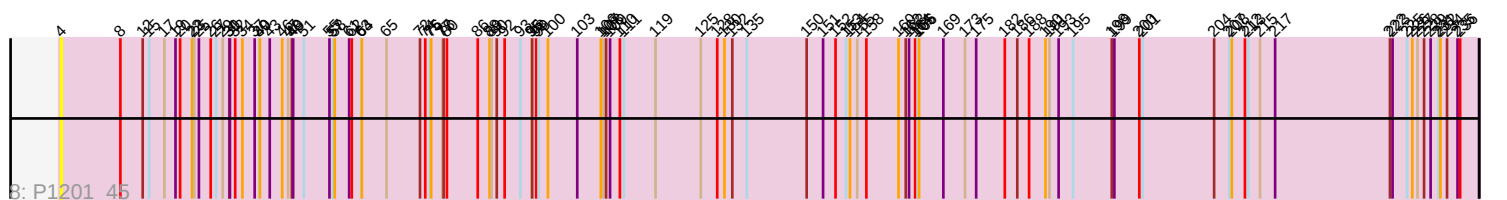
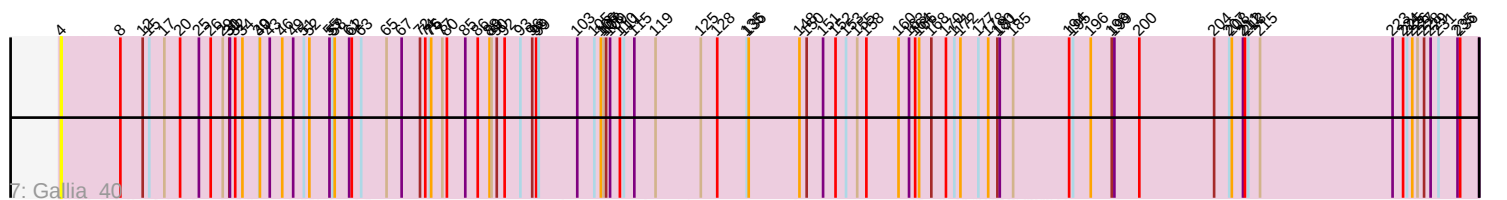
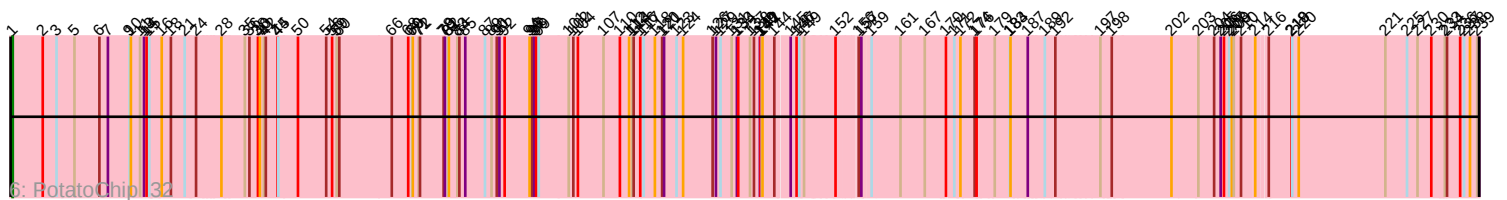
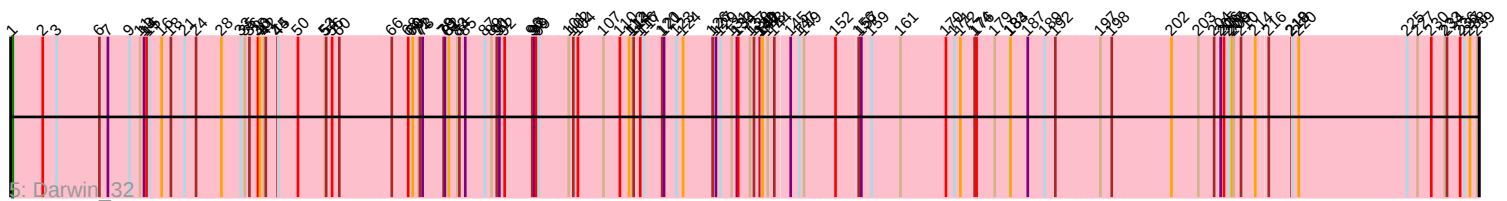
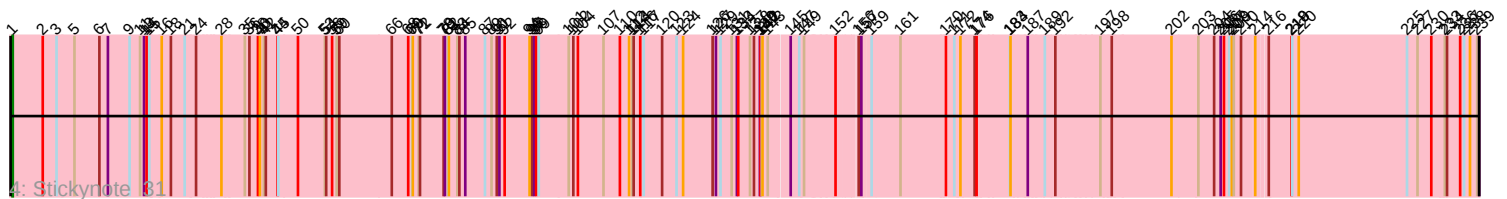
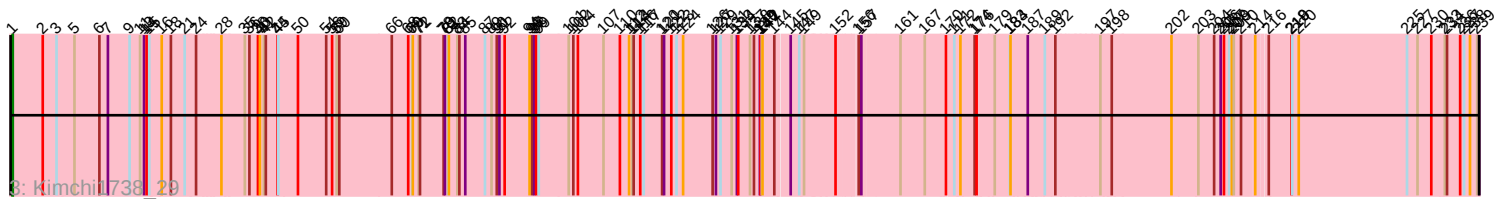
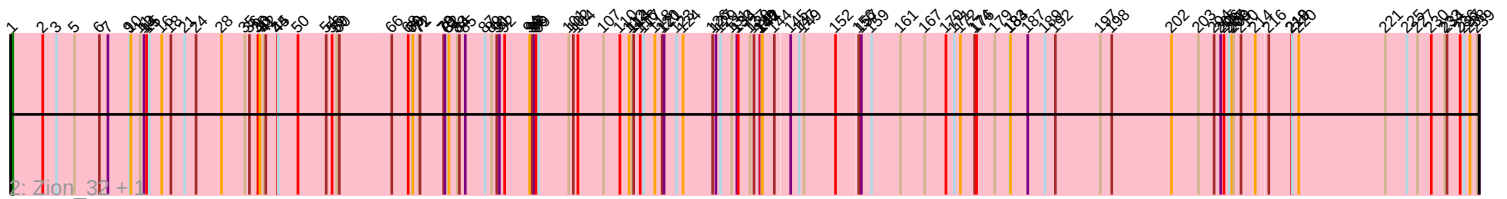
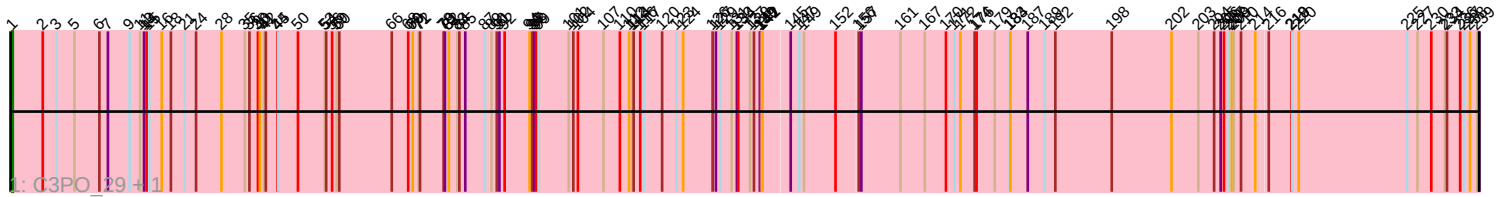


Pham 327711



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 327711 Report

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

Pham number 327711 has 10 members, 2 are drafts.

Phages represented in each track:

- Track 1 : C3PO_29, Cruella_29
- Track 2 : Zion_32, PeteyPab_31
- Track 3 : Kimchi1738_29
- Track 4 : Stickynote_31
- Track 5 : Darwin_32
- Track 6 : PotatoChip_32
- Track 7 : Gallia_40
- Track 8 : P1201_45

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 8 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- C3PO_29, Cruella_29, Darwin_32, Kimchi1738_29, PeteyPab_31, PotatoChip_32, Stickynote_31, Zion_32,

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

-

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

- Gallia_40, P1201_45,

Summary by start number:

Start 1:

- Found in 8 of 10 (80.0%) of genes in pham
- Manual Annotations of this start: 8 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: C3PO_29 (EN), Cruella_29 (EN), Darwin_32 (EN), Kimchi1738_29 (EN), PeteyPab_31 (EN), PotatoChip_32 (EN), Stickynote_31 (EN), Zion_32 (EN),

Start 4:

- Found in 2 of 10 (20.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gallia_40 (singleton), P1201_45 (singleton),

Summary by clusters:

There are 2 clusters represented in this pham: singleton, EN,

Info for manual annotations of cluster EN:

- Start number 1 was manually annotated 8 times for cluster EN.

Gene Information:

Gene: C3PO_29 Start: 21183, Stop: 27614, Start Num: 1

Candidate Starts for C3PO_29:

(Start: 1 @21183 has 8 MA's), (2, 21321), (3, 21384), (5, 21465), (6, 21579), (7, 21618), (9, 21717), (11, 21765), (13, 21783), (14, 21795), (15, 21807), (16, 21861), (18, 21903), (21, 21966), (24, 22017), (28, 22128), (35, 22233), (36, 22254), (38, 22293), (40, 22302), (41, 22320), (42, 22329), (44, 22383), (45, 22386), (50, 22473), (53, 22596), (54, 22602), (56, 22629), (59, 22650), (60, 22662), (66, 22899), (68, 22974), (69, 22992), (70, 22995), (71, 23022), (72, 23028), (78, 23136), (79, 23142), (81, 23157), (82, 23160), (83, 23199), (84, 23208), (85, 23235), (87, 23325), (89, 23355), (90, 23379), (91, 23391), (92, 23415), (94, 23529), (96, 23541), (97, 23550), (98, 23559), (99, 23571), (101, 23706), (102, 23727), (104, 23748), (107, 23865), (110, 23940), (112, 23982), (113, 23997), (114, 24003), (116, 24033), (117, 24048), (120, 24132), (123, 24198), (124, 24228), (126, 24363), (127, 24378), (129, 24399), (131, 24450), (133, 24474), (134, 24480), (137, 24534), (138, 24552), (139, 24579), (140, 24582), (141, 24588), (142, 24591), (145, 24702), (147, 24741), (149, 24762), (152, 24897), (156, 24963), (157, 24975), (161, 25131), (167, 25242), (170, 25335), (171, 25359), (172, 25386), (174, 25446), (176, 25455), (179, 25530), (183, 25599), (184, 25602), (187, 25671), (189, 25728), (192, 25770), (198, 25992), (202, 26262), (203, 26376), (204, 26448), (205, 26478), (206, 26493), (207, 26517), (208, 26529), (209, 26538), (210, 26571), (214, 26625), (216, 26661), (218, 26763), (219, 26766), (220, 26796), (225, 27291), (227, 27339), (230, 27402), (233, 27462), (234, 27468), (236, 27528), (237, 27546), (238, 27573), (239, 27606),

Gene: Cruella_29 Start: 21183, Stop: 27614, Start Num: 1

Candidate Starts for Cruella_29:

(Start: 1 @21183 has 8 MA's), (2, 21321), (3, 21384), (5, 21465), (6, 21579), (7, 21618), (9, 21717), (11, 21765), (13, 21783), (14, 21795), (15, 21807), (16, 21861), (18, 21903), (21, 21966), (24, 22017), (28, 22128), (35, 22233), (36, 22254), (38, 22293), (40, 22302), (41, 22320), (42, 22329), (44, 22383), (45, 22386), (50, 22473), (53, 22596), (54, 22602), (56, 22629), (59, 22650), (60, 22662), (66, 22899), (68, 22974), (69, 22992), (70, 22995), (71, 23022), (72, 23028), (78, 23136), (79, 23142), (81, 23157), (82, 23160), (83, 23199), (84, 23208), (85, 23235), (87, 23325), (89, 23355), (90, 23379), (91, 23391), (92, 23415), (94, 23529), (96, 23541), (97, 23550), (98, 23559), (99, 23571), (101, 23706), (102, 23727), (104, 23748), (107, 23865), (110, 23940), (112, 23982), (113, 23997), (114, 24003), (116, 24033), (117, 24048), (120, 24132), (123, 24198), (124, 24228), (126, 24363), (127, 24378), (129, 24399), (131, 24450), (133, 24474), (134, 24480), (137, 24534), (138, 24552), (139, 24579), (140, 24582), (141, 24588), (142, 24591), (145, 24702), (147, 24741), (149, 24762), (152, 24897), (156, 24963), (157, 24975), (161, 25131), (167, 25242), (170, 25335), (171, 25359), (172, 25386), (174, 25446), (176, 25455), (179, 25530), (183, 25599), (184, 25602), (187, 25671), (189, 25728), (192,

25770), (198, 25992), (202, 26262), (203, 26376), (204, 26448), (205, 26478), (206, 26493), (207, 26517), (208, 26529), (209, 26538), (210, 26571), (214, 26625), (216, 26661), (218, 26763), (219, 26766), (220, 26796), (225, 27291), (227, 27339), (230, 27402), (233, 27462), (234, 27468), (236, 27528), (237, 27546), (238, 27573), (239, 27606),

Gene: Darwin_32 Start: 20868, Stop: 27299, Start Num: 1

Candidate Starts for Darwin_32:

(Start: 1 @20868 has 8 MA's), (2, 21006), (3, 21069), (6, 21264), (7, 21303), (9, 21402), (11, 21450), (13, 21468), (14, 21480), (15, 21492), (16, 21546), (18, 21588), (21, 21651), (24, 21702), (28, 21813), (33, 21900), (35, 21918), (36, 21939), (38, 21978), (40, 21987), (41, 22005), (42, 22014), (44, 22068), (45, 22071), (50, 22158), (53, 22281), (54, 22287), (56, 22314), (60, 22347), (66, 22584), (68, 22659), (69, 22677), (70, 22680), (71, 22707), (72, 22713), (73, 22725), (78, 22821), (79, 22827), (81, 22842), (82, 22845), (83, 22884), (84, 22893), (85, 22920), (87, 23010), (89, 23040), (90, 23064), (91, 23076), (92, 23100), (96, 23226), (97, 23235), (98, 23244), (99, 23256), (101, 23391), (102, 23412), (104, 23433), (107, 23550), (110, 23625), (112, 23667), (113, 23682), (114, 23688), (116, 23718), (117, 23733), (120, 23817), (121, 23826), (123, 23883), (124, 23913), (126, 24048), (127, 24063), (129, 24084), (131, 24135), (133, 24159), (134, 24165), (137, 24219), (138, 24237), (139, 24264), (140, 24267), (141, 24273), (142, 24276), (143, 24300), (144, 24330), (145, 24387), (147, 24426), (149, 24447), (152, 24582), (156, 24648), (157, 24660), (159, 24693), (161, 24816), (170, 25020), (171, 25044), (172, 25071), (174, 25131), (176, 25140), (179, 25215), (183, 25284), (184, 25287), (187, 25356), (189, 25413), (192, 25455), (197, 25632), (198, 25677), (202, 25947), (203, 26061), (204, 26133), (205, 26163), (206, 26178), (207, 26202), (208, 26214), (209, 26223), (210, 26256), (214, 26310), (216, 26346), (218, 26448), (219, 26451), (220, 26481), (225, 26976), (227, 27024), (230, 27087), (233, 27147), (234, 27153), (236, 27213), (237, 27231), (238, 27258), (239, 27291),

Gene: Gallia_40 Start: 27594, Stop: 33863, Start Num: 4

Candidate Starts for Gallia_40:

(4, 27594), (8, 27849), (12, 27945), (15, 27975), (17, 28041), (20, 28110), (25, 28194), (26, 28248), (29, 28302), (30, 28332), (31, 28335), (32, 28359), (34, 28389), (39, 28461), (40, 28464), (43, 28509), (46, 28566), (49, 28614), (51, 28653), (52, 28677), (55, 28761), (57, 28773), (58, 28782), (61, 28848), (62, 28860), (63, 28902), (65, 29004), (67, 29073), (72, 29157), (74, 29181), (75, 29202), (76, 29208), (77, 29259), (80, 29280), (85, 29364), (86, 29421), (88, 29475), (89, 29484), (90, 29508), (92, 29544), (93, 29616), (96, 29670), (98, 29688), (99, 29700), (103, 29874), (105, 29952), (106, 29982), (107, 29994), (108, 30006), (109, 30024), (110, 30069), (111, 30087), (115, 30135), (119, 30231), (125, 30432), (128, 30507), (135, 30642), (136, 30651), (148, 30882), (150, 30915), (151, 30990), (152, 31047), (153, 31095), (155, 31146), (158, 31188), (160, 31335), (163, 31383), (164, 31410), (166, 31428), (168, 31482), (170, 31542), (171, 31566), (172, 31593), (177, 31653), (178, 31692), (180, 31722), (181, 31731), (185, 31779), (194, 31992), (195, 32010), (196, 32091), (198, 32187), (199, 32199), (200, 32313), (204, 32655), (207, 32724), (208, 32736), (211, 32787), (212, 32796), (213, 32811), (215, 32865), (223, 33471), (224, 33519), (225, 33537), (226, 33561), (227, 33585), (228, 33615), (229, 33645), (231, 33681), (235, 33768), (236, 33780),

Gene: Kimchi1738_29 Start: 20271, Stop: 26702, Start Num: 1

Candidate Starts for Kimchi1738_29:

(Start: 1 @20271 has 8 MA's), (2, 20409), (3, 20472), (5, 20553), (6, 20667), (7, 20706), (9, 20805), (11, 20853), (13, 20871), (14, 20883), (15, 20895), (16, 20949), (18, 20991), (21, 21054), (24, 21105), (28, 21216), (35, 21321), (36, 21342), (38, 21381), (40, 21390), (41, 21408), (42, 21417), (44, 21471), (45, 21474), (50, 21561), (54, 21690), (56, 21717), (59, 21738), (60, 21750), (66, 21987), (68, 22062), (69, 22080), (70, 22083), (71, 22110), (72, 22116), (78, 22224), (79, 22230), (81, 22245), (82, 22248), (83, 22287), (84, 22296), (85, 22323), (87, 22413), (89, 22443), (90, 22467), (91, 22479), (92, 22503), (94, 22617), (96, 22629), (97, 22638), (98, 22647), (99, 22659), (101, 22794), (102, 22815), (104, 22836), (107, 22953), (110, 23028), (112, 23070), (113, 23085), (114, 23091), (116, 23121), (117, 23136), (120, 23220), (121, 23229), (122, 23262), (123, 23286), (124, 23316), (126, 23451), (127,

23466), (129, 23487), (131, 23538), (133, 23562), (134, 23568), (137, 23622), (138, 23640), (139, 23667), (140, 23670), (141, 23676), (142, 23679), (144, 23733), (145, 23790), (147, 23829), (149, 23850), (152, 23985), (156, 24051), (157, 24063), (161, 24219), (167, 24330), (170, 24423), (171, 24447), (172, 24474), (174, 24534), (176, 24543), (179, 24618), (183, 24687), (184, 24690), (187, 24759), (189, 24816), (192, 24858), (197, 25035), (198, 25080), (202, 25350), (203, 25464), (204, 25536), (205, 25566), (206, 25581), (207, 25605), (208, 25617), (209, 25626), (210, 25659), (214, 25713), (216, 25749), (218, 25851), (219, 25854), (220, 25884), (225, 26379), (227, 26427), (230, 26490), (233, 26550), (234, 26556), (236, 26616), (237, 26634), (238, 26661), (239, 26694),

Gene: P1201_45 Start: 27164, Stop: 33547, Start Num: 4

Candidate Starts for P1201_45:

(4, 27164), (8, 27419), (12, 27515), (15, 27545), (17, 27611), (19, 27659), (20, 27680), (22, 27734), (23, 27743), (25, 27764), (26, 27818), (27, 27842), (29, 27872), (30, 27902), (31, 27905), (32, 27929), (34, 27959), (37, 28010), (39, 28031), (40, 28034), (43, 28079), (46, 28136), (47, 28163), (48, 28178), (49, 28184), (51, 28223), (55, 28331), (57, 28343), (58, 28352), (61, 28418), (62, 28430), (63, 28472), (64, 28475), (65, 28574), (72, 28727), (74, 28751), (75, 28772), (76, 28778), (77, 28829), (78, 28835), (80, 28850), (86, 28991), (88, 29045), (89, 29054), (90, 29078), (92, 29114), (93, 29186), (95, 29237), (96, 29240), (98, 29258), (99, 29270), (100, 29312), (103, 29444), (106, 29552), (107, 29564), (108, 29576), (109, 29594), (110, 29639), (111, 29657), (119, 29801), (125, 30002), (128, 30077), (130, 30110), (132, 30146), (135, 30212), (150, 30485), (151, 30560), (152, 30617), (153, 30665), (154, 30683), (155, 30716), (158, 30758), (160, 30905), (162, 30938), (163, 30953), (164, 30980), (165, 30992), (166, 30998), (169, 31106), (173, 31205), (175, 31256), (182, 31385), (186, 31442), (188, 31496), (190, 31571), (191, 31589), (193, 31631), (195, 31697), (198, 31871), (199, 31883), (200, 31997), (201, 32012), (204, 32339), (207, 32408), (208, 32420), (212, 32480), (213, 32495), (215, 32549), (217, 32618), (222, 33143), (223, 33155), (225, 33221), (226, 33245), (227, 33269), (228, 33299), (229, 33329), (231, 33365), (232, 33374), (234, 33404), (235, 33452), (236, 33464),

Gene: PeteyPab_31 Start: 22028, Stop: 28459, Start Num: 1

Candidate Starts for PeteyPab_31:

(Start: 1 @22028 has 8 MA's), (2, 22166), (3, 22229), (5, 22310), (6, 22424), (7, 22463), (9, 22562), (10, 22568), (11, 22610), (13, 22628), (14, 22640), (15, 22652), (16, 22706), (18, 22748), (21, 22811), (24, 22862), (28, 22973), (35, 23078), (36, 23099), (38, 23138), (40, 23147), (41, 23165), (42, 23174), (44, 23228), (45, 23231), (50, 23318), (54, 23447), (56, 23474), (59, 23495), (60, 23507), (66, 23744), (68, 23819), (69, 23837), (70, 23840), (71, 23867), (72, 23873), (78, 23981), (79, 23987), (81, 24002), (82, 24005), (83, 24044), (84, 24053), (85, 24080), (87, 24170), (89, 24200), (90, 24224), (91, 24236), (92, 24260), (94, 24374), (96, 24386), (97, 24395), (98, 24404), (99, 24416), (101, 24551), (102, 24572), (104, 24593), (107, 24710), (110, 24785), (112, 24827), (113, 24842), (114, 24848), (116, 24878), (117, 24893), (118, 24944), (120, 24977), (121, 24986), (123, 25043), (124, 25073), (126, 25208), (127, 25223), (129, 25244), (131, 25295), (133, 25319), (134, 25325), (137, 25379), (138, 25397), (139, 25424), (140, 25427), (141, 25433), (142, 25436), (144, 25490), (145, 25547), (147, 25586), (149, 25607), (152, 25742), (156, 25808), (157, 25820), (159, 25853), (161, 25976), (167, 26087), (170, 26180), (171, 26204), (172, 26231), (174, 26291), (176, 26300), (179, 26375), (183, 26444), (184, 26447), (187, 26516), (189, 26573), (192, 26615), (197, 26792), (198, 26837), (202, 27107), (203, 27221), (204, 27293), (205, 27323), (206, 27338), (207, 27362), (208, 27374), (209, 27383), (210, 27416), (214, 27470), (216, 27506), (218, 27608), (219, 27611), (220, 27641), (221, 28037), (225, 28136), (227, 28184), (230, 28247), (233, 28307), (234, 28313), (236, 28373), (237, 28391), (238, 28418), (239, 28451),

Gene: PotatoChip_32 Start: 22030, Stop: 28461, Start Num: 1

Candidate Starts for PotatoChip_32:

(Start: 1 @22030 has 8 MA's), (2, 22168), (3, 22231), (5, 22312), (6, 22426), (7, 22465), (9, 22564), (10, 22570), (11, 22612), (13, 22630), (14, 22642), (15, 22654), (16, 22708), (18, 22750), (21, 22813), (24, 22864), (28, 22975), (35, 23080), (36, 23101), (38, 23140), (40, 23149), (41, 23167), (42, 23176),

(44, 23230), (45, 23233), (50, 23320), (54, 23449), (56, 23476), (59, 23497), (60, 23509), (66, 23746), (68, 23821), (69, 23839), (70, 23842), (71, 23869), (72, 23875), (78, 23983), (79, 23989), (81, 24004), (82, 24007), (83, 24046), (84, 24055), (85, 24082), (87, 24172), (89, 24202), (90, 24226), (91, 24238), (92, 24262), (94, 24376), (96, 24388), (97, 24397), (98, 24406), (99, 24418), (101, 24553), (102, 24574), (104, 24595), (107, 24712), (110, 24787), (112, 24829), (113, 24844), (114, 24850), (116, 24880), (117, 24895), (118, 24946), (120, 24979), (121, 24988), (123, 25045), (124, 25075), (126, 25210), (127, 25225), (129, 25246), (131, 25297), (133, 25321), (134, 25327), (137, 25381), (138, 25399), (139, 25426), (140, 25429), (141, 25435), (142, 25438), (144, 25492), (145, 25549), (146, 25576), (147, 25588), (149, 25609), (152, 25744), (156, 25810), (157, 25822), (159, 25855), (161, 25978), (167, 26089), (170, 26182), (171, 26206), (172, 26233), (174, 26293), (176, 26302), (179, 26377), (183, 26446), (184, 26449), (187, 26518), (189, 26575), (192, 26617), (197, 26794), (198, 26839), (202, 27109), (203, 27223), (204, 27295), (205, 27325), (206, 27340), (207, 27364), (208, 27376), (209, 27385), (210, 27418), (214, 27472), (216, 27508), (218, 27610), (219, 27613), (220, 27643), (221, 28039), (225, 28138), (227, 28186), (230, 28249), (233, 28309), (234, 28315), (236, 28375), (237, 28393), (238, 28420), (239, 28453),

Gene: Stickynote_31 Start: 21450, Stop: 27881, Start Num: 1

Candidate Starts for Stickynote_31:

(Start: 1 @21450 has 8 MA's), (2, 21588), (3, 21651), (5, 21732), (6, 21846), (7, 21885), (9, 21984), (11, 22032), (13, 22050), (14, 22062), (15, 22074), (16, 22128), (18, 22170), (21, 22233), (24, 22284), (28, 22395), (35, 22500), (36, 22521), (38, 22560), (40, 22569), (41, 22587), (42, 22596), (44, 22650), (45, 22653), (50, 22740), (53, 22863), (54, 22869), (56, 22896), (59, 22917), (60, 22929), (66, 23166), (68, 23241), (69, 23259), (70, 23262), (71, 23289), (72, 23295), (78, 23403), (79, 23409), (81, 23424), (82, 23427), (83, 23466), (84, 23475), (85, 23502), (87, 23592), (89, 23622), (90, 23646), (91, 23658), (92, 23682), (94, 23796), (96, 23808), (97, 23817), (98, 23826), (99, 23838), (101, 23973), (102, 23994), (104, 24015), (107, 24132), (110, 24207), (112, 24249), (113, 24264), (114, 24270), (116, 24300), (117, 24315), (120, 24399), (123, 24465), (124, 24495), (126, 24630), (127, 24645), (129, 24666), (131, 24717), (133, 24741), (134, 24747), (137, 24801), (138, 24819), (139, 24846), (140, 24849), (141, 24855), (142, 24858), (143, 24882), (145, 24969), (147, 25008), (149, 25029), (152, 25164), (156, 25230), (157, 25242), (159, 25275), (161, 25398), (170, 25602), (171, 25626), (172, 25653), (174, 25713), (176, 25722), (183, 25866), (184, 25869), (187, 25938), (189, 25995), (192, 26037), (197, 26214), (198, 26259), (202, 26529), (203, 26643), (204, 26715), (205, 26745), (206, 26760), (207, 26784), (208, 26796), (209, 26805), (210, 26838), (214, 26892), (216, 26928), (218, 27030), (219, 27033), (220, 27063), (225, 27558), (227, 27606), (230, 27669), (233, 27729), (234, 27735), (236, 27795), (237, 27813), (238, 27840), (239, 27873),

Gene: Zion_32 Start: 22028, Stop: 28459, Start Num: 1

Candidate Starts for Zion_32:

(Start: 1 @22028 has 8 MA's), (2, 22166), (3, 22229), (5, 22310), (6, 22424), (7, 22463), (9, 22562), (10, 22568), (11, 22610), (13, 22628), (14, 22640), (15, 22652), (16, 22706), (18, 22748), (21, 22811), (24, 22862), (28, 22973), (35, 23078), (36, 23099), (38, 23138), (40, 23147), (41, 23165), (42, 23174), (44, 23228), (45, 23231), (50, 23318), (54, 23447), (56, 23474), (59, 23495), (60, 23507), (66, 23744), (68, 23819), (69, 23837), (70, 23840), (71, 23867), (72, 23873), (78, 23981), (79, 23987), (81, 24002), (82, 24005), (83, 24044), (84, 24053), (85, 24080), (87, 24170), (89, 24200), (90, 24224), (91, 24236), (92, 24260), (94, 24374), (96, 24386), (97, 24395), (98, 24404), (99, 24416), (101, 24551), (102, 24572), (104, 24593), (107, 24710), (110, 24785), (112, 24827), (113, 24842), (114, 24848), (116, 24878), (117, 24893), (118, 24944), (120, 24977), (121, 24986), (123, 25043), (124, 25073), (126, 25208), (127, 25223), (129, 25244), (131, 25295), (133, 25319), (134, 25325), (137, 25379), (138, 25397), (139, 25424), (140, 25427), (141, 25433), (142, 25436), (144, 25490), (145, 25547), (147, 25586), (149, 25607), (152, 25742), (156, 25808), (157, 25820), (159, 25853), (161, 25976), (167, 26087), (170, 26180), (171, 26204), (172, 26231), (174, 26291), (176, 26300), (179, 26375), (183, 26444), (184, 26447), (187, 26516), (189, 26573), (192, 26615), (197, 26792), (198, 26837), (202, 27107), (203, 27221), (204, 27293), (205, 27323), (206, 27338), (207, 27362), (208, 27374), (209,

27383), (210, 27416), (214, 27470), (216, 27506), (218, 27608), (219, 27611), (220, 27641), (221, 28037), (225, 28136), (227, 28184), (230, 28247), (233, 28307), (234, 28313), (236, 28373), (237, 28391), (238, 28418), (239, 28451),