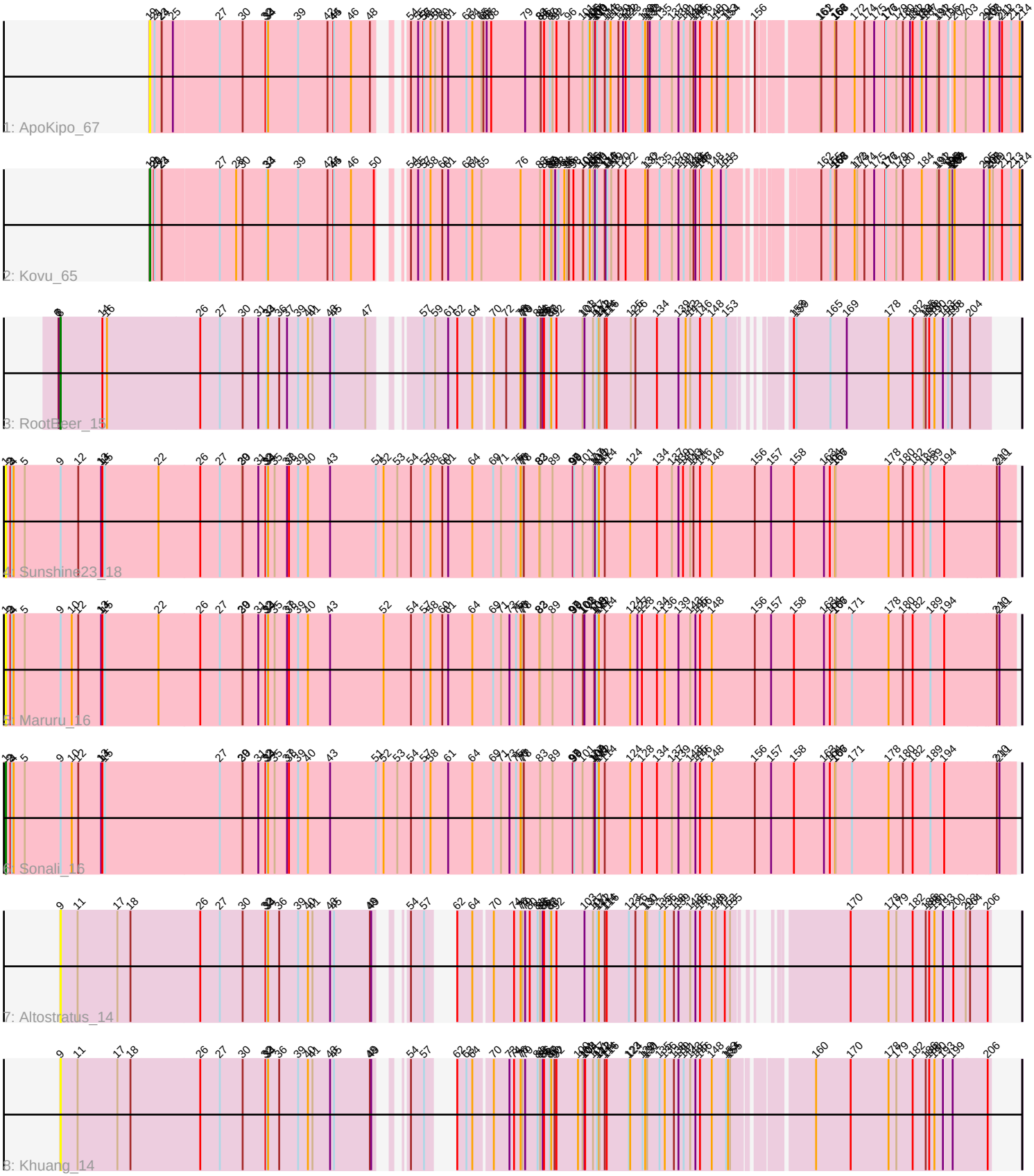
Pham 214937


1: ApoKipo_67
2: Kovu_65
3: RootBeer_13
4: Sunshine23_18
5: Maruru_16
6: Sonali_15
7: Altostratus_14
8: Khuang_14

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 214937 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214937 has 8 members, 5 are drafts.

Phages represented in each track:
• Track 1 : ApoKipo_67
• Track 2 : Kovu_65
• Track 3 : RootBeer_15
• Track 4 : Sunshine23_18
• Track 5 : Maruru_16
• Track 6 : Sonali_16
• Track 7 : Altostratus_14
• Track 8 : Khuang_14

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 1 of the 3 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Maruru_16, Sonali_16, Sunshine23_18,

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

Genes that do not have the "Most Annotated" start:
• Altostratus_14, ApoKipo_67, Khuang_14, Kovu_65, RootBeer_15,

Summary by start number:

Start 1:
• Found in 3 of 8 (37.5%) of genes in pham
• Manual Annotations of this start: 1 of 3
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Maruru_16 (FG), Sonali_16 (FG), Sunshine23_18 (FG),

Start 8:
• Found in 1 of 8 (12.5%) of genes in pham

• Manual Annotations of this start: 1 of 3
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RootBeer_15 (FA),

Start 9:
• Found in 5 of 8 (62.5%) of genes in pham
• No Manual Annotations of this start.
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Altostratus_14 (FS), Khuang_14 (FS),

Start 19:
• Found in 2 of 8 (25.0%) of genes in pham
• Manual Annotations of this start: 1 of 3
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ApoKipo_67 (AL), Kovu_65 (AL),

Summary by clusters:

There are 4 clusters represented in this pham: FA, FS, AL, FG,

Info for manual annotations of cluster AL:
•Start number 19 was manually annotated 1 time for cluster AL.

Info for manual annotations of cluster FA:
•Start number 8 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FG:
•Start number 1 was manually annotated 1 time for cluster FG.

Gene Information:

Gene: Altostratus_14 Start: 9122, Stop: 12901, Start Num: 9
Candidate Starts for Altostratus_14:
(9, 9122), (11, 9200), (17, 9383), (18, 9443), (26, 9755), (27, 9845), (30, 9950), (32, 10055), (33, 10061), (34, 10067), (36, 10118), (39, 10205), (40, 10250), (41, 10271), (43, 10352), (45, 10370), (48, 10535), (49, 10541), (54, 10595), (57, 10655), (62, 10697), (64, 10766), (70, 10844), (74, 10937), (76, 10967), (77, 10976), (79, 10988), (80, 11009), (81, 11045), (83, 11057), (85, 11069), (86, 11075), (87, 11102), (88, 11108), (92, 11132), (103, 11261), (107, 11300), (111, 11318), (112, 11327), (114, 11354), (116, 11363), (123, 11465), (126, 11495), (130, 11540), (131, 11549), (135, 11606), (136, 11630), (138, 11672), (139, 11693), (143, 11747), (145, 11771), (146, 11792), (148, 11846), (149, 11864), (152, 11906), (155, 11930), (170, 12281), (178, 12455), (179, 12491), (182, 12566), (186, 12626), (188, 12641), (190, 12662), (193, 12695), (200, 12734), (203, 12788), (204, 12806), (206, 12887),

Gene: ApoKipo_67 Start: 36687, Stop: 40424, Start Num: 19
Candidate Starts for ApoKipo_67:
(Start: 19 @36687 has 1 MA's), (21, 36705), (23, 36735), (24, 36738), (25, 36789), (27, 36996), (30, 37101), (32, 37206), (33, 37212), (34, 37218), (39, 37356), (42, 37491), (44, 37518), (45, 37521), (46, 37599), (48, 37686), (54, 37749), (55, 37782), (56, 37806), (57, 37809), (58, 37839), (59, 37860), (60, 37893), (61, 37920), (63, 38004), (64, 38031), (65, 38073), (66, 38082), (67, 38097), (68, 38118), (79,

38274), (83, 38343), (84, 38346), (86, 38361), (87, 38388), (89, 38400), (92, 38418), (96, 38475), (101, 38538), (105, 38565), (106, 38571), (107, 38586), (109, 38595), (110, 38598), (111, 38604), (114, 38640), (117, 38652), (118, 38667), (120, 38703), (121, 38724), (122, 38736), (123, 38751), (129, 38814), (130, 38826), (132, 38838), (133, 38847), (135, 38892), (137, 38949), (139, 38979), (141, 39003), (143, 39033), (144, 39048), (145, 39057), (146, 39078), (148, 39132), (150, 39156), (153, 39198), (154, 39207), (156, 39282), (161, 39519), (162, 39525), (166, 39588), (167, 39591), (168, 39594), (172, 39678), (174, 39723), (175, 39768), (176, 39819), (177, 39822), (179, 39870), (180, 39900), (181, 39933), (182, 39945), (183, 39981), (184, 39987), (187, 40005), (191, 40053), (192, 40062), (195, 40101), (202, 40116), (203, 40167), (205, 40248), (207, 40269), (208, 40275), (211, 40320), (212, 40332), (213, 40374), (214, 40413),

Gene: Khuang_14 Start: 9117, Stop: 13016, Start Num: 9
Candidate Starts for Khuang_14:
(9, 9117), (11, 9195), (17, 9378), (18, 9438), (26, 9750), (27, 9840), (30, 9945), (32, 10050), (33, 10056), (34, 10062), (36, 10113), (39, 10200), (40, 10245), (41, 10266), (43, 10347), (45, 10365), (48, 10530), (49, 10536), (54, 10590), (57, 10650), (62, 10692), (63, 10734), (64, 10761), (70, 10839), (73, 10911), (74, 10932), (76, 10962), (77, 10971), (79, 10983), (81, 11040), (83, 11052), (85, 11064), (86, 11070), (87, 11097), (88, 11103), (90, 11118), (92, 11127), (100, 11226), (101, 11247), (103, 11256), (104, 11259), (107, 11295), (111, 11313), (112, 11322), (113, 11325), (114, 11349), (116, 11358), (123, 11460), (124, 11466), (129, 11523), (130, 11535), (131, 11544), (135, 11601), (136, 11625), (138, 11667), (139, 11688), (141, 11712), (143, 11742), (145, 11766), (146, 11787), (148, 11841), (153, 11907), (154, 11916), (155, 11925), (160, 12234), (170, 12393), (178, 12567), (179, 12603), (182, 12678), (186, 12738), (188, 12753), (190, 12774), (193, 12807), (199, 12843), (206, 13002),

Gene: Kovu_65 Start: 36350, Stop: 40081, Start Num: 19
Candidate Starts for Kovu_65:
(Start: 19 @36350 has 1 MA's), (20, 36365), (21, 36368), (23, 36398), (24, 36401), (27, 36659), (28, 36734), (30, 36764), (33, 36875), (34, 36881), (39, 37019), (42, 37154), (44, 37181), (45, 37184), (46, 37262), (50, 37367), (54, 37412), (55, 37445), (57, 37472), (58, 37502), (60, 37556), (61, 37583), (63, 37667), (64, 37694), (65, 37736), (76, 37916), (83, 38006), (86, 38024), (87, 38051), (88, 38057), (89, 38063), (91, 38075), (93, 38090), (94, 38117), (95, 38129), (96, 38138), (98, 38159), (101, 38201), (102, 38204), (105, 38228), (106, 38234), (107, 38249), (109, 38258), (111, 38267), (114, 38303), (115, 38309), (117, 38315), (119, 38333), (120, 38366), (122, 38399), (130, 38489), (132, 38501), (135, 38555), (137, 38612), (139, 38642), (141, 38666), (143, 38696), (144, 38711), (145, 38720), (146, 38741), (147, 38744), (148, 38795), (151, 38837), (153, 38861), (162, 39167), (165, 39209), (166, 39230), (167, 39233), (168, 39236), (172, 39320), (173, 39332), (174, 39365), (175, 39410), (176, 39461), (177, 39464), (179, 39512), (180, 39542), (184, 39629), (191, 39695), (192, 39704), (195, 39743), (196, 39749), (197, 39758), (199, 39764), (201, 39770), (202, 39773), (205, 39905), (207, 39926), (208, 39932), (209, 39947), (212, 39989), (213, 40031), (214, 40070),

Gene: Maruru_16 Start: 12620, Stop: 17245, Start Num: 1
Candidate Starts for Maruru_16:
(Start: 1 @12620 has 1 MA's), (2, 12641), (3, 12647), (4, 12656), (5, 12707), (9, 12872), (10, 12923), (12, 12953), (13, 13058), (14, 13064), (15, 13076), (22, 13322), (26, 13511), (27, 13601), (29, 13703), (30, 13706), (31, 13778), (32, 13811), (33, 13817), (34, 13823), (35, 13853), (37, 13910), (38, 13919), (39, 13961), (40, 14006), (43, 14108), (52, 14354), (54, 14480), (57, 14540), (58, 14570), (60, 14624), (61, 14651), (64, 14762), (69, 14858), (71, 14894), (73, 14933), (75, 14963), (76, 14984), (77, 14993), (78, 14999), (82, 15071), (83, 15074), (89, 15131), (97, 15224), (98, 15227), (99, 15230), (101, 15269), (102, 15272), (103, 15278), (108, 15323), (109, 15326), (111, 15335), (112, 15344), (114, 15371), (124, 15488), (127, 15521), (128, 15542), (134, 15611), (136, 15647), (139, 15710), (143, 15764), (145, 15788), (146, 15809), (148, 15863), (156, 16061), (157, 16136), (158, 16241), (163, 16379), (164, 16406), (166, 16430), (167, 16433), (171, 16508), (178, 16676), (180, 16742), (182, 16787), (189, 16868), (194, 16931), (210, 17165), (211, 17177),

Gene: RootBeer_15 Start: 9305, Stop: 13243, Start Num: 8
Candidate Starts for RootBeer_15:
(6, 9296), (7, 9299), (Start: 8 @9305 has 1 MA's), (14, 9497), (16, 9518), (26, 9938), (27, 10028), (30, 10133), (31, 10205), (33, 10244), (34, 10250), (36, 10301), (37, 10337), (39, 10388), (40, 10433), (41, 10454), (43, 10535), (45, 10553), (47, 10697), (57, 10838), (59, 10889), (61, 10949), (62, 10991), (64, 11060), (70, 11138), (72, 11195), (76, 11261), (77, 11270), (78, 11276), (79, 11282), (81, 11339), (84, 11354), (85, 11363), (86, 11369), (87, 11396), (88, 11402), (92, 11426), (101, 11546), (103, 11555), (107, 11594), (111, 11612), (112, 11621), (113, 11624), (114, 11648), (116, 11657), (125, 11768), (126, 11789), (134, 11888), (139, 11987), (142, 12020), (143, 12041), (146, 12086), (148, 12140), (153, 12206), (158, 12362), (159, 12374), (165, 12530), (169, 12605), (178, 12797), (182, 12908), (185, 12959), (186, 12968), (188, 12983), (190, 13004), (193, 13037), (195, 13058), (198, 13067), (204, 13148),

Gene: Sonali_16 Start: 13198, Stop: 17811, Start Num: 1
Candidate Starts for Sonali_16:
(Start: 1 @13198 has 1 MA's), (2, 13219), (3, 13225), (4, 13234), (5, 13285), (9, 13450), (10, 13501), (12, 13531), (13, 13636), (14, 13642), (15, 13654), (27, 14179), (29, 14281), (30, 14284), (31, 14356), (32, 14389), (33, 14395), (34, 14401), (35, 14431), (37, 14488), (38, 14497), (39, 14539), (40, 14584), (43, 14686), (51, 14896), (52, 14920), (53, 14983), (54, 15046), (57, 15106), (58, 15136), (61, 15217), (64, 15328), (69, 15424), (71, 15460), (73, 15499), (75, 15529), (76, 15550), (77, 15559), (78, 15565), (83, 15640), (89, 15697), (97, 15790), (98, 15793), (99, 15796), (101, 15835), (107, 15883), (108, 15889), (109, 15892), (111, 15901), (112, 15910), (114, 15937), (124, 16054), (128, 16108), (134, 16177), (137, 16246), (139, 16276), (143, 16330), (145, 16354), (146, 16375), (148, 16429), (156, 16627), (157, 16702), (158, 16807), (163, 16945), (164, 16972), (166, 16996), (167, 16999), (171, 17074), (178, 17242), (180, 17308), (182, 17353), (189, 17434), (194, 17497), (210, 17731), (211, 17743),

Gene: Sunshine23_18 Start: 13210, Stop: 17823, Start Num: 1
Candidate Starts for Sunshine23_18:
(Start: 1 @13210 has 1 MA's), (2, 13231), (3, 13237), (4, 13246), (5, 13297), (9, 13462), (12, 13543), (13, 13648), (14, 13654), (15, 13666), (22, 13912), (26, 14101), (27, 14191), (29, 14293), (30, 14296), (31, 14368), (32, 14401), (33, 14407), (34, 14413), (35, 14443), (37, 14500), (38, 14509), (39, 14551), (40, 14596), (43, 14698), (51, 14908), (52, 14932), (53, 14995), (54, 15058), (57, 15118), (58, 15148), (60, 15202), (61, 15229), (64, 15340), (69, 15436), (71, 15472), (75, 15541), (76, 15562), (77, 15571), (78, 15577), (82, 15649), (83, 15652), (89, 15709), (97, 15802), (98, 15805), (99, 15808), (101, 15847), (107, 15895), (109, 15904), (111, 15913), (112, 15922), (114, 15949), (124, 16066), (134, 16189), (137, 16258), (139, 16288), (140, 16309), (143, 16342), (144, 16357), (146, 16387), (148, 16441), (156, 16639), (157, 16714), (158, 16819), (163, 16957), (164, 16984), (166, 17008), (167, 17011), (178, 17254), (180, 17320), (182, 17365), (185, 17416), (189, 17446), (194, 17509), (210, 17743), (211, 17755),