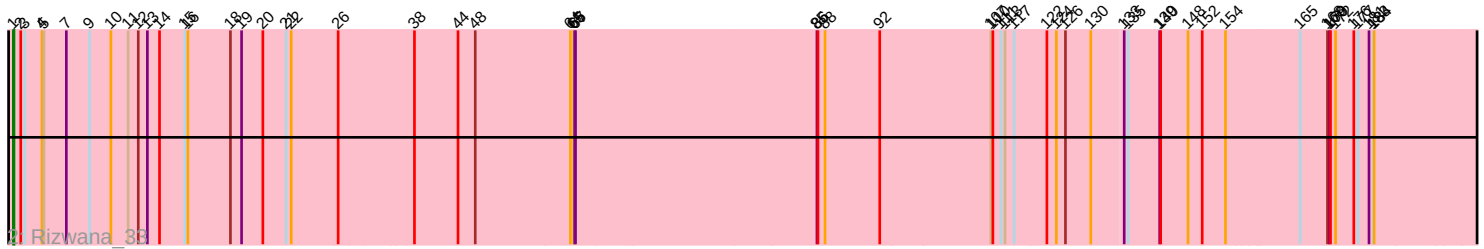
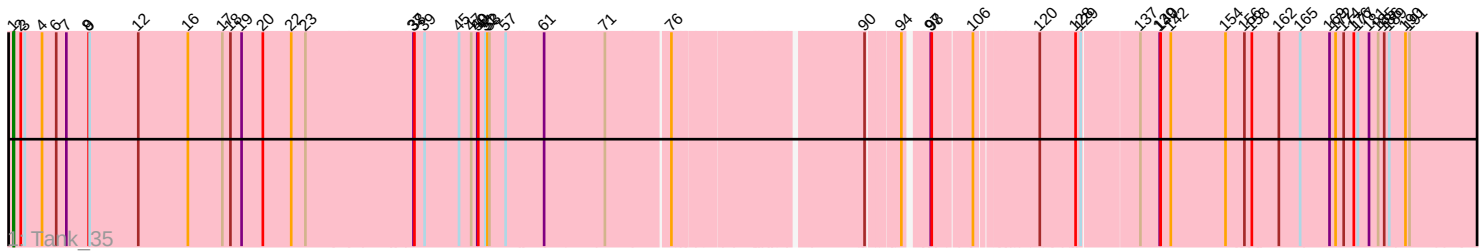


Zoomed Pham 331610



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 331610 Report

This analysis was run 09/05/26 on database version 662.

Pham number 331610 has 7 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Tank_35
- Track 2 : Rizwana_33
- Track 3 : Wilde_35
- Track 4 : AWGoat_33
- Track 5 : SilentRX_35
- Track 6 : RomansRevenge_30, Boise_29

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

The start number called the most often in the published annotations is 1, it was called in 3 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Rizwana_33, Tank_35, Wilde_35,

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

-

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

- AWGoat_33, Boise_29, RomansRevenge_30, SilentRX_35,

Summary by start number:

Start 1:

- Found in 3 of 7 (42.9%) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana_33 (AP1), Tank_35 (AP1), Wilde_35 (AP1),

Start 24:

- Found in 2 of 7 (28.6%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Boise_29 (FT), RomansRevenge_30 (FT),

Start 25:

- Found in 2 of 7 (28.6%) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat_33 (AP4), SilentRX_35 (AP4),

Summary by clusters:

There are 3 clusters represented in this pham: AP1, FT, AP4,

Info for manual annotations of cluster AP1:

- Start number 1 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP4:

- Start number 25 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster FT:

- Start number 24 was manually annotated 1 time for cluster FT.

Gene Information:

Gene: AWGoat_33 Start: 29085, Stop: 33077, Start Num: 25

Candidate Starts for AWGoat_33:

(Start: 25 @29085 has 2 MA's), (27, 29109), (28, 29121), (33, 29244), (36, 29313), (41, 29364), (47, 29484), (57, 29580), (58, 29619), (59, 29658), (62, 29694), (64, 29751), (66, 29763), (68, 29790), (72, 29856), (74, 29949), (75, 29970), (78, 30114), (81, 30126), (82, 30198), (89, 30342), (91, 30360), (93, 30384), (101, 30459), (121, 30615), (125, 30651), (127, 30660), (131, 30693), (132, 30705), (144, 30852), (145, 30861), (152, 30891), (157, 30933), (159, 30951), (163, 31011), (167, 31026), (175, 31092), (179, 31104), (182, 31128), (183, 31131), (188, 31158), (194, 31224), (195, 31236), (198, 31329), (201, 31347), (204, 31380), (210, 31413), (229, 31554), (230, 31557), (237, 31572), (238, 31575), (251, 31620), (253, 31629), (258, 31698), (262, 31788), (265, 31818), (266, 31869), (270, 31926), (272, 31938), (275, 31983), (279, 32022), (286, 32103), (288, 32121), (291, 32139), (296, 32211), (298, 32223), (313, 32412), (314, 32418), (315, 32424), (321, 32502), (327, 32601), (329, 32634), (336, 32841), (339, 32889), (342, 32943),

Gene: Boise_29 Start: 25974, Stop: 30983, Start Num: 24

Candidate Starts for Boise_29:

(Start: 24 @25974 has 1 MA's), (29, 26061), (30, 26073), (31, 26103), (32, 26121), (34, 26157), (35, 26175), (36, 26217), (40, 26259), (42, 26280), (43, 26286), (46, 26361), (54, 26427), (55, 26436), (56, 26463), (60, 26571), (63, 26604), (69, 26694), (70, 26706), (80, 27027), (95, 27465), (99, 27522), (104, 27579), (108, 27660), (109, 27663), (116, 27705), (136, 28005), (137, 28026), (138, 28071), (141, 28086), (149, 28164), (151, 28188), (155, 28302), (161, 28356), (164, 28449), (171, 28563), (178, 28635), (180, 28650), (187, 28701), (189, 28710), (192, 28788), (193, 28836), (196, 28926), (197, 28974), (206, 29154), (209, 29229), (213, 29256), (224, 29427), (226, 29442), (228, 29457), (230, 29511), (232, 29520), (233, 29532), (234, 29541), (236, 29556), (240, 29568), (242, 29586), (243, 29598), (246, 29622), (247, 29625), (249, 29655), (260, 29808), (261, 29838), (263, 29847), (264, 29868), (265, 29874), (269, 29970), (274, 30033), (277, 30066), (278, 30075), (281, 30093), (282, 30096), (285, 30141), (289, 30183), (306, 30360), (307, 30381), (310, 30414), (311, 30435), (316,

30492), (319, 30531), (322, 30561), (328, 30657), (337, 30861), (339, 30900), (341, 30939),

Gene: Rizwana_33 Start: 28128, Stop: 34640, Start Num: 1

Candidate Starts for Rizwana_33:

(Start: 1 @28128 has 3 MA's), (2, 28149), (3, 28161), (4, 28212), (5, 28218), (7, 28284), (9, 28353), (10, 28416), (11, 28467), (12, 28497), (13, 28524), (14, 28560), (15, 28635), (16, 28644), (18, 28770), (19, 28803), (20, 28866), (21, 28935), (22, 28950), (26, 29088), (38, 29304), (44, 29433), (48, 29484), (64, 29760), (65, 29769), (66, 29772), (67, 29775), (85, 30480), (86, 30483), (88, 30504), (92, 30666), (107, 30993), (110, 30999), (111, 31023), (113, 31035), (117, 31062), (122, 31158), (124, 31185), (126, 31212), (130, 31287), (133, 31377), (135, 31389), (139, 31482), (140, 31485), (148, 31566), (152, 31608), (154, 31677), (165, 31893), (168, 31974), (169, 31980), (170, 31983), (172, 31998), (176, 32052), (177, 32064), (181, 32097), (183, 32109), (184, 32112), (199, 32496), (207, 32637), (212, 32706), (214, 32733), (216, 32739), (217, 32742), (218, 32757), (221, 32841), (225, 32898), (226, 32907), (227, 32913), (237, 33042), (241, 33072), (244, 33105), (254, 33204), (255, 33207), (266, 33423), (271, 33489), (272, 33495), (273, 33522), (276, 33546), (282, 33591), (284, 33630), (287, 33660), (290, 33690), (294, 33765), (295, 33777), (302, 33816), (304, 33843), (305, 33849), (309, 33942), (312, 33969), (314, 33999), (318, 34047), (320, 34068), (324, 34155), (326, 34164), (330, 34245), (331, 34272), (333, 34290), (334, 34308), (335, 34344), (337, 34407), (340, 34461), (343, 34566),

Gene: RomansRevenge_30 Start: 25974, Stop: 30983, Start Num: 24

Candidate Starts for RomansRevenge_30:

(Start: 24 @25974 has 1 MA's), (29, 26061), (30, 26073), (31, 26103), (32, 26121), (34, 26157), (35, 26175), (36, 26217), (40, 26259), (42, 26280), (43, 26286), (46, 26361), (54, 26427), (55, 26436), (56, 26463), (60, 26571), (63, 26604), (69, 26694), (70, 26706), (80, 27027), (95, 27465), (99, 27522), (104, 27579), (108, 27660), (109, 27663), (116, 27705), (136, 28005), (137, 28026), (138, 28071), (141, 28086), (149, 28164), (151, 28188), (155, 28302), (161, 28356), (164, 28449), (171, 28563), (178, 28635), (180, 28650), (187, 28701), (189, 28710), (192, 28788), (193, 28836), (196, 28926), (197, 28974), (206, 29154), (209, 29229), (213, 29256), (224, 29427), (226, 29442), (228, 29457), (230, 29511), (232, 29520), (233, 29532), (234, 29541), (236, 29556), (240, 29568), (242, 29586), (243, 29598), (246, 29622), (247, 29625), (249, 29655), (260, 29808), (261, 29838), (263, 29847), (264, 29868), (265, 29874), (269, 29970), (274, 30033), (277, 30066), (278, 30075), (281, 30093), (282, 30096), (285, 30141), (289, 30183), (306, 30360), (307, 30381), (310, 30414), (311, 30435), (316, 30492), (319, 30531), (322, 30561), (328, 30657), (337, 30861), (339, 30900), (341, 30939),

Gene: SilentRX_35 Start: 28842, Stop: 34139, Start Num: 25

Candidate Starts for SilentRX_35:

(Start: 25 @28842 has 2 MA's), (27, 28866), (28, 28878), (36, 29070), (41, 29121), (47, 29241), (57, 29337), (58, 29376), (59, 29415), (62, 29451), (64, 29508), (66, 29520), (68, 29547), (72, 29613), (73, 29616), (74, 29706), (75, 29727), (77, 29814), (79, 29895), (81, 29904), (83, 30048), (87, 30141), (96, 30351), (100, 30411), (102, 30417), (103, 30438), (105, 30492), (112, 30561), (114, 30576), (115, 30579), (118, 30627), (119, 30630), (123, 30693), (134, 30885), (137, 30927), (143, 31005), (146, 31041), (147, 31044), (150, 31071), (153, 31101), (160, 31251), (166, 31383), (172, 31458), (173, 31464), (199, 31962), (200, 31980), (202, 32007), (203, 32010), (204, 32055), (205, 32070), (207, 32103), (208, 32133), (211, 32169), (212, 32172), (214, 32199), (215, 32202), (216, 32205), (220, 32295), (222, 32325), (227, 32394), (230, 32466), (239, 32532), (245, 32586), (249, 32625), (257, 32751), (266, 32931), (268, 32961), (270, 32991), (271, 32997), (286, 33168), (288, 33186), (291, 33207), (293, 33246), (296, 33279), (298, 33291), (300, 33303), (301, 33309), (308, 33411), (314, 33486), (315, 33492), (317, 33525), (321, 33561), (329, 33696), (336, 33903), (339, 33951), (340, 33966), (342, 34005),

Gene: Tank_35 Start: 28446, Stop: 34673, Start Num: 1

Candidate Starts for Tank_35:

(Start: 1 @28446 has 3 MA's), (2, 28467), (3, 28479), (4, 28530), (6, 28572), (7, 28602), (8, 28668), (9, 28671), (12, 28815), (16, 28962), (17, 29064), (18, 29088), (19, 29121), (20, 29184), (22, 29268), (23, 29310), (37, 29619), (38, 29622), (39, 29652), (45, 29754), (47, 29790), (49, 29808), (50, 29811), (51, 29832), (52, 29838), (53, 29844), (57, 29892), (61, 30003), (71, 30174), (76, 30354), (90, 30831), (94, 30900), (97, 30957), (98, 30960), (106, 31059), (120, 31206), (128, 31296), (129, 31308), (137, 31464), (139, 31521), (140, 31524), (142, 31554), (154, 31716), (156, 31770), (158, 31791), (162, 31869), (165, 31932), (169, 32016), (172, 32034), (174, 32058), (176, 32088), (177, 32100), (181, 32133), (185, 32160), (186, 32178), (189, 32193), (190, 32238), (191, 32250), (211, 32739), (212, 32742), (214, 32769), (216, 32775), (217, 32778), (219, 32796), (223, 32925), (226, 32958), (228, 32985), (231, 33042), (235, 33081), (237, 33093), (238, 33096), (241, 33123), (244, 33156), (246, 33162), (248, 33168), (249, 33195), (250, 33207), (252, 33225), (255, 33258), (256, 33261), (257, 33294), (259, 33348), (265, 33423), (266, 33474), (267, 33495), (271, 33540), (272, 33546), (280, 33639), (283, 33675), (284, 33681), (292, 33774), (294, 33798), (295, 33810), (297, 33819), (299, 33834), (303, 33858), (304, 33876), (309, 33975), (311, 33999), (320, 34101), (323, 34140), (324, 34188), (325, 34191), (330, 34278), (332, 34314), (333, 34323), (334, 34341), (338, 34461), (340, 34494), (344, 34668),

Gene: Wilde_35 Start: 28288, Stop: 34515, Start Num: 1

Candidate Starts for Wilde_35:

(Start: 1 @28288 has 3 MA's), (2, 28309), (3, 28321), (4, 28372), (6, 28414), (7, 28444), (8, 28510), (9, 28513), (12, 28657), (16, 28804), (17, 28906), (18, 28930), (19, 28963), (20, 29026), (22, 29110), (23, 29152), (37, 29461), (38, 29464), (39, 29494), (45, 29596), (47, 29632), (49, 29650), (50, 29653), (51, 29674), (52, 29680), (53, 29686), (57, 29734), (61, 29845), (64, 29917), (71, 30016), (76, 30196), (84, 30496), (90, 30673), (94, 30742), (97, 30799), (98, 30802), (106, 30901), (120, 31048), (128, 31138), (137, 31306), (139, 31363), (140, 31366), (142, 31396), (154, 31558), (156, 31612), (158, 31633), (162, 31711), (165, 31774), (169, 31858), (172, 31876), (174, 31900), (176, 31930), (177, 31942), (181, 31975), (185, 32002), (186, 32020), (189, 32035), (190, 32080), (191, 32092), (211, 32581), (212, 32584), (214, 32611), (216, 32617), (217, 32620), (219, 32638), (223, 32767), (226, 32800), (228, 32827), (231, 32884), (235, 32923), (237, 32935), (238, 32938), (241, 32965), (244, 32998), (246, 33004), (248, 33010), (249, 33037), (250, 33049), (252, 33067), (255, 33100), (256, 33103), (257, 33136), (259, 33190), (265, 33265), (266, 33316), (267, 33337), (271, 33382), (272, 33388), (280, 33481), (283, 33517), (284, 33523), (292, 33616), (294, 33640), (295, 33652), (297, 33661), (299, 33676), (303, 33700), (304, 33718), (309, 33817), (311, 33841), (320, 33943), (323, 33982), (324, 34030), (325, 34033), (330, 34120), (333, 34165), (334, 34183), (338, 34303), (340, 34336), (344, 34510),