

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 185607 Report

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

Pham number 185607 has 57 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Keiki_14, Cota_14
- Track 2 : P100.1_14
- Track 3 : P107A_14
- Track 4 : Kubed_14
- Track 5 : PHL071N05_14
- Track 6 : Procrass1_14
- Track 7 : Lauchelly_14
- Track 8 : Attacne_14
- Track 9 : P106L_14, P106M_14, P106I_14, P106C_14, P106A_14
- Track 10 : PAS50_14
- Track 11 : Moyashi_14
- Track 12 : PHL114L00_14
- Track 13 : Enochoraptor_14
- Track 14 : ATCC29399BC_14, P107C_14
- Track 15 : P101A_14
- Track 16 : PA6_14
- Track 17 : P100D_14
- Track 18 : P1.1_14
- Track 19 : P108C_14
- Track 20 : PAD20_14
- Track 21 : Stormborn_14
- Track 22 : MEAK_14
- Track 23 : P104A_14
- Track 24 : PHL113M01_14
- Track 25 : Ouroboros_14
- Track 26 : LilBandit_14
- Track 27 : ATCC29399BT_14
- Track 28 : PHL067M10_14
- Track 29 : QueenBey_14
- Track 30 : SKKY_14
- Track 31 : Solid_14
- Track 32 : P100A_14
- Track 33 : PHL037M02_14
- Track 34 : Pirate_14
- Track 35 : Aquarius_14
- Track 36 : Leviosa_14
- Track 37 : PHL010M04_14

- Track 38 : P104B_14
- Track 39 : Wizzo_14
- Track 40 : P9.1_14
- Track 41 : Supernova_14
- Track 42 : BruceLethal_14
- Track 43 : P105_14
- Track 44 : PHL112N00_14
- Track 45 : P14.4_14
- Track 46 : PHL060L00_14
- Track 47 : Enoki_14
- Track 48 : Rileysaurus_14
- Track 49 : MrAK_14
- Track 50 : PHL111M01_14
- Track 51 : DrParker_14

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 43 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ATCC29399BC_14, ATCC29399BT_14, Aquarius_14, Attacne_14, BruceLethal_14, Cota_14, DrParker_14, Enochoraptor_14, Enoki_14, Keiki_14, Kubed_14, Lauchelly_14, Leviosa_14, LilBandit_14, MEAK_14, Moyashi_14, MrAK_14, Ouroboros_14, P1.1_14, P100.1_14, P100A_14, P100D_14, P101A_14, P104A_14, P104B_14, P105_14, P106A_14, P106C_14, P106I_14, P106L_14, P106M_14, P107A_14, P107C_14, P108C_14, P14.4_14, P9.1_14, PA6_14, PAD20_14, PAS50_14, PHL010M04_14, PHL037M02_14, PHL060L00_14, PHL067M10_14, PHL071N05_14, PHL111M01_14, PHL112N00_14, PHL113M01_14, PHL114L00_14, Pirate_14, Procrass1_14, QueenBey_14, Rileysaurus_14, SKKY_14, Solid_14, Stormborn_14, Supernova_14, Wizzo_14,

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

-

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

-

Summary by start number:

Start 9:

- Found in 57 of 57 (100.0%) of genes in pham
- Manual Annotations of this start: 43 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ATCC29399BC_14 (BU), ATCC29399BT_14 (BU), Aquarius_14 (BU), Attacne_14 (BU), BruceLethal_14 (BU), Cota_14 (BU), DrParker_14 (BU), Enochoraptor_14 (BU), Enoki_14 (BU), Keiki_14 (BU), Kubed_14 (BU), Lauchelly_14 (BU), Leviosa_14 (BU), LilBandit_14 (BU), MEAK_14 (BU), Moyashi_14 (BU), MrAK_14 (BU), Ouroboros_14 (BU), P1.1_14 (BU), P100.1_14 (BU), P100A_14 (BU), P100D_14 (BU), P101A_14 (BU), P104A_14

(BU), P104B_14 (BU), P105_14 (BU), P106A_14 (BU), P106C_14 (BU), P106I_14 (BU), P106L_14 (BU), P106M_14 (BU), P107A_14 (BU), P107C_14 (BU), P108C_14 (BU), P14.4_14 (BU), P9.1_14 (BU), PA6_14 (BU), PAD20_14 (BU), PAS50_14 (BU), PHL010M04_14 (BU), PHL037M02_14 (BU), PHL060L00_14 (BU), PHL067M10_14 (BU), PHL071N05_14 (BU), PHL111M01_14 (BU), PHL112N00_14 (BU), PHL113M01_14 (BU), PHL114L00_14 (BU), Pirate_14 (BU), Procrass1_14 (BU), QueenBey_14 (BU), Rileysaurus_14 (BU), SKKY_14 (BU), Solid_14 (BU), Stormborn_14 (BU), Supernova_14 (BU), Wizzo_14 (BU),

Summary by clusters:

There is one cluster represented in this pham: BU

Info for manual annotations of cluster BU:

•Start number 9 was manually annotated 43 times for cluster BU.

Gene Information:

Gene: ATCC29399BC_14 Start: 8502, Stop: 11267, Start Num: 9

Candidate Starts for ATCC29399BC_14:

(Start: 9 @8502 has 43 MA's), (10, 8529), (11, 8535), (12, 8547), (13, 8556), (16, 8589), (17, 8592), (18, 8622), (19, 8637), (20, 8643), (21, 8649), (22, 8664), (23, 8667), (25, 8715), (26, 8745), (27, 8772), (28, 8781), (29, 8814), (30, 8835), (31, 8856), (32, 8886), (33, 8901), (34, 8919), (35, 8928), (36, 8931), (37, 8949), (39, 9006), (40, 9021), (41, 9036), (42, 9039), (43, 9051), (45, 9066), (46, 9069), (47, 9075), (49, 9111), (50, 9120), (51, 9123), (52, 9165), (53, 9177), (54, 9222), (57, 9267), (59, 9288), (61, 9309), (63, 9330), (64, 9342), (65, 9351), (66, 9363), (67, 9384), (68, 9387), (69, 9399), (70, 9417), (71, 9426), (73, 9438), (74, 9450), (75, 9462), (76, 9471), (77, 9492), (78, 9498), (79, 9513), (80, 9519), (81, 9528), (82, 9549), (89, 9615), (92, 9645), (93, 9675), (95, 9708), (97, 9729), (99, 9765), (100, 9774), (102, 9780), (104, 9795), (105, 9807), (109, 9834), (112, 9849), (113, 9858), (115, 9888), (119, 9915), (120, 9921), (121, 9930), (127, 9978), (129, 9996), (130, 9999), (131, 10002), (134, 10014), (138, 10035), (139, 10041), (142, 10068), (143, 10074), (144, 10077), (146, 10086), (147, 10089), (148, 10095), (150, 10110), (152, 10122), (159, 10176), (160, 10185), (161, 10191), (162, 10194), (163, 10197), (164, 10215), (166, 10224), (167, 10227), (170, 10248), (171, 10251), (173, 10260), (174, 10269), (178, 10305), (183, 10359), (185, 10371), (186, 10380), (187, 10389), (190, 10404), (194, 10464), (195, 10479), (196, 10491), (199, 10533), (201, 10578), (203, 10599), (204, 10608), (207, 10641), (208, 10668), (210, 10710), (211, 10719), (212, 10731), (213, 10743), (214, 10752), (216, 10773), (218, 10806), (219, 10815), (220, 10818), (221, 10821), (222, 10839), (223, 10842), (224, 10851), (225, 10875), (226, 10884), (227, 10887), (228, 10896), (229, 10905), (231, 10938), (232, 10941), (233, 10965), (235, 11004), (236, 11034), (237, 11040), (238, 11049), (239, 11058), (243, 11100), (244, 11112), (245, 11148), (246, 11166), (247, 11169), (248, 11175), (249, 11244), (250, 11253), (251, 11262),

Gene: ATCC29399BT_14 Start: 8499, Stop: 11264, Start Num: 9

Candidate Starts for ATCC29399BT_14:

(Start: 9 @8499 has 43 MA's), (10, 8526), (11, 8532), (12, 8544), (13, 8553), (14, 8577), (17, 8589), (19, 8634), (20, 8640), (21, 8646), (22, 8661), (23, 8664), (24, 8694), (25, 8712), (26, 8742), (27, 8769), (28, 8778), (29, 8811), (30, 8832), (31, 8853), (32, 8883), (34, 8916), (35, 8925), (36, 8928), (37, 8946), (39, 9003), (40, 9018), (41, 9033), (42, 9036), (43, 9048), (45, 9063), (46, 9066), (48, 9075), (49, 9108), (50, 9117), (51, 9120), (52, 9162), (53, 9174), (54, 9219), (57, 9264), (59, 9285), (61, 9306), (64, 9339), (66, 9360), (67, 9381), (68, 9384), (69, 9396), (70, 9414), (71, 9423), (73, 9435), (74, 9447), (76, 9468), (77, 9489), (78, 9495), (79, 9510), (80, 9516), (81, 9525), (82, 9546),

(85, 9570), (87, 9600), (89, 9612), (90, 9621), (91, 9624), (92, 9642), (93, 9672), (95, 9705), (96, 9714), (97, 9726), (99, 9762), (100, 9771), (104, 9792), (105, 9804), (109, 9831), (112, 9846), (113, 9855), (115, 9885), (117, 9897), (118, 9909), (119, 9912), (120, 9918), (121, 9927), (125, 9951), (127, 9975), (129, 9993), (130, 9996), (131, 9999), (133, 10008), (134, 10011), (138, 10032), (139, 10038), (141, 10062), (142, 10065), (144, 10074), (146, 10083), (147, 10086), (148, 10092), (150, 10107), (152, 10119), (153, 10125), (156, 10158), (159, 10173), (160, 10182), (161, 10188), (162, 10191), (163, 10194), (164, 10212), (166, 10221), (167, 10224), (170, 10245), (171, 10248), (173, 10257), (174, 10266), (178, 10302), (183, 10356), (185, 10368), (186, 10377), (187, 10386), (190, 10401), (194, 10461), (195, 10476), (196, 10488), (199, 10530), (201, 10575), (203, 10596), (204, 10605), (207, 10638), (208, 10665), (210, 10707), (211, 10716), (212, 10728), (214, 10749), (218, 10803), (219, 10812), (221, 10818), (222, 10836), (224, 10848), (225, 10872), (226, 10881), (227, 10884), (228, 10893), (229, 10902), (230, 10914), (232, 10938), (233, 10962), (235, 11001), (236, 11031), (237, 11037), (238, 11046), (239, 11055), (242, 11079), (243, 11097), (244, 11109), (245, 11145), (246, 11163), (247, 11166), (249, 11241), (250, 11250), (251, 11259),

Gene: Aquarius_14 Start: 8519, Stop: 11284, Start Num: 9

Candidate Starts for Aquarius_14:

(Start: 9 @8519 has 43 MA's), (10, 8546), (11, 8552), (12, 8564), (13, 8573), (16, 8606), (17, 8609), (19, 8654), (20, 8660), (22, 8681), (23, 8684), (25, 8732), (26, 8762), (27, 8789), (28, 8798), (29, 8831), (31, 8873), (32, 8903), (33, 8918), (34, 8936), (35, 8945), (36, 8948), (37, 8966), (38, 9020), (39, 9023), (40, 9038), (41, 9053), (42, 9056), (43, 9068), (45, 9083), (47, 9092), (49, 9128), (50, 9137), (51, 9140), (52, 9182), (53, 9194), (54, 9239), (57, 9284), (59, 9305), (61, 9326), (63, 9347), (64, 9359), (65, 9368), (67, 9401), (68, 9404), (69, 9416), (70, 9434), (71, 9443), (73, 9455), (74, 9467), (75, 9479), (76, 9488), (77, 9509), (78, 9515), (79, 9530), (80, 9536), (81, 9545), (82, 9566), (83, 9578), (89, 9632), (91, 9644), (92, 9662), (93, 9692), (94, 9704), (95, 9725), (96, 9734), (97, 9746), (99, 9782), (100, 9791), (104, 9812), (105, 9824), (109, 9851), (112, 9866), (113, 9875), (114, 9884), (115, 9905), (116, 9908), (117, 9917), (118, 9929), (119, 9932), (120, 9938), (121, 9947), (123, 9953), (125, 9971), (126, 9992), (127, 9995), (129, 10013), (130, 10016), (133, 10028), (134, 10031), (135, 10037), (136, 10040), (139, 10058), (140, 10079), (142, 10085), (143, 10091), (144, 10094), (145, 10100), (146, 10103), (147, 10106), (148, 10112), (151, 10136), (152, 10139), (153, 10145), (155, 10166), (156, 10178), (157, 10181), (158, 10187), (160, 10202), (161, 10208), (162, 10211), (164, 10232), (166, 10241), (167, 10244), (169, 10262), (170, 10265), (172, 10274), (173, 10277), (175, 10289), (176, 10298), (178, 10322), (179, 10331), (183, 10376), (185, 10388), (186, 10397), (187, 10406), (188, 10415), (195, 10496), (196, 10508), (199, 10550), (201, 10595), (203, 10616), (204, 10625), (207, 10658), (208, 10685), (210, 10727), (211, 10736), (212, 10748), (213, 10760), (214, 10769), (216, 10790), (220, 10835), (221, 10838), (222, 10856), (223, 10859), (224, 10868), (225, 10892), (227, 10904), (228, 10913), (229, 10922), (231, 10955), (232, 10958), (233, 10982), (235, 11021), (236, 11051), (237, 11057), (238, 11066), (239, 11075), (243, 11117), (244, 11129), (245, 11165), (246, 11183), (247, 11186), (248, 11192), (249, 11261), (250, 11270), (251, 11279),

Gene: Attacne_14 Start: 8505, Stop: 11270, Start Num: 9

Candidate Starts for Attacne_14:

(Start: 9 @8505 has 43 MA's), (10, 8532), (11, 8538), (12, 8550), (13, 8559), (16, 8592), (17, 8595), (18, 8625), (19, 8640), (20, 8646), (22, 8667), (23, 8670), (25, 8718), (26, 8748), (28, 8784), (29, 8817), (30, 8838), (31, 8859), (32, 8889), (33, 8904), (34, 8922), (35, 8931), (36, 8934), (37, 8952), (38, 9006), (39, 9009), (40, 9024), (41, 9039), (42, 9042), (43, 9054), (47, 9078), (49, 9114), (50, 9123), (51, 9126), (52, 9168), (53, 9180), (54, 9225), (57, 9270), (59, 9291), (61, 9312), (63, 9333), (64, 9345), (65, 9354), (67, 9387), (68, 9390), (69, 9402), (70, 9420), (71, 9429), (73, 9441), (74, 9453), (75, 9465), (76, 9474), (77, 9495), (78, 9501), (79, 9516), (80, 9522), (81, 9531), (82, 9552), (85, 9576), (87, 9606), (88, 9612), (89, 9618), (91, 9630), (92, 9648), (93, 9678), (95, 9711), (97, 9732), (99, 9768), (100, 9777), (101, 9780), (104, 9798), (105, 9810), (106, 9819), (112, 9852), (113, 9861), (114, 9870), (115, 9891), (119, 9918), (120, 9924), (121, 9933), (125, 9957), (127, 9981), (129, 9999), (130, 10002), (131, 10005), (133, 10014), (134, 10017), (139, 10044), (141, 10068), (144,

10080), (146, 10089), (147, 10092), (148, 10098), (150, 10113), (152, 10125), (153, 10131), (156, 10164), (157, 10167), (158, 10173), (160, 10188), (161, 10194), (162, 10197), (164, 10218), (166, 10227), (170, 10251), (172, 10260), (173, 10263), (174, 10272), (178, 10308), (183, 10362), (185, 10374), (186, 10383), (187, 10392), (195, 10482), (196, 10494), (197, 10518), (198, 10524), (201, 10581), (202, 10599), (203, 10602), (204, 10611), (207, 10644), (208, 10671), (210, 10713), (211, 10722), (212, 10734), (213, 10746), (214, 10755), (216, 10776), (217, 10800), (218, 10809), (219, 10818), (220, 10821), (221, 10824), (222, 10842), (223, 10845), (224, 10854), (225, 10878), (226, 10887), (227, 10890), (228, 10899), (229, 10908), (231, 10941), (232, 10944), (233, 10968), (235, 11007), (236, 11037), (237, 11043), (238, 11052), (239, 11061), (242, 11085), (243, 11103), (244, 11115), (246, 11169), (247, 11172), (248, 11178), (249, 11247), (250, 11256), (251, 11265),

Gene: BruceLethal_14 Start: 8509, Stop: 11274, Start Num: 9

Candidate Starts for BruceLethal_14:

(Start: 9 @8509 has 43 MA's), (10, 8536), (11, 8542), (12, 8554), (13, 8563), (14, 8587), (17, 8599), (19, 8644), (20, 8650), (22, 8671), (23, 8674), (25, 8722), (26, 8752), (27, 8779), (28, 8788), (29, 8821), (31, 8863), (32, 8893), (33, 8908), (34, 8926), (35, 8935), (36, 8938), (37, 8956), (39, 9013), (40, 9028), (41, 9043), (42, 9046), (43, 9058), (45, 9073), (46, 9076), (49, 9118), (50, 9127), (51, 9130), (52, 9172), (53, 9184), (54, 9229), (55, 9250), (57, 9274), (61, 9316), (64, 9349), (65, 9358), (67, 9391), (68, 9394), (69, 9406), (70, 9424), (71, 9433), (73, 9445), (74, 9457), (75, 9469), (76, 9478), (78, 9505), (79, 9520), (80, 9526), (81, 9535), (82, 9556), (88, 9616), (89, 9622), (90, 9631), (91, 9634), (92, 9652), (93, 9682), (96, 9724), (97, 9736), (99, 9772), (104, 9802), (105, 9814), (111, 9853), (112, 9856), (113, 9865), (115, 9895), (116, 9898), (117, 9907), (119, 9922), (120, 9928), (121, 9937), (125, 9961), (127, 9985), (129, 10003), (134, 10021), (135, 10027), (136, 10030), (137, 10039), (138, 10042), (139, 10048), (141, 10072), (142, 10075), (144, 10084), (146, 10093), (147, 10096), (148, 10102), (150, 10117), (151, 10126), (152, 10129), (154, 10138), (155, 10156), (159, 10183), (160, 10192), (163, 10204), (164, 10222), (166, 10231), (170, 10255), (174, 10276), (178, 10312), (183, 10366), (185, 10378), (186, 10387), (187, 10396), (201, 10585), (202, 10603), (203, 10606), (204, 10615), (207, 10648), (208, 10675), (210, 10717), (211, 10726), (212, 10738), (213, 10750), (214, 10759), (218, 10813), (220, 10825), (221, 10828), (222, 10846), (223, 10849), (224, 10858), (225, 10882), (226, 10891), (227, 10894), (228, 10903), (229, 10912), (231, 10945), (232, 10948), (233, 10972), (235, 11011), (236, 11041), (237, 11047), (238, 11056), (239, 11065), (243, 11107), (244, 11119), (245, 11155), (246, 11173), (247, 11176), (248, 11182), (249, 11251), (250, 11260), (251, 11269),

Gene: Cota_14 Start: 8514, Stop: 11279, Start Num: 9

Candidate Starts for Cota_14:

(Start: 9 @8514 has 43 MA's), (10, 8541), (11, 8547), (12, 8559), (14, 8592), (16, 8601), (17, 8604), (19, 8649), (20, 8655), (21, 8661), (22, 8676), (23, 8679), (25, 8727), (26, 8757), (27, 8784), (28, 8793), (29, 8826), (30, 8847), (31, 8868), (32, 8898), (33, 8913), (34, 8931), (35, 8940), (36, 8943), (37, 8961), (38, 9015), (39, 9018), (40, 9033), (41, 9048), (42, 9051), (43, 9063), (45, 9078), (48, 9090), (49, 9123), (50, 9132), (51, 9135), (52, 9177), (53, 9189), (54, 9234), (57, 9279), (59, 9300), (61, 9321), (64, 9354), (65, 9363), (68, 9399), (69, 9411), (70, 9429), (71, 9438), (73, 9450), (74, 9462), (75, 9474), (76, 9483), (77, 9504), (78, 9510), (79, 9525), (80, 9531), (81, 9540), (82, 9561), (85, 9585), (87, 9615), (88, 9621), (89, 9627), (92, 9657), (93, 9687), (94, 9699), (95, 9720), (97, 9741), (98, 9774), (99, 9777), (100, 9786), (104, 9807), (105, 9819), (111, 9858), (113, 9870), (114, 9879), (115, 9900), (117, 9912), (119, 9927), (121, 9942), (126, 9987), (129, 10008), (130, 10011), (131, 10014), (132, 10020), (134, 10026), (139, 10053), (140, 10074), (142, 10080), (143, 10086), (144, 10089), (146, 10098), (147, 10101), (149, 10110), (150, 10122), (152, 10134), (155, 10161), (158, 10182), (159, 10188), (160, 10197), (161, 10203), (162, 10206), (163, 10209), (164, 10227), (165, 10230), (166, 10236), (167, 10239), (171, 10263), (174, 10281), (183, 10371), (185, 10383), (186, 10392), (187, 10401), (190, 10416), (195, 10491), (196, 10503), (199, 10545), (201, 10590), (203, 10611), (204, 10620), (207, 10653), (208, 10680), (210, 10722), (211, 10731), (212, 10743), (213, 10755), (214, 10764), (216, 10785), (218, 10818), (220, 10830), (221, 10833), (222, 10851),

(223, 10854), (224, 10863), (225, 10887), (227, 10899), (228, 10908), (229, 10917), (231, 10950), (232, 10953), (233, 10977), (235, 11016), (236, 11046), (237, 11052), (238, 11061), (239, 11070), (243, 11112), (244, 11124), (245, 11160), (246, 11178), (247, 11181), (248, 11187), (249, 11256), (250, 11265), (251, 11274),

Gene: DrParker_14 Start: 8544, Stop: 11309, Start Num: 9

Candidate Starts for DrParker_14:

(Start: 9 @8544 has 43 MA's), (10, 8571), (11, 8577), (12, 8589), (13, 8598), (16, 8631), (17, 8634), (19, 8679), (20, 8685), (22, 8706), (23, 8709), (25, 8757), (26, 8787), (28, 8823), (29, 8856), (30, 8877), (31, 8898), (33, 8943), (34, 8961), (35, 8970), (36, 8973), (37, 8991), (38, 9045), (39, 9048), (40, 9063), (41, 9078), (42, 9081), (43, 9093), (45, 9108), (47, 9117), (49, 9153), (50, 9162), (51, 9165), (52, 9207), (53, 9219), (54, 9264), (56, 9294), (57, 9309), (59, 9330), (61, 9351), (64, 9384), (65, 9393), (66, 9405), (67, 9426), (68, 9429), (70, 9459), (71, 9468), (73, 9480), (74, 9492), (75, 9504), (76, 9513), (78, 9540), (81, 9570), (82, 9591), (85, 9615), (87, 9645), (88, 9651), (89, 9657), (92, 9687), (93, 9717), (95, 9750), (97, 9771), (98, 9804), (99, 9807), (100, 9816), (102, 9822), (105, 9849), (106, 9858), (107, 9867), (111, 9888), (112, 9891), (113, 9900), (114, 9909), (115, 9930), (117, 9942), (118, 9954), (119, 9957), (120, 9963), (121, 9972), (122, 9975), (123, 9978), (125, 9996), (126, 10017), (127, 10020), (129, 10038), (130, 10041), (131, 10044), (133, 10053), (134, 10056), (135, 10062), (136, 10065), (139, 10083), (140, 10104), (142, 10110), (143, 10116), (144, 10119), (145, 10125), (147, 10131), (148, 10137), (151, 10161), (152, 10164), (153, 10170), (155, 10191), (156, 10203), (157, 10206), (158, 10212), (160, 10227), (161, 10233), (162, 10236), (164, 10257), (166, 10266), (167, 10269), (169, 10287), (170, 10290), (172, 10299), (173, 10302), (174, 10311), (176, 10323), (178, 10347), (179, 10356), (180, 10365), (183, 10401), (185, 10413), (186, 10422), (187, 10431), (188, 10440), (193, 10488), (195, 10521), (196, 10533), (197, 10557), (201, 10620), (202, 10638), (203, 10641), (204, 10650), (205, 10653), (206, 10662), (207, 10683), (209, 10737), (210, 10752), (211, 10761), (212, 10773), (213, 10785), (214, 10794), (216, 10815), (217, 10839), (218, 10848), (219, 10857), (220, 10860), (221, 10863), (222, 10881), (223, 10884), (224, 10893), (225, 10917), (227, 10929), (228, 10938), (229, 10947), (233, 11007), (235, 11046), (236, 11076), (237, 11082), (238, 11091), (239, 11100), (241, 11121), (242, 11124), (243, 11142), (244, 11154), (246, 11208), (247, 11211), (249, 11286), (250, 11295), (251, 11304),

Gene: Enochoraptor_14 Start: 8517, Stop: 11282, Start Num: 9

Candidate Starts for Enochoraptor_14:

(Start: 9 @8517 has 43 MA's), (10, 8544), (11, 8550), (12, 8562), (13, 8571), (16, 8604), (17, 8607), (19, 8652), (20, 8658), (22, 8679), (23, 8682), (25, 8730), (26, 8760), (28, 8796), (29, 8829), (30, 8850), (31, 8871), (32, 8901), (33, 8916), (34, 8934), (35, 8943), (36, 8946), (37, 8964), (39, 9021), (40, 9036), (41, 9051), (42, 9054), (43, 9066), (45, 9081), (47, 9090), (49, 9126), (50, 9135), (51, 9138), (52, 9180), (53, 9192), (54, 9237), (57, 9282), (59, 9303), (61, 9324), (64, 9357), (65, 9366), (67, 9399), (68, 9402), (69, 9414), (70, 9432), (71, 9441), (73, 9453), (74, 9465), (75, 9477), (77, 9507), (78, 9513), (79, 9528), (80, 9534), (81, 9543), (82, 9564), (85, 9588), (87, 9618), (89, 9630), (90, 9639), (91, 9642), (92, 9660), (93, 9690), (94, 9702), (95, 9723), (96, 9732), (97, 9744), (98, 9777), (99, 9780), (105, 9822), (109, 9849), (110, 9852), (112, 9864), (113, 9873), (114, 9882), (115, 9903), (117, 9915), (119, 9930), (120, 9936), (121, 9945), (124, 9963), (125, 9969), (127, 9993), (129, 10011), (130, 10014), (131, 10017), (133, 10026), (134, 10029), (135, 10035), (139, 10056), (142, 10083), (143, 10089), (144, 10092), (146, 10101), (147, 10104), (148, 10110), (150, 10125), (152, 10137), (153, 10143), (159, 10191), (160, 10200), (161, 10206), (162, 10209), (163, 10212), (164, 10230), (167, 10242), (170, 10263), (171, 10266), (173, 10275), (174, 10284), (178, 10320), (183, 10374), (185, 10386), (186, 10395), (187, 10404), (190, 10419), (194, 10479), (195, 10494), (199, 10548), (201, 10593), (202, 10611), (203, 10614), (204, 10623), (207, 10656), (208, 10683), (210, 10725), (211, 10734), (212, 10746), (213, 10758), (214, 10767), (216, 10788), (218, 10821), (219, 10830), (220, 10833), (221, 10836), (222, 10854), (223, 10857), (224, 10866), (225, 10890), (226, 10899), (227, 10902), (228, 10911), (229, 10920), (231, 10953), (232, 10956), (233, 10980), (235, 11019), (236, 11049), (237, 11055), (238, 11064), (239, 11073), (242, 11097), (243, 11115), (244,

11127), (245, 11163), (246, 11181), (247, 11184), (248, 11190), (249, 11259), (250, 11268), (251, 11277),

Gene: Enoki_14 Start: 8500, Stop: 11265, Start Num: 9

Candidate Starts for Enoki_14:

(Start: 9 @8500 has 43 MA's), (10, 8527), (11, 8533), (12, 8545), (13, 8554), (14, 8578), (16, 8587), (17, 8590), (19, 8635), (20, 8641), (22, 8662), (23, 8665), (25, 8713), (26, 8743), (28, 8779), (29, 8812), (30, 8833), (31, 8854), (32, 8884), (33, 8899), (34, 8917), (35, 8926), (36, 8929), (37, 8947), (39, 9004), (40, 9019), (41, 9034), (42, 9037), (43, 9049), (45, 9064), (46, 9067), (47, 9073), (49, 9109), (50, 9118), (51, 9121), (52, 9163), (53, 9175), (54, 9220), (57, 9265), (59, 9286), (61, 9307), (64, 9340), (65, 9349), (67, 9382), (68, 9385), (69, 9397), (70, 9415), (71, 9424), (73, 9436), (74, 9448), (75, 9460), (76, 9469), (78, 9496), (79, 9511), (80, 9517), (81, 9526), (82, 9547), (85, 9571), (87, 9601), (88, 9607), (89, 9613), (92, 9643), (93, 9673), (94, 9685), (95, 9706), (96, 9715), (97, 9727), (98, 9760), (99, 9763), (100, 9772), (102, 9778), (104, 9793), (105, 9805), (106, 9814), (108, 9826), (109, 9832), (111, 9844), (112, 9847), (113, 9856), (114, 9865), (115, 9886), (119, 9913), (120, 9919), (121, 9928), (124, 9946), (125, 9952), (127, 9976), (129, 9994), (130, 9997), (131, 10000), (134, 10012), (135, 10018), (136, 10021), (138, 10033), (139, 10039), (140, 10060), (142, 10066), (143, 10072), (144, 10075), (145, 10081), (146, 10084), (147, 10087), (148, 10093), (150, 10108), (152, 10120), (153, 10126), (156, 10159), (157, 10162), (158, 10168), (160, 10183), (161, 10189), (162, 10192), (164, 10213), (166, 10222), (170, 10246), (172, 10255), (173, 10258), (174, 10267), (178, 10303), (179, 10312), (185, 10369), (186, 10378), (187, 10387), (188, 10396), (195, 10477), (196, 10489), (199, 10531), (201, 10576), (203, 10597), (204, 10606), (207, 10639), (210, 10708), (211, 10717), (212, 10729), (213, 10741), (214, 10750), (218, 10804), (219, 10813), (220, 10816), (221, 10819), (224, 10849), (225, 10873), (227, 10885), (228, 10894), (229, 10903), (233, 10963), (235, 11002), (236, 11032), (237, 11038), (238, 11047), (239, 11056), (242, 11080), (243, 11098), (244, 11110), (246, 11164), (247, 11167), (248, 11173), (249, 11242), (250, 11251), (251, 11260),

Gene: Keiki_14 Start: 8514, Stop: 11279, Start Num: 9

Candidate Starts for Keiki_14:

(Start: 9 @8514 has 43 MA's), (10, 8541), (11, 8547), (12, 8559), (14, 8592), (16, 8601), (17, 8604), (19, 8649), (20, 8655), (21, 8661), (22, 8676), (23, 8679), (25, 8727), (26, 8757), (27, 8784), (28, 8793), (29, 8826), (30, 8847), (31, 8868), (32, 8898), (33, 8913), (34, 8931), (35, 8940), (36, 8943), (37, 8961), (38, 9015), (39, 9018), (40, 9033), (41, 9048), (42, 9051), (43, 9063), (45, 9078), (48, 9090), (49, 9123), (50, 9132), (51, 9135), (52, 9177), (53, 9189), (54, 9234), (57, 9279), (59, 9300), (61, 9321), (64, 9354), (65, 9363), (68, 9399), (69, 9411), (70, 9429), (71, 9438), (73, 9450), (74, 9462), (75, 9474), (76, 9483), (77, 9504), (78, 9510), (79, 9525), (80, 9531), (81, 9540), (82, 9561), (85, 9585), (87, 9615), (88, 9621), (89, 9627), (92, 9657), (93, 9687), (94, 9699), (95, 9720), (97, 9741), (98, 9774), (99, 9777), (100, 9786), (104, 9807), (105, 9819), (111, 9858), (113, 9870), (114, 9879), (115, 9900), (117, 9912), (119, 9927), (121, 9942), (126, 9987), (129, 10008), (130, 10011), (131, 10014), (132, 10020), (134, 10026), (139, 10053), (140, 10074), (142, 10080), (143, 10086), (144, 10089), (146, 10098), (147, 10101), (149, 10110), (150, 10122), (152, 10134), (155, 10161), (158, 10182), (159, 10188), (160, 10197), (161, 10203), (162, 10206), (163, 10209), (164, 10227), (165, 10230), (166, 10236), (167, 10239), (171, 10263), (174, 10281), (183, 10371), (185, 10383), (186, 10392), (187, 10401), (190, 10416), (195, 10491), (196, 10503), (199, 10545), (201, 10590), (203, 10611), (204, 10620), (207, 10653), (208, 10680), (210, 10722), (211, 10731), (212, 10743), (213, 10755), (214, 10764), (216, 10785), (218, 10818), (220, 10830), (221, 10833), (222, 10851), (223, 10854), (224, 10863), (225, 10887), (227, 10899), (228, 10908), (229, 10917), (231, 10950), (232, 10953), (233, 10977), (235, 11016), (236, 11046), (237, 11052), (238, 11061), (239, 11070), (243, 11112), (244, 11124), (245, 11160), (246, 11178), (247, 11181), (248, 11187), (249, 11256), (250, 11265), (251, 11274),

Gene: Kubed_14 Start: 8509, Stop: 11274, Start Num: 9

Candidate Starts for Kubed_14:

(Start: 9 @8509 has 43 MA's), (10, 8536), (11, 8542), (12, 8554), (13, 8563), (14, 8587), (17, 8599), (18, 8629), (19, 8644), (20, 8650), (22, 8671), (23, 8674), (25, 8722), (26, 8752), (27, 8779), (28, 8788), (29, 8821), (30, 8842), (31, 8863), (32, 8893), (33, 8908), (34, 8926), (35, 8935), (36, 8938), (37, 8956), (39, 9013), (40, 9028), (41, 9043), (42, 9046), (43, 9058), (44, 9067), (45, 9073), (46, 9076), (48, 9085), (49, 9118), (50, 9127), (51, 9130), (52, 9172), (53, 9184), (54, 9229), (57, 9274), (58, 9286), (59, 9295), (61, 9316), (62, 9325), (63, 9337), (64, 9349), (65, 9358), (66, 9370), (67, 9391), (68, 9394), (69, 9406), (70, 9424), (71, 9433), (72, 9436), (73, 9445), (74, 9457), (75, 9469), (76, 9478), (77, 9499), (79, 9520), (80, 9526), (81, 9535), (82, 9556), (83, 9568), (85, 9580), (89, 9622), (91, 9634), (92, 9652), (93, 9682), (95, 9715), (96, 9724), (97, 9736), (98, 9769), (99, 9772), (102, 9787), (104, 9802), (105, 9814), (107, 9832), (109, 9841), (112, 9856), (113, 9865), (114, 9874), (115, 9895), (117, 9907), (119, 9922), (120, 9928), (121, 9937), (125, 9961), (127, 9985), (129, 10003), (130, 10006), (131, 10009), (133, 10018), (134, 10021), (135, 10027), (136, 10030), (137, 10039), (138, 10042), (139, 10048), (140, 10069), (142, 10075), (143, 10081), (144, 10084), (146, 10093), (147, 10096), (148, 10102), (149, 10105), (152, 10129), (153, 10135), (154, 10138), (155, 10156), (158, 10177), (159, 10183), (160, 10192), (162, 10201), (163, 10204), (164, 10222), (165, 10225), (166, 10231), (172, 10264), (174, 10276), (176, 10288), (178, 10312), (181, 10342), (182, 10354), (183, 10366), (184, 10375), (185, 10378), (186, 10387), (189, 10408), (191, 10429), (192, 10438), (193, 10453), (201, 10585), (203, 10606), (204, 10615), (207, 10648), (209, 10702), (210, 10717), (211, 10726), (212, 10738), (213, 10750), (214, 10759), (215, 10762), (218, 10813), (220, 10825), (221, 10828), (223, 10849), (224, 10858), (225, 10882), (227, 10894), (229, 10912), (230, 10924), (231, 10945), (232, 10948), (233, 10972), (235, 11011), (236, 11041), (237, 11047), (238, 11056), (239, 11065), (243, 11107), (244, 11119), (245, 11155), (246, 11173), (247, 11176), (249, 11251), (250, 11260), (251, 11269),

Gene: Lauchelly_14 Start: 8512, Stop: 11277, Start Num: 9

Candidate Starts for Lauchelly_14:

(Start: 9 @8512 has 43 MA's), (10, 8539), (11, 8545), (12, 8557), (13, 8566), (16, 8599), (17, 8602), (19, 8647), (21, 8659), (22, 8674), (23, 8677), (25, 8725), (26, 8755), (27, 8782), (28, 8791), (29, 8824), (30, 8845), (31, 8866), (32, 8896), (34, 8929), (35, 8938), (36, 8941), (37, 8959), (39, 9016), (41, 9046), (42, 9049), (43, 9061), (45, 9076), (46, 9079), (48, 9088), (49, 9121), (50, 9130), (51, 9133), (52, 9175), (53, 9187), (54, 9232), (55, 9253), (57, 9277), (59, 9298), (61, 9319), (64, 9352), (65, 9361), (67, 9394), (68, 9397), (69, 9409), (70, 9427), (71, 9436), (73, 9448), (74, 9460), (75, 9472), (76, 9481), (77, 9502), (78, 9508), (79, 9523), (80, 9529), (81, 9538), (82, 9559), (87, 9613), (89, 9625), (90, 9634), (92, 9655), (93, 9685), (95, 9718), (96, 9727), (97, 9739), (98, 9772), (99, 9775), (100, 9784), (104, 9805), (105, 9817), (106, 9826), (109, 9844), (110, 9847), (112, 9859), (113, 9868), (114, 9877), (115, 9898), (117, 9910), (119, 9925), (120, 9931), (121, 9940), (125, 9964), (127, 9988), (129, 10006), (134, 10024), (135, 10030), (136, 10033), (139, 10051), (140, 10072), (142, 10078), (143, 10084), (146, 10096), (147, 10099), (148, 10105), (150, 10120), (152, 10132), (156, 10171), (157, 10174), (159, 10186), (160, 10195), (161, 10201), (164, 10225), (166, 10234), (167, 10237), (170, 10258), (171, 10261), (174, 10279), (177, 10303), (178, 10315), (183, 10369), (185, 10381), (186, 10390), (187, 10399), (195, 10489), (196, 10501), (199, 10543), (201, 10588), (203, 10609), (204, 10618), (207, 10651), (208, 10678), (210, 10720), (211, 10729), (212, 10741), (213, 10753), (214, 10762), (218, 10816), (219, 10825), (221, 10831), (222, 10849), (223, 10852), (225, 10885), (228, 10906), (229, 10915), (231, 10948), (232, 10951), (233, 10975), (235, 11014), (236, 11044), (237, 11050), (238, 11059), (239, 11068), (243, 11110), (244, 11122), (245, 11158), (246, 11176), (247, 11179), (249, 11254), (251, 11272),

Gene: Leviosa_14 Start: 8531, Stop: 11296, Start Num: 9

Candidate Starts for Leviosa_14:

(Start: 9 @8531 has 43 MA's), (10, 8558), (11, 8564), (12, 8576), (13, 8585), (17, 8621), (18, 8651), (19, 8666), (20, 8672), (22, 8693), (23, 8696), (25, 8744), (26, 8774), (28, 8810), (29, 8843), (30, 8864), (32, 8915), (33, 8930), (34, 8948), (35, 8957), (36, 8960), (37, 8978), (39, 9035), (40, 9050), (41, 9065), (42, 9068), (43, 9080), (47, 9104), (49, 9140), (50, 9149), (51, 9152), (52, 9194), (53,

9206), (54, 9251), (57, 9296), (59, 9317), (61, 9338), (64, 9371), (65, 9380), (66, 9392), (67, 9413), (68, 9416), (69, 9428), (70, 9446), (71, 9455), (73, 9467), (74, 9479), (75, 9491), (76, 9500), (78, 9527), (79, 9542), (80, 9548), (81, 9557), (82, 9578), (85, 9602), (87, 9632), (88, 9638), (89, 9644), (90, 9653), (92, 9674), (93, 9704), (95, 9737), (96, 9746), (97, 9758), (99, 9794), (100, 9803), (105, 9836), (109, 9863), (112, 9878), (113, 9887), (114, 9896), (115, 9917), (116, 9920), (117, 9929), (119, 9944), (120, 9950), (121, 9959), (127, 10007), (129, 10025), (134, 10043), (135, 10049), (136, 10052), (137, 10061), (138, 10064), (139, 10070), (140, 10091), (142, 10097), (144, 10106), (146, 10115), (147, 10118), (148, 10124), (150, 10139), (151, 10148), (152, 10151), (154, 10160), (155, 10178), (159, 10205), (160, 10214), (161, 10220), (163, 10226), (164, 10244), (166, 10253), (170, 10277), (174, 10298), (178, 10334), (183, 10388), (184, 10397), (185, 10400), (186, 10409), (187, 10418), (195, 10508), (196, 10520), (199, 10562), (201, 10607), (202, 10625), (203, 10628), (204, 10637), (207, 10670), (210, 10739), (211, 10748), (212, 10760), (214, 10781), (218, 10835), (220, 10847), (221, 10850), (222, 10868), (224, 10880), (225, 10904), (226, 10913), (227, 10916), (228, 10925), (229, 10934), (230, 10946), (231, 10967), (232, 10970), (233, 10994), (234, 11021), (236, 11063), (237, 11069), (238, 11078), (242, 11111), (243, 11129), (245, 11177), (246, 11195), (247, 11198), (248, 11204), (249, 11273), (250, 11282),

Gene: LilBandit_14 Start: 8515, Stop: 11280, Start Num: 9

Candidate Starts for LilBandit_14:

(Start: 9 @8515 has 43 MA's), (10, 8542), (11, 8548), (12, 8560), (16, 8602), (17, 8605), (19, 8650), (20, 8656), (22, 8677), (23, 8680), (25, 8728), (26, 8758), (28, 8794), (29, 8827), (30, 8848), (31, 8869), (32, 8899), (33, 8914), (34, 8932), (35, 8941), (36, 8944), (37, 8962), (39, 9019), (40, 9034), (41, 9049), (42, 9052), (43, 9064), (45, 9079), (46, 9082), (47, 9088), (48, 9091), (49, 9124), (50, 9133), (51, 9136), (52, 9178), (53, 9190), (54, 9235), (57, 9280), (59, 9301), (61, 9322), (64, 9355), (65, 9364), (67, 9397), (68, 9400), (69, 9412), (70, 9430), (71, 9439), (73, 9451), (74, 9463), (75, 9475), (76, 9484), (77, 9505), (78, 9511), (79, 9526), (80, 9532), (81, 9541), (82, 9562), (85, 9586), (88, 9622), (89, 9628), (92, 9658), (93, 9688), (95, 9721), (96, 9730), (97, 9742), (99, 9778), (100, 9787), (102, 9793), (104, 9808), (105, 9820), (112, 9862), (113, 9871), (114, 9880), (115, 9901), (117, 9913), (119, 9928), (120, 9934), (121, 9943), (124, 9961), (125, 9967), (127, 9991), (129, 10009), (130, 10012), (131, 10015), (133, 10024), (134, 10027), (135, 10033), (136, 10036), (138, 10048), (139, 10054), (140, 10075), (142, 10081), (143, 10087), (144, 10090), (146, 10099), (147, 10102), (148, 10108), (150, 10123), (152, 10135), (159, 10189), (160, 10198), (161, 10204), (162, 10207), (163, 10210), (164, 10228), (165, 10231), (166, 10237), (167, 10240), (170, 10261), (171, 10264), (173, 10273), (174, 10282), (178, 10318), (183, 10372), (185, 10384), (186, 10393), (187, 10402), (195, 10492), (196, 10504), (199, 10546), (201, 10591), (203, 10612), (204, 10621), (207, 10654), (208, 10681), (210, 10723), (211, 10732), (212, 10744), (213, 10756), (214, 10765), (216, 10786), (218, 10819), (219, 10828), (220, 10831), (221, 10834), (222, 10852), (223, 10855), (224, 10864), (225, 10888), (227, 10900), (228, 10909), (229, 10918), (231, 10951), (232, 10954), (233, 10978), (235, 11017), (236, 11047), (237, 11053), (238, 11062), (239, 11071), (243, 11113), (244, 11125), (245, 11161), (246, 11179), (247, 11182), (248, 11188), (249, 11257), (250, 11266), (251, 11275),

Gene: MEAK_14 Start: 8501, Stop: 11266, Start Num: 9

Candidate Starts for MEAK_14:

(Start: 9 @8501 has 43 MA's), (10, 8528), (11, 8534), (12, 8546), (13, 8555), (16, 8588), (17, 8591), (19, 8636), (22, 8663), (23, 8666), (24, 8696), (25, 8714), (26, 8744), (27, 8771), (28, 8780), (29, 8813), (30, 8834), (31, 8855), (32, 8885), (33, 8900), (34, 8918), (35, 8927), (36, 8930), (37, 8948), (38, 9002), (39, 9005), (40, 9020), (41, 9035), (42, 9038), (43, 9050), (47, 9074), (49, 9110), (50, 9119), (51, 9122), (52, 9164), (53, 9176), (54, 9221), (57, 9266), (59, 9287), (61, 9308), (63, 9329), (64, 9341), (66, 9362), (67, 9383), (68, 9386), (69, 9398), (70, 9416), (71, 9425), (73, 9437), (74, 9449), (75, 9461), (76, 9470), (77, 9491), (78, 9497), (79, 9512), (80, 9518), (81, 9527), (82, 9548), (89, 9614), (91, 9626), (92, 9644), (93, 9674), (95, 9707), (96, 9716), (97, 9728), (98, 9761), (99, 9764), (100, 9773), (102, 9779), (104, 9794), (105, 9806), (109, 9833), (112, 9848), (113, 9857), (114, 9866), (115, 9887), (117, 9899), (119, 9914), (120, 9920), (121, 9929), (124, 9947), (125, 9953), (127,

9977), (129, 9995), (130, 9998), (131, 10001), (133, 10010), (134, 10013), (135, 10019), (136, 10022), (139, 10040), (140, 10061), (142, 10067), (144, 10076), (146, 10085), (147, 10088), (148, 10094), (150, 10109), (152, 10121), (158, 10169), (159, 10175), (160, 10184), (161, 10190), (162, 10193), (163, 10196), (164, 10214), (165, 10217), (166, 10223), (167, 10226), (170, 10247), (171, 10250), (173, 10259), (174, 10268), (178, 10304), (179, 10313), (180, 10322), (183, 10358), (185, 10370), (186, 10379), (187, 10388), (195, 10478), (196, 10490), (197, 10514), (201, 10577), (202, 10595), (203, 10598), (204, 10607), (207, 10640), (210, 10709), (211, 10718), (212, 10730), (213, 10742), (214, 10751), (216, 10772), (218, 10805), (220, 10817), (221, 10820), (222, 10838), (223, 10841), (225, 10874), (228, 10895), (229, 10904), (231, 10937), (232, 10940), (233, 10964), (235, 11003), (236, 11033), (237, 11039), (238, 11048), (239, 11057), (243, 11099), (244, 11111), (245, 11147), (246, 11165), (247, 11168), (248, 11174), (249, 11243), (250, 11252), (251, 11261),

Gene: Moyashi_14 Start: 8543, Stop: 11308, Start Num: 9

Candidate Starts for Moyashi_14:

(Start: 9 @8543 has 43 MA's), (10, 8570), (11, 8576), (12, 8588), (14, 8621), (17, 8633), (18, 8663), (19, 8678), (20, 8684), (22, 8705), (23, 8708), (25, 8756), (26, 8786), (28, 8822), (29, 8855), (30, 8876), (31, 8897), (32, 8927), (33, 8942), (34, 8960), (35, 8969), (36, 8972), (37, 8990), (38, 9044), (39, 9047), (40, 9062), (41, 9077), (42, 9080), (43, 9092), (45, 9107), (48, 9119), (49, 9152), (50, 9161), (51, 9164), (52, 9206), (53, 9218), (54, 9263), (57, 9308), (58, 9320), (61, 9350), (64, 9383), (66, 9404), (67, 9425), (68, 9428), (69, 9440), (70, 9458), (71, 9467), (73, 9479), (74, 9491), (75, 9503), (77, 9533), (78, 9539), (81, 9569), (82, 9590), (85, 9614), (88, 9650), (92, 9686), (93, 9716), (95, 9749), (97, 9770), (98, 9803), (99, 9806), (100, 9815), (102, 9821), (104, 9836), (105, 9848), (106, 9857), (107, 9866), (111, 9887), (112, 9890), (113, 9899), (114, 9908), (115, 9929), (117, 9941), (119, 9956), (120, 9962), (121, 9971), (127, 10019), (129, 10037), (130, 10040), (131, 10043), (133, 10052), (134, 10055), (138, 10076), (139, 10082), (140, 10103), (142, 10109), (143, 10115), (144, 10118), (146, 10127), (147, 10130), (148, 10136), (150, 10151), (152, 10163), (153, 10169), (156, 10202), (159, 10217), (160, 10226), (161, 10232), (162, 10235), (164, 10256), (166, 10265), (167, 10268), (170, 10289), (172, 10298), (173, 10301), (174, 10310), (178, 10346), (179, 10355), (183, 10400), (184, 10409), (185, 10412), (186, 10421), (187, 10430), (195, 10520), (196, 10532), (198, 10562), (199, 10574), (201, 10619), (203, 10640), (204, 10649), (207, 10682), (208, 10709), (210, 10751), (211, 10760), (212, 10772), (213, 10784), (214, 10793), (218, 10847), (219, 10856), (220, 10859), (221, 10862), (222, 10880), (223, 10883), (224, 10892), (225, 10916), (228, 10937), (229, 10946), (230, 10958), (231, 10979), (232, 10982), (233, 11006), (235, 11045), (236, 11075), (237, 11081), (238, 11090), (242, 11123), (243, 11141), (244, 11153), (246, 11207), (247, 11210), (248, 11216), (249, 11285), (250, 11294), (251, 11303),

Gene: MrAK_14 Start: 8555, Stop: 11320, Start Num: 9

Candidate Starts for MrAK_14:

(Start: 9 @8555 has 43 MA's), (10, 8582), (11, 8588), (12, 8600), (14, 8633), (16, 8642), (17, 8645), (18, 8675), (19, 8690), (20, 8696), (22, 8717), (23, 8720), (25, 8768), (26, 8798), (29, 8867), (30, 8888), (31, 8909), (33, 8954), (34, 8972), (35, 8981), (36, 8984), (37, 9002), (39, 9059), (40, 9074), (41, 9089), (42, 9092), (43, 9104), (45, 9119), (48, 9131), (49, 9164), (50, 9173), (51, 9176), (52, 9218), (53, 9230), (54, 9275), (57, 9320), (58, 9332), (61, 9362), (64, 9395), (65, 9404), (66, 9416), (67, 9437), (68, 9440), (69, 9452), (70, 9470), (71, 9479), (73, 9491), (74, 9503), (75, 9515), (76, 9524), (77, 9545), (78, 9551), (81, 9581), (82, 9602), (85, 9626), (87, 9656), (88, 9662), (89, 9668), (92, 9698), (93, 9728), (95, 9761), (97, 9782), (98, 9815), (99, 9818), (100, 9827), (102, 9833), (104, 9848), (105, 9860), (106, 9869), (107, 9878), (111, 9899), (112, 9902), (113, 9911), (114, 9920), (115, 9941), (119, 9968), (120, 9974), (121, 9983), (127, 10031), (129, 10049), (130, 10052), (133, 10064), (134, 10067), (139, 10094), (140, 10115), (142, 10121), (143, 10127), (144, 10130), (146, 10139), (147, 10142), (148, 10148), (150, 10163), (152, 10175), (153, 10181), (156, 10214), (159, 10229), (160, 10238), (161, 10244), (162, 10247), (164, 10268), (166, 10277), (167, 10280), (170, 10301), (172, 10310), (173, 10313), (174, 10322), (178, 10358), (179, 10367), (183, 10412), (184, 10421), (185, 10424), (186, 10433), (187, 10442), (188, 10451), (194, 10517), (195, 10532), (196, 10544),

(198, 10574), (199, 10586), (201, 10631), (203, 10652), (204, 10661), (207, 10694), (210, 10763), (211, 10772), (212, 10784), (213, 10796), (217, 10850), (218, 10859), (220, 10871), (221, 10874), (222, 10892), (223, 10895), (224, 10904), (225, 10928), (227, 10940), (228, 10949), (229, 10958), (231, 10991), (232, 10994), (233, 11018), (235, 11057), (236, 11087), (237, 11093), (238, 11102), (242, 11135), (243, 11153), (244, 11165), (246, 11219), (247, 11222), (248, 11228), (249, 11297), (250, 11306), (251, 11315),

Gene: Ouroboros_14 Start: 8504, Stop: 11269, Start Num: 9

Candidate Starts for Ouroboros_14:

(Start: 9 @8504 has 43 MA's), (10, 8531), (11, 8537), (12, 8549), (13, 8558), (14, 8582), (16, 8591), (17, 8594), (18, 8624), (19, 8639), (20, 8645), (21, 8651), (22, 8666), (23, 8669), (25, 8717), (26, 8747), (27, 8774), (28, 8783), (29, 8816), (31, 8858), (32, 8888), (33, 8903), (34, 8921), (35, 8930), (36, 8933), (37, 8951), (38, 9005), (39, 9008), (40, 9023), (41, 9038), (42, 9041), (43, 9053), (45, 9068), (47, 9077), (48, 9080), (49, 9113), (50, 9122), (51, 9125), (52, 9167), (53, 9179), (54, 9224), (57, 9269), (60, 9305), (61, 9311), (64, 9344), (66, 9365), (67, 9386), (68, 9389), (70, 9419), (71, 9428), (73, 9440), (74, 9452), (76, 9473), (78, 9500), (79, 9515), (80, 9521), (81, 9530), (82, 9551), (85, 9575), (87, 9605), (89, 9617), (90, 9626), (92, 9647), (94, 9689), (95, 9710), (96, 9719), (97, 9731), (98, 9764), (100, 9776), (104, 9797), (105, 9809), (110, 9839), (112, 9851), (113, 9860), (114, 9869), (115, 9890), (117, 9902), (119, 9917), (120, 9923), (121, 9932), (125, 9956), (127, 9980), (129, 9998), (130, 10001), (131, 10004), (133, 10013), (134, 10016), (135, 10022), (136, 10025), (139, 10043), (142, 10070), (143, 10076), (144, 10079), (146, 10088), (147, 10091), (148, 10097), (150, 10112), (152, 10124), (155, 10151), (159, 10178), (160, 10187), (161, 10193), (162, 10196), (163, 10199), (164, 10217), (166, 10226), (167, 10229), (170, 10250), (171, 10253), (173, 10262), (174, 10271), (178, 10307), (183, 10361), (185, 10373), (186, 10382), (187, 10391), (199, 10535), (201, 10580), (204, 10610), (207, 10643), (208, 10670), (210, 10712), (211, 10721), (212, 10733), (213, 10745), (214, 10754), (216, 10775), (218, 10808), (219, 10817), (220, 10820), (221, 10823), (222, 10841), (223, 10844), (224, 10853), (225, 10877), (228, 10898), (229, 10907), (230, 10919), (231, 10940), (232, 10943), (233, 10967), (235, 11006), (236, 11036), (237, 11042), (238, 11051), (239, 11060), (240, 11072), (243, 11102), (244, 11114), (245, 11150), (246, 11168), (247, 11171), (249, 11246), (250, 11255), (251, 11264),

Gene: P1.1_14 Start: 8512, Stop: 11277, Start Num: 9

Candidate Starts for P1.1_14:

(Start: 9 @8512 has 43 MA's), (10, 8539), (11, 8545), (12, 8557), (13, 8566), (16, 8599), (17, 8602), (19, 8647), (20, 8653), (22, 8674), (23, 8677), (25, 8725), (26, 8755), (28, 8791), (29, 8824), (30, 8845), (31, 8866), (32, 8896), (33, 8911), (34, 8929), (35, 8938), (36, 8941), (37, 8959), (38, 9013), (39, 9016), (40, 9031), (41, 9046), (42, 9049), (43, 9061), (47, 9085), (49, 9121), (50, 9130), (51, 9133), (52, 9175), (53, 9187), (54, 9232), (57, 9277), (61, 9319), (64, 9352), (65, 9361), (67, 9394), (68, 9397), (69, 9409), (70, 9427), (71, 9436), (73, 9448), (74, 9460), (75, 9472), (76, 9481), (77, 9502), (79, 9523), (80, 9529), (81, 9538), (82, 9559), (85, 9583), (87, 9613), (88, 9619), (89, 9625), (91, 9637), (93, 9685), (95, 9718), (96, 9727), (97, 9739), (98, 9772), (99, 9775), (104, 9805), (105, 9817), (109, 9844), (113, 9868), (114, 9877), (115, 9898), (117, 9910), (119, 9925), (120, 9931), (121, 9940), (127, 9988), (128, 9997), (129, 10006), (130, 10009), (131, 10012), (134, 10024), (135, 10030), (138, 10045), (139, 10051), (140, 10072), (142, 10078), (143, 10084), (144, 10087), (146, 10096), (147, 10099), (148, 10105), (150, 10120), (152, 10132), (153, 10138), (156, 10171), (160, 10195), (161, 10201), (162, 10204), (163, 10207), (164, 10225), (166, 10234), (167, 10237), (170, 10258), (171, 10261), (173, 10270), (174, 10279), (178, 10315), (183, 10369), (185, 10381), (186, 10390), (187, 10399), (190, 10414), (194, 10474), (195, 10489), (196, 10501), (199, 10543), (201, 10588), (203, 10609), (204, 10618), (207, 10651), (208, 10678), (210, 10720), (211, 10729), (213, 10753), (214, 10762), (216, 10783), (218, 10816), (219, 10825), (220, 10828), (221, 10831), (222, 10849), (223, 10852), (224, 10861), (225, 10885), (227, 10897), (228, 10906), (229, 10915), (231, 10948), (232, 10951), (233, 10975), (235, 11014), (236, 11044), (237, 11050), (238, 11059), (239, 11068), (243, 11110), (244, 11122), (245, 11158), (246, 11176), (247, 11179), (249, 11254), (250, 11263),

(251, 11272),

Gene: P100.1_14 Start: 8519, Stop: 11284, Start Num: 9

Candidate Starts for P100.1_14:

(Start: 9 @8519 has 43 MA's), (10, 8546), (11, 8552), (12, 8564), (14, 8597), (16, 8606), (17, 8609), (18, 8639), (19, 8654), (20, 8660), (22, 8681), (23, 8684), (25, 8732), (26, 8762), (28, 8798), (29, 8831), (30, 8852), (31, 8873), (32, 8903), (33, 8918), (34, 8936), (35, 8945), (36, 8948), (37, 8966), (39, 9023), (40, 9038), (41, 9053), (42, 9056), (43, 9068), (45, 9083), (48, 9095), (49, 9128), (50, 9137), (51, 9140), (52, 9182), (53, 9194), (54, 9239), (56, 9269), (57, 9284), (58, 9296), (61, 9326), (64, 9359), (65, 9368), (66, 9380), (67, 9401), (68, 9404), (69, 9416), (70, 9434), (71, 9443), (73, 9455), (74, 9467), (76, 9488), (78, 9515), (79, 9530), (80, 9536), (81, 9545), (82, 9566), (87, 9620), (88, 9626), (89, 9632), (91, 9644), (92, 9662), (93, 9692), (95, 9725), (96, 9734), (97, 9746), (98, 9779), (99, 9782), (100, 9791), (104, 9812), (105, 9824), (106, 9833), (111, 9863), (113, 9875), (114, 9884), (115, 9905), (117, 9917), (119, 9932), (121, 9947), (126, 9992), (129, 10013), (130, 10016), (131, 10019), (132, 10025), (134, 10031), (139, 10058), (140, 10079), (142, 10085), (143, 10091), (146, 10103), (147, 10106), (149, 10115), (150, 10127), (152, 10139), (154, 10148), (155, 10166), (158, 10187), (159, 10193), (160, 10202), (161, 10208), (162, 10211), (163, 10214), (164, 10232), (166, 10241), (167, 10244), (171, 10268), (174, 10286), (183, 10376), (185, 10388), (186, 10397), (187, 10406), (193, 10463), (196, 10508), (197, 10532), (199, 10550), (201, 10595), (203, 10616), (204, 10625), (207, 10658), (208, 10685), (210, 10727), (211, 10736), (212, 10748), (213, 10760), (214, 10769), (216, 10790), (217, 10814), (218, 10823), (220, 10835), (221, 10838), (222, 10856), (223, 10859), (224, 10868), (225, 10892), (228, 10913), (229, 10922), (231, 10955), (232, 10958), (233, 10982), (235, 11021), (236, 11051), (237, 11057), (238, 11066), (239, 11075), (241, 11096), (242, 11099), (243, 11117), (244, 11129), (246, 11183), (247, 11186), (249, 11261), (250, 11270), (251, 11279),

Gene: P100A_14 Start: 8513, Stop: 11278, Start Num: 9

Candidate Starts for P100A_14:

(Start: 9 @8513 has 43 MA's), (10, 8540), (11, 8546), (12, 8558), (13, 8567), (14, 8591), (17, 8603), (19, 8648), (20, 8654), (21, 8660), (22, 8675), (23, 8678), (25, 8726), (26, 8756), (27, 8783), (28, 8792), (29, 8825), (30, 8846), (32, 8897), (33, 8912), (34, 8930), (35, 8939), (36, 8942), (37, 8960), (39, 9017), (40, 9032), (41, 9047), (42, 9050), (43, 9062), (44, 9071), (47, 9086), (49, 9122), (50, 9131), (51, 9134), (52, 9176), (53, 9188), (54, 9233), (55, 9254), (57, 9278), (59, 9299), (61, 9320), (64, 9353), (66, 9374), (67, 9395), (68, 9398), (69, 9410), (70, 9428), (71, 9437), (73, 9449), (74, 9461), (76, 9482), (77, 9503), (78, 9509), (79, 9524), (80, 9530), (81, 9539), (82, 9560), (87, 9614), (89, 9626), (92, 9656), (93, 9686), (95, 9719), (96, 9728), (97, 9740), (99, 9776), (100, 9785), (104, 9806), (105, 9818), (109, 9845), (112, 9860), (113, 9869), (115, 9899), (116, 9902), (117, 9911), (119, 9926), (120, 9932), (121, 9941), (125, 9965), (127, 9989), (129, 10007), (130, 10010), (131, 10013), (133, 10022), (134, 10025), (138, 10046), (139, 10052), (141, 10076), (142, 10079), (144, 10088), (145, 10094), (146, 10097), (147, 10100), (149, 10109), (150, 10121), (152, 10133), (159, 10187), (160, 10196), (161, 10202), (162, 10205), (163, 10208), (164, 10226), (165, 10229), (167, 10238), (172, 10268), (173, 10271), (178, 10316), (183, 10370), (185, 10382), (186, 10391), (187, 10400), (195, 10490), (196, 10502), (201, 10589), (202, 10607), (203, 10610), (204, 10619), (207, 10652), (208, 10679), (210, 10721), (211, 10730), (212, 10742), (213, 10754), (214, 10763), (218, 10817), (220, 10829), (221, 10832), (222, 10850), (223, 10853), (224, 10862), (225, 10886), (228, 10907), (229, 10916), (230, 10928), (231, 10949), (232, 10952), (233, 10976), (235, 11015), (236, 11045), (237, 11051), (238, 11060), (239, 11069), (243, 11111), (244, 11123), (245, 11159), (246, 11177), (247, 11180), (249, 11255), (250, 11264), (251, 11273),

Gene: P100D_14 Start: 8515, Stop: 11280, Start Num: 9

Candidate Starts for P100D_14:

(Start: 9 @8515 has 43 MA's), (10, 8542), (11, 8548), (12, 8560), (13, 8569), (16, 8602), (17, 8605), (19, 8650), (20, 8656), (21, 8662), (22, 8677), (23, 8680), (25, 8728), (26, 8758), (28, 8794), (29,

8827), (30, 8848), (31, 8869), (32, 8899), (33, 8914), (34, 8932), (35, 8941), (36, 8944), (37, 8962), (38, 9016), (39, 9019), (40, 9034), (41, 9049), (42, 9052), (43, 9064), (45, 9079), (46, 9082), (47, 9088), (49, 9124), (50, 9133), (51, 9136), (52, 9178), (53, 9190), (54, 9235), (55, 9256), (56, 9265), (57, 9280), (59, 9301), (61, 9322), (64, 9355), (65, 9364), (67, 9397), (68, 9400), (69, 9412), (70, 9430), (71, 9439), (73, 9451), (74, 9463), (75, 9475), (76, 9484), (78, 9511), (79, 9526), (80, 9532), (81, 9541), (82, 9562), (85, 9586), (87, 9616), (89, 9628), (91, 9640), (92, 9658), (93, 9688), (94, 9700), (95, 9721), (96, 9730), (97, 9742), (99, 9778), (104, 9808), (105, 9820), (109, 9847), (112, 9862), (113, 9871), (115, 9901), (117, 9913), (121, 9943), (126, 9988), (129, 10009), (130, 10012), (131, 10015), (132, 10021), (134, 10027), (139, 10054), (141, 10078), (142, 10081), (144, 10090), (146, 10099), (147, 10102), (148, 10108), (150, 10123), (152, 10135), (153, 10141), (155, 10162), (156, 10174), (158, 10183), (159, 10189), (160, 10198), (161, 10204), (162, 10207), (163, 10210), (164, 10228), (165, 10231), (166, 10237), (167, 10240), (171, 10264), (174, 10282), (183, 10372), (185, 10384), (186, 10393), (187, 10402), (194, 10477), (195, 10492), (196, 10504), (199, 10546), (201, 10591), (203, 10612), (204, 10621), (207, 10654), (208, 10681), (210, 10723), (211, 10732), (212, 10744), (213, 10756), (214, 10765), (218, 10819), (220, 10831), (221, 10834), (222, 10852), (223, 10855), (224, 10864), (225, 10888), (228, 10909), (229, 10918), (231, 10951), (232, 10954), (233, 10978), (235, 11017), (236, 11047), (237, 11053), (238, 11062), (239, 11071), (243, 11113), (244, 11125), (245, 11161), (246, 11179), (247, 11182), (248, 11188), (249, 11257), (250, 11266), (251, 11275),

Gene: P101A_14 Start: 8527, Stop: 11292, Start Num: 9

Candidate Starts for P101A_14:

(Start: 9 @8527 has 43 MA's), (10, 8554), (11, 8560), (12, 8572), (14, 8605), (16, 8614), (17, 8617), (18, 8647), (19, 8662), (20, 8668), (22, 8689), (23, 8692), (25, 8740), (26, 8770), (28, 8806), (29, 8839), (30, 8860), (31, 8881), (32, 8911), (33, 8926), (34, 8944), (35, 8953), (36, 8956), (37, 8974), (39, 9031), (40, 9046), (41, 9061), (42, 9064), (43, 9076), (45, 9091), (48, 9103), (49, 9136), (50, 9145), (51, 9148), (52, 9190), (53, 9202), (54, 9247), (56, 9277), (57, 9292), (58, 9304), (61, 9334), (64, 9367), (65, 9376), (66, 9388), (67, 9409), (68, 9412), (69, 9424), (70, 9442), (71, 9451), (73, 9463), (74, 9475), (76, 9496), (78, 9523), (79, 9538), (80, 9544), (81, 9553), (82, 9574), (85, 9598), (87, 9628), (88, 9634), (89, 9640), (91, 9652), (92, 9670), (93, 9700), (95, 9733), (96, 9742), (97, 9754), (98, 9787), (99, 9790), (100, 9799), (104, 9820), (105, 9832), (106, 9841), (111, 9871), (113, 9883), (114, 9892), (115, 9913), (117, 9925), (119, 9940), (121, 9955), (126, 10000), (129, 10021), (130, 10024), (131, 10027), (132, 10033), (134, 10039), (139, 10066), (140, 10087), (142, 10093), (143, 10099), (146, 10111), (147, 10114), (149, 10123), (150, 10135), (152, 10147), (154, 10156), (155, 10174), (158, 10195), (159, 10201), (160, 10210), (161, 10216), (162, 10219), (163, 10222), (164, 10240), (166, 10249), (167, 10252), (171, 10276), (174, 10294), (183, 10384), (185, 10396), (186, 10405), (187, 10414), (193, 10471), (196, 10516), (197, 10540), (199, 10558), (201, 10603), (203, 10624), (204, 10633), (207, 10666), (208, 10693), (210, 10735), (211, 10744), (212, 10756), (213, 10768), (214, 10777), (216, 10798), (217, 10822), (218, 10831), (220, 10843), (221, 10846), (222, 10864), (223, 10867), (224, 10876), (225, 10900), (228, 10921), (229, 10930), (231, 10963), (232, 10966), (233, 10990), (235, 11029), (236, 11059), (237, 11065), (238, 11074), (239, 11083), (241, 11104), (242, 11107), (243, 11125), (244, 11137), (246, 11191), (247, 11194), (249, 11269), (250, 11278), (251, 11287),

Gene: P104A_14 Start: 8498, Stop: 11263, Start Num: 9

Candidate Starts for P104A_14:

(Start: 9 @8498 has 43 MA's), (10, 8525), (11, 8531), (12, 8543), (13, 8552), (16, 8585), (17, 8588), (19, 8633), (20, 8639), (22, 8660), (23, 8663), (24, 8693), (25, 8711), (26, 8741), (28, 8777), (29, 8810), (30, 8831), (31, 8852), (32, 8882), (33, 8897), (34, 8915), (35, 8924), (36, 8927), (37, 8945), (38, 8999), (39, 9002), (40, 9017), (41, 9032), (42, 9035), (43, 9047), (47, 9071), (49, 9107), (50, 9116), (51, 9119), (52, 9161), (53, 9173), (54, 9218), (57, 9263), (59, 9284), (61, 9305), (63, 9326), (64, 9338), (65, 9347), (67, 9380), (68, 9383), (69, 9395), (70, 9413), (71, 9422), (73, 9434), (74, 9446), (75, 9458), (76, 9467), (78, 9494), (79, 9509), (80, 9515), (81, 9524), (82, 9545), (84, 9563),

(85, 9569), (87, 9599), (88, 9605), (89, 9611), (90, 9620), (91, 9623), (92, 9641), (93, 9671), (95, 9704), (96, 9713), (97, 9725), (99, 9761), (102, 9776), (104, 9791), (105, 9803), (106, 9812), (109, 9830), (112, 9845), (113, 9854), (115, 9884), (116, 9887), (117, 9896), (119, 9911), (120, 9917), (121, 9926), (125, 9950), (127, 9974), (129, 9992), (130, 9995), (131, 9998), (133, 10007), (134, 10010), (138, 10031), (139, 10037), (140, 10058), (142, 10064), (143, 10070), (144, 10073), (146, 10082), (147, 10085), (148, 10091), (150, 10106), (152, 10118), (153, 10124), (158, 10166), (159, 10172), (160, 10181), (161, 10187), (162, 10190), (163, 10193), (164, 10211), (166, 10220), (167, 10223), (171, 10247), (174, 10265), (183, 10355), (185, 10367), (186, 10376), (187, 10385), (194, 10460), (196, 10487), (197, 10511), (199, 10529), (201, 10574), (203, 10595), (204, 10604), (207, 10637), (208, 10664), (210, 10706), (211, 10715), (212, 10727), (213, 10739), (214, 10748), (218, 10802), (219, 10811), (220, 10814), (221, 10817), (222, 10835), (223, 10838), (224, 10847), (225, 10871), (227, 10883), (228, 10892), (229, 10901), (231, 10934), (232, 10937), (233, 10961), (235, 11000), (236, 11030), (237, 11036), (238, 11045), (239, 11054), (241, 11075), (243, 11096), (244, 11108), (245, 11144), (246, 11162), (247, 11165), (248, 11171), (249, 11240), (250, 11249), (251, 11258),

Gene: P104B_14 Start: 8515, Stop: 11280, Start Num: 9

Candidate Starts for P104B_14:

(Start: 9 @8515 has 43 MA's), (10, 8542), (11, 8548), (12, 8560), (13, 8569), (16, 8602), (17, 8605), (19, 8650), (20, 8656), (22, 8677), (23, 8680), (25, 8728), (26, 8758), (28, 8794), (29, 8827), (30, 8848), (31, 8869), (32, 8899), (33, 8914), (34, 8932), (35, 8941), (36, 8944), (37, 8962), (38, 9016), (39, 9019), (40, 9034), (41, 9049), (42, 9052), (43, 9064), (45, 9079), (47, 9088), (49, 9124), (50, 9133), (51, 9136), (52, 9178), (53, 9190), (54, 9235), (57, 9280), (59, 9301), (61, 9322), (64, 9355), (65, 9364), (67, 9397), (68, 9400), (69, 9412), (70, 9430), (71, 9439), (73, 9451), (74, 9463), (75, 9475), (76, 9484), (77, 9505), (78, 9511), (79, 9526), (80, 9532), (81, 9541), (82, 9562), (87, 9616), (88, 9622), (89, 9628), (91, 9640), (92, 9658), (93, 9688), (95, 9721), (96, 9730), (97, 9742), (98, 9775), (99, 9778), (100, 9787), (102, 9793), (105, 9820), (109, 9847), (112, 9862), (113, 9871), (114, 9880), (119, 9928), (120, 9934), (121, 9943), (125, 9967), (127, 9991), (128, 10000), (129, 10009), (130, 10012), (131, 10015), (132, 10021), (133, 10024), (134, 10027), (138, 10048), (139, 10054), (141, 10078), (142, 10081), (144, 10090), (145, 10096), (146, 10099), (147, 10102), (148, 10108), (150, 10123), (152, 10135), (159, 10189), (160, 10198), (161, 10204), (162, 10207), (163, 10210), (164, 10228), (166, 10237), (167, 10240), (170, 10261), (172, 10270), (173, 10273), (174, 10282), (175, 10285), (178, 10318), (183, 10372), (185, 10384), (186, 10393), (187, 10402), (193, 10459), (194, 10477), (195, 10492), (196, 10504), (199, 10546), (201, 10591), (202, 10609), (203, 10612), (207, 10654), (208, 10681), (210, 10723), (211, 10732), (212, 10744), (213, 10756), (214, 10765), (216, 10786), (217, 10810), (218, 10819), (219, 10828), (220, 10831), (221, 10834), (222, 10852), (223, 10855), (224, 10864), (225, 10888), (227, 10900), (228, 10909), (229, 10918), (231, 10951), (232, 10954), (233, 10978), (235, 11017), (236, 11047), (237, 11053), (238, 11062), (239, 11071), (241, 11092), (243, 11113), (244, 11125), (246, 11179), (247, 11182), (248, 11188), (249, 11257), (250, 11266), (251, 11275),

Gene: P105_14 Start: 8500, Stop: 11190, Start Num: 9

Candidate Starts for P105_14:

(Start: 9 @8500 has 43 MA's), (10, 8527), (11, 8533), (12, 8545), (16, 8587), (17, 8590), (18, 8620), (19, 8635), (20, 8641), (22, 8662), (23, 8665), (25, 8713), (26, 8743), (27, 8770), (28, 8779), (29, 8812), (30, 8833), (31, 8854), (32, 8884), (33, 8899), (34, 8917), (35, 8926), (36, 8929), (37, 8947), (38, 9001), (39, 9004), (40, 9019), (41, 9034), (42, 9037), (43, 9049), (45, 9064), (47, 9073), (49, 9109), (50, 9118), (51, 9121), (52, 9163), (53, 9175), (54, 9220), (57, 9265), (61, 9307), (63, 9328), (64, 9340), (65, 9349), (66, 9361), (67, 9382), (68, 9385), (69, 9397), (70, 9415), (71, 9424), (73, 9436), (74, 9448), (75, 9460), (76, 9469), (77, 9490), (78, 9496), (79, 9511), (80, 9517), (81, 9526), (82, 9547), (85, 9571), (87, 9601), (88, 9607), (89, 9613), (91, 9625), (92, 9643), (93, 9673), (95, 9706), (96, 9715), (97, 9727), (99, 9763), (100, 9772), (102, 9778), (112, 9793), (113, 9802), (114, 9811), (115, 9832), (117, 9844), (119, 9859), (120, 9865), (121, 9874), (125, 9898), (127, 9922), (129, 9940), (130, 9943), (131, 9946), (133, 9955), (134, 9958), (135, 9964), (136, 9967), (139, 9985), (140,

10006), (142, 10012), (143, 10018), (144, 10021), (146, 10030), (147, 10033), (148, 10039), (150, 10054), (152, 10066), (153, 10072), (156, 10105), (159, 10120), (160, 10129), (161, 10135), (162, 10138), (163, 10141), (164, 10159), (166, 10168), (170, 10192), (171, 10195), (173, 10204), (174, 10213), (178, 10249), (185, 10294), (186, 10303), (187, 10312), (188, 10321), (196, 10414), (197, 10438), (199, 10456), (201, 10501), (202, 10519), (203, 10522), (204, 10531), (207, 10564), (210, 10633), (211, 10642), (212, 10654), (213, 10666), (214, 10675), (218, 10729), (220, 10741), (221, 10744), (224, 10774), (225, 10798), (226, 10807), (227, 10810), (228, 10819), (229, 10828), (233, 10888), (235, 10927), (236, 10957), (237, 10963), (238, 10972), (243, 11023), (244, 11035), (246, 11089), (247, 11092), (248, 11098), (249, 11167), (250, 11176), (251, 11185),

Gene: P106A_14 Start: 8543, Stop: 11308, Start Num: 9

Candidate Starts for P106A_14:

(Start: 9 @8543 has 43 MA's), (10, 8570), (11, 8576), (12, 8588), (14, 8621), (16, 8630), (17, 8633), (18, 8663), (19, 8678), (20, 8684), (22, 8705), (23, 8708), (25, 8756), (26, 8786), (28, 8822), (29, 8855), (30, 8876), (31, 8897), (32, 8927), (33, 8942), (34, 8960), (35, 8969), (36, 8972), (37, 8990), (39, 9047), (40, 9062), (41, 9077), (42, 9080), (43, 9092), (45, 9107), (48, 9119), (49, 9152), (50, 9161), (51, 9164), (52, 9206), (53, 9218), (54, 9263), (56, 9293), (57, 9308), (58, 9320), (61, 9350), (64, 9383), (65, 9392), (66, 9404), (67, 9425), (68, 9428), (69, 9440), (70, 9458), (71, 9467), (73, 9479), (74, 9491), (76, 9512), (78, 9539), (79, 9554), (80, 9560), (81, 9569), (82, 9590), (87, 9644), (88, 9650), (89, 9656), (91, 9668), (92, 9686), (93, 9716), (95, 9749), (96, 9758), (97, 9770), (98, 9803), (99, 9806), (100, 9815), (104, 9836), (105, 9848), (106, 9857), (111, 9887), (113, 9899), (114, 9908), (115, 9929), (117, 9941), (119, 9956), (121, 9971), (126, 10016), (129, 10037), (130, 10040), (131, 10043), (132, 10049), (134, 10055), (139, 10082), (140, 10103), (142, 10109), (143, 10115), (146, 10127), (147, 10130), (149, 10139), (150, 10151), (152, 10163), (154, 10172), (155, 10190), (158, 10211), (159, 10217), (160, 10226), (161, 10232), (162, 10235), (163, 10238), (164, 10256), (166, 10265), (167, 10268), (171, 10292), (174, 10310), (183, 10400), (185, 10412), (186, 10421), (187, 10430), (193, 10487), (196, 10532), (197, 10556), (199, 10574), (201, 10619), (203, 10640), (204, 10649), (207, 10682), (208, 10709), (210, 10751), (211, 10760), (212, 10772), (213, 10784), (214, 10793), (216, 10814), (217, 10838), (218, 10847), (220, 10859), (221, 10862), (222, 10880), (223, 10883), (224, 10892), (225, 10916), (227, 10928), (228, 10937), (229, 10946), (232, 10982), (233, 11006), (235, 11045), (236, 11075), (237, 11081), (238, 11090), (239, 11099), (241, 11120), (242, 11123), (243, 11141), (244, 11153), (246, 11207), (247, 11210), (249, 11285), (250, 11294), (251, 11303),

Gene: P106C_14 Start: 8543, Stop: 11308, Start Num: 9

Candidate Starts for P106C_14:

(Start: 9 @8543 has 43 MA's), (10, 8570), (11, 8576), (12, 8588), (14, 8621), (16, 8630), (17, 8633), (18, 8663), (19, 8678), (20, 8684), (22, 8705), (23, 8708), (25, 8756), (26, 8786), (28, 8822), (29, 8855), (30, 8876), (31, 8897), (32, 8927), (33, 8942), (34, 8960), (35, 8969), (36, 8972), (37, 8990), (39, 9047), (40, 9062), (41, 9077), (42, 9080), (43, 9092), (45, 9107), (48, 9119), (49, 9152), (50, 9161), (51, 9164), (52, 9206), (53, 9218), (54, 9263), (56, 9293), (57, 9308), (58, 9320), (61, 9350), (64, 9383), (65, 9392), (66, 9404), (67, 9425), (68, 9428), (69, 9440), (70, 9458), (71, 9467), (73, 9479), (74, 9491), (76, 9512), (78, 9539), (79, 9554), (80, 9560), (81, 9569), (82, 9590), (87, 9644), (88, 9650), (89, 9656), (91, 9668), (92, 9686), (93, 9716), (95, 9749), (96, 9758), (97, 9770), (98, 9803), (99, 9806), (100, 9815), (104, 9836), (105, 9848), (106, 9857), (111, 9887), (113, 9899), (114, 9908), (115, 9929), (117, 9941), (119, 9956), (121, 9971), (126, 10016), (129, 10037), (130, 10040), (131, 10043), (132, 10049), (134, 10055), (139, 10082), (140, 10103), (142, 10109), (143, 10115), (146, 10127), (147, 10130), (149, 10139), (150, 10151), (152, 10163), (154, 10172), (155, 10190), (158, 10211), (159, 10217), (160, 10226), (161, 10232), (162, 10235), (163, 10238), (164, 10256), (166, 10265), (167, 10268), (171, 10292), (174, 10310), (183, 10400), (185, 10412), (186, 10421), (187, 10430), (193, 10487), (196, 10532), (197, 10556), (199, 10574), (201, 10619), (203, 10640), (204, 10649), (207, 10682), (208, 10709), (210, 10751), (211, 10760), (212, 10772), (213, 10784), (214, 10793), (216, 10814), (217, 10838), (218, 10847), (220, 10859), (221, 10862), (222, 10880),

(223, 10883), (224, 10892), (225, 10916), (227, 10928), (228, 10937), (229, 10946), (232, 10982), (233, 11006), (235, 11045), (236, 11075), (237, 11081), (238, 11090), (239, 11099), (241, 11120), (242, 11123), (243, 11141), (244, 11153), (246, 11207), (247, 11210), (249, 11285), (250, 11294), (251, 11303),

Gene: P106I_14 Start: 8543, Stop: 11308, Start Num: 9

Candidate Starts for P106I_14:

(Start: 9 @8543 has 43 MA's), (10, 8570), (11, 8576), (12, 8588), (14, 8621), (16, 8630), (17, 8633), (18, 8663), (19, 8678), (20, 8684), (22, 8705), (23, 8708), (25, 8756), (26, 8786), (28, 8822), (29, 8855), (30, 8876), (31, 8897), (32, 8927), (33, 8942), (34, 8960), (35, 8969), (36, 8972), (37, 8990), (39, 9047), (40, 9062), (41, 9077), (42, 9080), (43, 9092), (45, 9107), (48, 9119), (49, 9152), (50, 9161), (51, 9164), (52, 9206), (53, 9218), (54, 9263), (56, 9293), (57, 9308), (58, 9320), (61, 9350), (64, 9383), (65, 9392), (66, 9404), (67, 9425), (68, 9428), (69, 9440), (70, 9458), (71, 9467), (73, 9479), (74, 9491), (76, 9512), (78, 9539), (79, 9554), (80, 9560), (81, 9569), (82, 9590), (87, 9644), (88, 9650), (89, 9656), (91, 9668), (92, 9686), (93, 9716), (95, 9749), (96, 9758), (97, 9770), (98, 9803), (99, 9806), (100, 9815), (104, 9836), (105, 9848), (106, 9857), (111, 9887), (113, 9899), (114, 9908), (115, 9929), (117, 9941), (119, 9956), (121, 9971), (126, 10016), (129, 10037), (130, 10040), (131, 10043), (132, 10049), (134, 10055), (139, 10082), (140, 10103), (142, 10109), (143, 10115), (146, 10127), (147, 10130), (149, 10139), (150, 10151), (152, 10163), (154, 10172), (155, 10190), (158, 10211), (159, 10217), (160, 10226), (161, 10232), (162, 10235), (163, 10238), (164, 10256), (166, 10265), (167, 10268), (171, 10292), (174, 10310), (183, 10400), (185, 10412), (186, 10421), (187, 10430), (193, 10487), (196, 10532), (197, 10556), (199, 10574), (201, 10619), (203, 10640), (204, 10649), (207, 10682), (208, 10709), (210, 10751), (211, 10760), (212, 10772), (213, 10784), (214, 10793), (216, 10814), (217, 10838), (218, 10847), (220, 10859), (221, 10862), (222, 10880), (223, 10883), (224, 10892), (225, 10916), (227, 10928), (228, 10937), (229, 10946), (232, 10982), (233, 11006), (235, 11045), (236, 11075), (237, 11081), (238, 11090), (239, 11099), (241, 11120), (242, 11123), (243, 11141), (244, 11153), (246, 11207), (247, 11210), (249, 11285), (250, 11294), (251, 11303),

Gene: P106L_14 Start: 8543, Stop: 11308, Start Num: 9

Candidate Starts for P106L_14:

(Start: 9 @8543 has 43 MA's), (10, 8570), (11, 8576), (12, 8588), (14, 8621), (16, 8630), (17, 8633), (18, 8663), (19, 8678), (20, 8684), (22, 8705), (23, 8708), (25, 8756), (26, 8786), (28, 8822), (29, 8855), (30, 8876), (31, 8897), (32, 8927), (33, 8942), (34, 8960), (35, 8969), (36, 8972), (37, 8990), (39, 9047), (40, 9062), (41, 9077), (42, 9080), (43, 9092), (45, 9107), (48, 9119), (49, 9152), (50, 9161), (51, 9164), (52, 9206), (53, 9218), (54, 9263), (56, 9293), (57, 9308), (58, 9320), (61, 9350), (64, 9383), (65, 9392), (66, 9404), (67, 9425), (68, 9428), (69, 9440), (70, 9458), (71, 9467), (73, 9479), (74, 9491), (76, 9512), (78, 9539), (79, 9554), (80, 9560), (81, 9569), (82, 9590), (87, 9644), (88, 9650), (89, 9656), (91, 9668), (92, 9686), (93, 9716), (95, 9749), (96, 9758), (97, 9770), (98, 9803), (99, 9806), (100, 9815), (104, 9836), (105, 9848), (106, 9857), (111, 9887), (113, 9899), (114, 9908), (115, 9929), (117, 9941), (119, 9956), (121, 9971), (126, 10016), (129, 10037), (130, 10040), (131, 10043), (132, 10049), (134, 10055), (139, 10082), (140, 10103), (142, 10109), (143, 10115), (146, 10127), (147, 10130), (149, 10139), (150, 10151), (152, 10163), (154, 10172), (155, 10190), (158, 10211), (159, 10217), (160, 10226), (161, 10232), (162, 10235), (163, 10238), (164, 10256), (166, 10265), (167, 10268), (171, 10292), (174, 10310), (183, 10400), (185, 10412), (186, 10421), (187, 10430), (193, 10487), (196, 10532), (197, 10556), (199, 10574), (201, 10619), (203, 10640), (204, 10649), (207, 10682), (208, 10709), (210, 10751), (211, 10760), (212, 10772), (213, 10784), (214, 10793), (216, 10814), (217, 10838), (218, 10847), (220, 10859), (221, 10862), (222, 10880), (223, 10883), (224, 10892), (225, 10916), (227, 10928), (228, 10937), (229, 10946), (232, 10982), (233, 11006), (235, 11045), (236, 11075), (237, 11081), (238, 11090), (239, 11099), (241, 11120), (242, 11123), (243, 11141), (244, 11153), (246, 11207), (247, 11210), (249, 11285), (250, 11294), (251, 11303),

Gene: P106M_14 Start: 8543, Stop: 11308, Start Num: 9

Candidate Starts for P106M_14:

(Start: 9 @8543 has 43 MA's), (10, 8570), (11, 8576), (12, 8588), (14, 8621), (16, 8630), (17, 8633), (18, 8663), (19, 8678), (20, 8684), (22, 8705), (23, 8708), (25, 8756), (26, 8786), (28, 8822), (29, 8855), (30, 8876), (31, 8897), (32, 8927), (33, 8942), (34, 8960), (35, 8969), (36, 8972), (37, 8990), (39, 9047), (40, 9062), (41, 9077), (42, 9080), (43, 9092), (45, 9107), (48, 9119), (49, 9152), (50, 9161), (51, 9164), (52, 9206), (53, 9218), (54, 9263), (56, 9293), (57, 9308), (58, 9320), (61, 9350), (64, 9383), (65, 9392), (66, 9404), (67, 9425), (68, 9428), (69, 9440), (70, 9458), (71, 9467), (73, 9479), (74, 9491), (76, 9512), (78, 9539), (79, 9554), (80, 9560), (81, 9569), (82, 9590), (87, 9644), (88, 9650), (89, 9656), (91, 9668), (92, 9686), (93, 9716), (95, 9749), (96, 9758), (97, 9770), (98, 9803), (99, 9806), (100, 9815), (104, 9836), (105, 9848), (106, 9857), (111, 9887), (113, 9899), (114, 9908), (115, 9929), (117, 9941), (119, 9956), (121, 9971), (126, 10016), (129, 10037), (130, 10040), (131, 10043), (132, 10049), (134, 10055), (139, 10082), (140, 10103), (142, 10109), (143, 10115), (146, 10127), (147, 10130), (149, 10139), (150, 10151), (152, 10163), (154, 10172), (155, 10190), (158, 10211), (159, 10217), (160, 10226), (161, 10232), (162, 10235), (163, 10238), (164, 10256), (166, 10265), (167, 10268), (171, 10292), (174, 10310), (183, 10400), (185, 10412), (186, 10421), (187, 10430), (193, 10487), (196, 10532), (197, 10556), (199, 10574), (201, 10619), (203, 10640), (204, 10649), (207, 10682), (208, 10709), (210, 10751), (211, 10760), (212, 10772), (213, 10784), (214, 10793), (216, 10814), (217, 10838), (218, 10847), (220, 10859), (221, 10862), (222, 10880), (223, 10883), (224, 10892), (225, 10916), (227, 10928), (228, 10937), (229, 10946), (232, 10982), (233, 11006), (235, 11045), (236, 11075), (237, 11081), (238, 11090), (239, 11099), (241, 11120), (242, 11123), (243, 11141), (244, 11153), (246, 11207), (247, 11210), (249, 11285), (250, 11294), (251, 11303),

Gene: P107A_14 Start: 8520, Stop: 11285, Start Num: 9

Candidate Starts for P107A_14:

(Start: 9 @8520 has 43 MA's), (10, 8547), (11, 8553), (12, 8565), (13, 8574), (14, 8598), (16, 8607), (17, 8610), (19, 8655), (21, 8667), (22, 8682), (23, 8685), (25, 8733), (26, 8763), (28, 8799), (29, 8832), (30, 8853), (32, 8904), (33, 8919), (34, 8937), (35, 8946), (37, 8967), (39, 9024), (40, 9039), (41, 9054), (42, 9057), (43, 9069), (45, 9084), (47, 9093), (48, 9096), (49, 9129), (50, 9138), (51, 9141), (52, 9183), (53, 9195), (54, 9240), (55, 9261), (57, 9285), (59, 9306), (61, 9327), (64, 9360), (65, 9369), (67, 9402), (68, 9405), (69, 9417), (70, 9435), (71, 9444), (73, 9456), (74, 9468), (75, 9480), (76, 9489), (77, 9510), (78, 9516), (79, 9531), (80, 9537), (81, 9546), (82, 9567), (89, 9633), (90, 9642), (91, 9645), (92, 9663), (93, 9693), (95, 9726), (96, 9735), (97, 9747), (99, 9783), (100, 9792), (104, 9813), (105, 9825), (109, 9852), (112, 9867), (113, 9876), (114, 9885), (115, 9906), (117, 9918), (119, 9933), (120, 9939), (121, 9948), (125, 9972), (127, 9996), (129, 10014), (130, 10017), (131, 10020), (133, 10029), (134, 10032), (135, 10038), (136, 10041), (138, 10053), (139, 10059), (140, 10080), (142, 10086), (143, 10092), (144, 10095), (146, 10104), (147, 10107), (148, 10113), (150, 10128), (151, 10137), (152, 10140), (154, 10149), (155, 10167), (158, 10188), (159, 10194), (160, 10203), (161, 10209), (162, 10212), (164, 10233), (166, 10242), (167, 10245), (170, 10266), (171, 10269), (173, 10278), (174, 10287), (178, 10323), (183, 10377), (185, 10389), (186, 10398), (187, 10407), (196, 10509), (199, 10551), (201, 10596), (203, 10617), (204, 10626), (207, 10659), (208, 10686), (210, 10728), (211, 10737), (213, 10761), (214, 10770), (218, 10824), (220, 10836), (221, 10839), (222, 10857), (223, 10860), (224, 10869), (225, 10893), (228, 10914), (229, 10923), (231, 10956), (232, 10959), (233, 10983), (235, 11022), (236, 11052), (237, 11058), (238, 11067), (239, 11076), (243, 11118), (244, 11130), (245, 11166), (246, 11184), (247, 11187), (249, 11262), (250, 11271), (251, 11280),

Gene: P107C_14 Start: 8502, Stop: 11267, Start Num: 9

Candidate Starts for P107C_14:

(Start: 9 @8502 has 43 MA's), (10, 8529), (11, 8535), (12, 8547), (13, 8556), (16, 8589), (17, 8592), (18, 8622), (19, 8637), (20, 8643), (21, 8649), (22, 8664), (23, 8667), (25, 8715), (26, 8745), (27, 8772), (28, 8781), (29, 8814), (30, 8835), (31, 8856), (32, 8886), (33, 8901), (34, 8919), (35, 8928),

(36, 8931), (37, 8949), (39, 9006), (40, 9021), (41, 9036), (42, 9039), (43, 9051), (45, 9066), (46, 9069), (47, 9075), (49, 9111), (50, 9120), (51, 9123), (52, 9165), (53, 9177), (54, 9222), (57, 9267), (59, 9288), (61, 9309), (63, 9330), (64, 9342), (65, 9351), (66, 9363), (67, 9384), (68, 9387), (69, 9399), (70, 9417), (71, 9426), (73, 9438), (74, 9450), (75, 9462), (76, 9471), (77, 9492), (78, 9498), (79, 9513), (80, 9519), (81, 9528), (82, 9549), (89, 9615), (92, 9645), (93, 9675), (95, 9708), (97, 9729), (99, 9765), (100, 9774), (102, 9780), (104, 9795), (105, 9807), (109, 9834), (112, 9849), (113, 9858), (115, 9888), (119, 9915), (120, 9921), (121, 9930), (127, 9978), (129, 9996), (130, 9999), (131, 10002), (134, 10014), (138, 10035), (139, 10041), (142, 10068), (143, 10074), (144, 10077), (146, 10086), (147, 10089), (148, 10095), (150, 10110), (152, 10122), (159, 10176), (160, 10185), (161, 10191), (162, 10194), (163, 10197), (164, 10215), (166, 10224), (167, 10227), (170, 10248), (171, 10251), (173, 10260), (174, 10269), (178, 10305), (183, 10359), (185, 10371), (186, 10380), (187, 10389), (190, 10404), (194, 10464), (195, 10479), (196, 10491), (199, 10533), (201, 10578), (203, 10599), (204, 10608), (207, 10641), (208, 10668), (210, 10710), (211, 10719), (212, 10731), (213, 10743), (214, 10752), (216, 10773), (218, 10806), (219, 10815), (220, 10818), (221, 10821), (222, 10839), (223, 10842), (224, 10851), (225, 10875), (226, 10884), (227, 10887), (228, 10896), (229, 10905), (231, 10938), (232, 10941), (233, 10965), (235, 11004), (236, 11034), (237, 11040), (238, 11049), (239, 11058), (243, 11100), (244, 11112), (245, 11148), (246, 11166), (247, 11169), (248, 11175), (249, 11244), (250, 11253), (251, 11262),

Gene: P108C_14 Start: 8510, Stop: 11275, Start Num: 9

Candidate Starts for P108C_14:

(Start: 9 @8510 has 43 MA's), (10, 8537), (11, 8543), (12, 8555), (13, 8564), (14, 8588), (17, 8600), (18, 8630), (19, 8645), (20, 8651), (22, 8672), (23, 8675), (25, 8723), (26, 8753), (28, 8789), (29, 8822), (30, 8843), (31, 8864), (32, 8894), (33, 8909), (34, 8927), (35, 8936), (36, 8939), (37, 8957), (39, 9014), (40, 9029), (41, 9044), (42, 9047), (43, 9059), (45, 9074), (48, 9086), (49, 9119), (50, 9128), (51, 9131), (52, 9173), (53, 9185), (54, 9230), (56, 9260), (57, 9275), (58, 9287), (61, 9317), (64, 9350), (65, 9359), (66, 9371), (67, 9392), (68, 9395), (69, 9407), (70, 9425), (71, 9434), (73, 9446), (74, 9458), (76, 9479), (78, 9506), (79, 9521), (80, 9527), (81, 9536), (82, 9557), (88, 9617), (89, 9623), (90, 9632), (92, 9653), (93, 9683), (95, 9716), (96, 9725), (97, 9737), (99, 9773), (102, 9788), (105, 9815), (107, 9833), (109, 9842), (112, 9857), (113, 9866), (114, 9875), (115, 9896), (117, 9908), (119, 9923), (121, 9938), (127, 9986), (129, 10004), (130, 10007), (131, 10010), (133, 10019), (134, 10022), (135, 10028), (139, 10049), (142, 10076), (143, 10082), (144, 10085), (146, 10094), (147, 10097), (148, 10103), (150, 10118), (152, 10130), (153, 10136), (159, 10184), (160, 10193), (161, 10199), (162, 10202), (163, 10205), (164, 10223), (167, 10235), (170, 10256), (171, 10259), (173, 10268), (174, 10277), (178, 10313), (183, 10367), (185, 10379), (186, 10388), (187, 10397), (190, 10412), (194, 10472), (196, 10499), (199, 10541), (201, 10586), (203, 10607), (204, 10616), (207, 10649), (208, 10676), (210, 10718), (211, 10727), (212, 10739), (213, 10751), (214, 10760), (216, 10781), (218, 10814), (220, 10826), (221, 10829), (222, 10847), (223, 10850), (225, 10883), (227, 10895), (228, 10904), (229, 10913), (231, 10946), (232, 10949), (233, 10973), (235, 11012), (236, 11042), (237, 11048), (238, 11057), (239, 11066), (243, 11108), (244, 11120), (245, 11156), (246, 11174), (247, 11177), (248, 11183), (249, 11252), (250, 11261), (251, 11270),

Gene: P14.4_14 Start: 8510, Stop: 11275, Start Num: 9

Candidate Starts for P14.4_14:

(Start: 9 @8510 has 43 MA's), (10, 8537), (11, 8543), (12, 8555), (13, 8564), (16, 8597), (17, 8600), (19, 8645), (20, 8651), (22, 8672), (23, 8675), (25, 8723), (26, 8753), (28, 8789), (29, 8822), (30, 8843), (31, 8864), (32, 8894), (33, 8909), (34, 8927), (35, 8936), (36, 8939), (37, 8957), (39, 9014), (40, 9029), (41, 9044), (42, 9047), (43, 9059), (45, 9074), (47, 9083), (49, 9119), (50, 9128), (51, 9131), (52, 9173), (53, 9185), (54, 9230), (57, 9275), (59, 9296), (61, 9317), (63, 9338), (64, 9350), (65, 9359), (67, 9392), (68, 9395), (69, 9407), (70, 9425), (71, 9434), (73, 9446), (74, 9458), (75, 9470), (76, 9479), (77, 9500), (78, 9506), (79, 9521), (80, 9527), (81, 9536), (82, 9557), (85, 9581), (87, 9611), (88, 9617), (89, 9623), (92, 9653), (93, 9683), (95, 9716), (96, 9725), (97, 9737), (98, 9770), (99, 9773), (100, 9782), (102, 9788), (105, 9815), (106, 9824), (108, 9836), (109, 9842), (112,

9857), (113, 9866), (114, 9875), (115, 9896), (117, 9908), (120, 9929), (121, 9938), (125, 9962), (127, 9986), (129, 10004), (130, 10007), (131, 10010), (133, 10019), (134, 10022), (135, 10028), (136, 10031), (138, 10043), (139, 10049), (141, 10073), (142, 10076), (144, 10085), (146, 10094), (147, 10097), (148, 10103), (150, 10118), (152, 10130), (153, 10136), (155, 10157), (156, 10169), (159, 10184), (160, 10193), (161, 10199), (162, 10202), (163, 10205), (164, 10223), (165, 10226), (166, 10232), (167, 10235), (170, 10256), (171, 10259), (173, 10268), (174, 10277), (178, 10313), (183, 10367), (185, 10379), (186, 10388), (187, 10397), (195, 10487), (196, 10499), (199, 10541), (201, 10586), (203, 10607), (204, 10616), (207, 10649), (208, 10676), (210, 10718), (211, 10727), (212, 10739), (213, 10751), (214, 10760), (216, 10781), (218, 10814), (219, 10823), (220, 10826), (221, 10829), (222, 10847), (223, 10850), (224, 10859), (225, 10883), (228, 10904), (229, 10913), (231, 10946), (232, 10949), (233, 10973), (235, 11012), (236, 11042), (237, 11048), (238, 11057), (239, 11066), (243, 11108), (244, 11120), (246, 11174), (247, 11177), (248, 11183), (249, 11252), (250, 11261), (251, 11270),

Gene: P9.1_14 Start: 8505, Stop: 11270, Start Num: 9

Candidate Starts for P9.1_14:

(Start: 9 @8505 has 43 MA's), (10, 8532), (11, 8538), (12, 8550), (13, 8559), (16, 8592), (17, 8595), (18, 8625), (19, 8640), (20, 8646), (22, 8667), (23, 8670), (25, 8718), (26, 8748), (28, 8784), (29, 8817), (30, 8838), (31, 8859), (32, 8889), (33, 8904), (34, 8922), (35, 8931), (36, 8934), (37, 8952), (38, 9006), (39, 9009), (40, 9024), (41, 9039), (42, 9042), (43, 9054), (47, 9078), (49, 9114), (50, 9123), (51, 9126), (52, 9168), (53, 9180), (54, 9225), (57, 9270), (59, 9291), (61, 9312), (63, 9333), (64, 9345), (66, 9366), (68, 9390), (69, 9402), (70, 9420), (71, 9429), (73, 9441), (74, 9453), (75, 9465), (76, 9474), (77, 9495), (78, 9501), (79, 9516), (80, 9522), (81, 9531), (82, 9552), (85, 9576), (87, 9606), (88, 9612), (89, 9618), (91, 9630), (92, 9648), (93, 9678), (95, 9711), (96, 9720), (97, 9732), (99, 9768), (100, 9777), (104, 9798), (105, 9810), (106, 9819), (109, 9837), (112, 9852), (113, 9861), (114, 9870), (115, 9891), (116, 9894), (117, 9903), (119, 9918), (120, 9924), (121, 9933), (125, 9957), (126, 9978), (127, 9981), (129, 9999), (130, 10002), (133, 10014), (134, 10017), (135, 10023), (136, 10026), (139, 10044), (140, 10065), (142, 10071), (143, 10077), (144, 10080), (146, 10089), (147, 10092), (148, 10098), (150, 10113), (152, 10125), (159, 10179), (160, 10188), (161, 10194), (162, 10197), (163, 10200), (164, 10218), (165, 10221), (166, 10227), (167, 10230), (170, 10251), (171, 10254), (173, 10263), (174, 10272), (178, 10308), (183, 10362), (185, 10374), (186, 10383), (187, 10392), (190, 10407), (195, 10482), (196, 10494), (199, 10536), (201, 10581), (203, 10602), (204, 10611), (207, 10644), (210, 10713), (211, 10722), (213, 10746), (214, 10755), (216, 10776), (218, 10809), (219, 10818), (220, 10821), (221, 10824), (222, 10842), (223, 10845), (224, 10854), (225, 10878), (226, 10887), (227, 10890), (228, 10899), (229, 10908), (231, 10941), (232, 10944), (233, 10968), (235, 11007), (236, 11037), (237, 11043), (238, 11052), (243, 11103), (244, 11115), (246, 11169), (248, 11178), (249, 11247), (250, 11256), (251, 11265),

Gene: PA6_14 Start: 8532, Stop: 11297, Start Num: 9

Candidate Starts for PA6_14:

(Start: 9 @8532 has 43 MA's), (10, 8559), (11, 8565), (12, 8577), (13, 8586), (16, 8619), (17, 8622), (18, 8652), (19, 8667), (20, 8673), (22, 8694), (23, 8697), (25, 8745), (26, 8775), (27, 8802), (28, 8811), (29, 8844), (31, 8886), (32, 8916), (33, 8931), (34, 8949), (35, 8958), (36, 8961), (37, 8979), (38, 9033), (39, 9036), (40, 9051), (41, 9066), (42, 9069), (43, 9081), (47, 9105), (49, 9141), (50, 9150), (51, 9153), (52, 9195), (53, 9207), (54, 9252), (57, 9297), (59, 9318), (61, 9339), (64, 9372), (65, 9381), (67, 9414), (68, 9417), (69, 9429), (70, 9447), (71, 9456), (73, 9468), (74, 9480), (75, 9492), (76, 9501), (77, 9522), (78, 9528), (79, 9543), (80, 9549), (81, 9558), (82, 9579), (87, 9633), (88, 9639), (89, 9645), (91, 9657), (92, 9675), (93, 9705), (94, 9717), (95, 9738), (96, 9747), (97, 9759), (99, 9795), (100, 9804), (102, 9810), (104, 9825), (105, 9837), (106, 9846), (107, 9855), (111, 9876), (113, 9888), (115, 9918), (117, 9930), (119, 9945), (121, 9960), (126, 10005), (129, 10026), (130, 10029), (131, 10032), (132, 10038), (134, 10044), (139, 10071), (140, 10092), (142, 10098), (143, 10104), (146, 10116), (147, 10119), (149, 10128), (150, 10140), (152, 10152), (154, 10161), (155, 10179), (158, 10200), (159, 10206), (160, 10215), (161, 10221), (162, 10224), (163, 10227),

(164, 10245), (166, 10254), (167, 10257), (171, 10281), (174, 10299), (183, 10389), (185, 10401), (186, 10410), (187, 10419), (196, 10521), (197, 10545), (199, 10563), (201, 10608), (203, 10629), (204, 10638), (207, 10671), (208, 10698), (210, 10740), (211, 10749), (212, 10761), (213, 10773), (214, 10782), (216, 10803), (217, 10827), (218, 10836), (220, 10848), (221, 10851), (222, 10869), (223, 10872), (224, 10881), (225, 10905), (227, 10917), (228, 10926), (229, 10935), (233, 10995), (235, 11034), (236, 11064), (237, 11070), (238, 11079), (239, 11088), (242, 11112), (243, 11130), (244, 11142), (246, 11196), (247, 11199), (248, 11205), (249, 11274), (250, 11283), (251, 11292),

Gene: PAD20_14 Start: 8508, Stop: 11273, Start Num: 9

Candidate Starts for PAD20_14:

(Start: 9 @8508 has 43 MA's), (10, 8535), (11, 8541), (12, 8553), (13, 8562), (14, 8586), (15, 8592), (17, 8598), (19, 8643), (20, 8649), (22, 8670), (23, 8673), (25, 8721), (26, 8751), (27, 8778), (28, 8787), (29, 8820), (30, 8841), (31, 8862), (32, 8892), (33, 8907), (34, 8925), (35, 8934), (36, 8937), (37, 8955), (38, 9009), (39, 9012), (40, 9027), (41, 9042), (42, 9045), (43, 9057), (47, 9081), (49, 9117), (50, 9126), (51, 9129), (52, 9171), (53, 9183), (54, 9228), (57, 9273), (59, 9294), (61, 9315), (64, 9348), (65, 9357), (67, 9390), (68, 9393), (69, 9405), (70, 9423), (71, 9432), (73, 9444), (74, 9456), (75, 9468), (76, 9477), (77, 9498), (78, 9504), (79, 9519), (80, 9525), (81, 9534), (82, 9555), (87, 9609), (88, 9615), (89, 9621), (92, 9651), (93, 9681), (95, 9714), (96, 9723), (97, 9735), (99, 9771), (100, 9780), (102, 9786), (105, 9813), (106, 9822), (107, 9831), (109, 9840), (114, 9873), (115, 9894), (118, 9918), (119, 9921), (120, 9927), (121, 9936), (125, 9960), (127, 9984), (128, 9993), (129, 10002), (130, 10005), (133, 10017), (134, 10020), (135, 10026), (136, 10029), (139, 10047), (140, 10068), (142, 10074), (143, 10080), (144, 10083), (145, 10089), (146, 10092), (147, 10095), (148, 10101), (150, 10116), (152, 10128), (153, 10134), (155, 10155), (156, 10167), (157, 10170), (158, 10176), (160, 10191), (161, 10197), (162, 10200), (163, 10203), (164, 10221), (166, 10230), (167, 10233), (170, 10254), (172, 10263), (173, 10266), (174, 10275), (178, 10311), (185, 10377), (186, 10386), (187, 10395), (195, 10485), (196, 10497), (197, 10521), (199, 10539), (201, 10584), (203, 10605), (204, 10614), (207, 10647), (208, 10674), (210, 10716), (211, 10725), (212, 10737), (213, 10749), (214, 10758), (216, 10779), (218, 10812), (219, 10821), (220, 10824), (221, 10827), (222, 10845), (223, 10848), (224, 10857), (225, 10881), (227, 10893), (228, 10902), (229, 10911), (231, 10944), (232, 10947), (233, 10971), (235, 11010), (236, 11040), (237, 11046), (238, 11055), (239, 11064), (243, 11106), (244, 11118), (246, 11172), (247, 11175), (248, 11181), (249, 11250), (250, 11259), (251, 11268),

Gene: PAS50_14 Start: 8517, Stop: 11282, Start Num: 9

Candidate Starts for PAS50_14:

(1, 8298), (2, 8316), (3, 8373), (4, 8409), (5, 8448), (6, 8460), (7, 8466), (8, 8472), (Start: 9 @8517 has 43 MA's), (10, 8544), (11, 8550), (13, 8571), (17, 8607), (19, 8652), (20, 8658), (22, 8679), (23, 8682), (25, 8730), (26, 8760), (28, 8796), (29, 8829), (31, 8871), (32, 8901), (33, 8916), (34, 8934), (35, 8943), (36, 8946), (37, 8964), (39, 9021), (40, 9036), (41, 9051), (42, 9054), (43, 9066), (45, 9081), (47, 9090), (49, 9126), (50, 9135), (51, 9138), (52, 9180), (53, 9192), (54, 9237), (56, 9267), (57, 9282), (59, 9303), (61, 9324), (64, 9357), (65, 9366), (67, 9399), (68, 9402), (69, 9414), (70, 9432), (71, 9441), (73, 9453), (74, 9465), (76, 9486), (77, 9507), (78, 9513), (79, 9528), (80, 9534), (81, 9543), (82, 9564), (85, 9588), (87, 9618), (88, 9624), (89, 9630), (91, 9642), (92, 9660), (93, 9690), (94, 9702), (95, 9723), (96, 9732), (97, 9744), (99, 9780), (100, 9789), (104, 9810), (105, 9822), (111, 9861), (113, 9873), (114, 9882), (115, 9903), (117, 9915), (119, 9930), (121, 9945), (126, 9990), (129, 10011), (130, 10014), (132, 10023), (134, 10029), (139, 10056), (140, 10077), (142, 10083), (143, 10089), (144, 10092), (145, 10098), (146, 10101), (147, 10104), (149, 10113), (150, 10125), (152, 10137), (154, 10146), (155, 10164), (158, 10185), (159, 10191), (160, 10200), (161, 10206), (162, 10209), (163, 10212), (164, 10230), (166, 10239), (167, 10242), (171, 10266), (174, 10284), (183, 10374), (185, 10386), (186, 10395), (187, 10404), (195, 10494), (196, 10506), (197, 10530), (199, 10548), (201, 10593), (203, 10614), (204, 10623), (207, 10656), (208, 10683), (210, 10725), (211, 10734), (212, 10746), (213, 10758), (214, 10767), (218, 10821), (219, 10830), (220, 10833), (221, 10836), (222, 10854), (223, 10857), (224, 10866), (225, 10890), (227, 10902), (228, 10911), (229,

10920), (231, 10953), (232, 10956), (233, 10980), (235, 11019), (236, 11049), (237, 11055), (238, 11064), (239, 11073), (241, 11094), (242, 11097), (243, 11115), (244, 11127), (246, 11181), (247, 11184), (249, 11259), (250, 11268), (251, 11277),

Gene: PHL010M04_14 Start: 8505, Stop: 11270, Start Num: 9

Candidate Starts for PHL010M04_14:

(Start: 9 @8505 has 43 MA's), (10, 8532), (11, 8538), (12, 8550), (13, 8559), (14, 8583), (16, 8592), (17, 8595), (19, 8640), (20, 8646), (21, 8652), (22, 8667), (23, 8670), (25, 8718), (26, 8748), (28, 8784), (29, 8817), (32, 8889), (33, 8904), (34, 8922), (35, 8931), (36, 8934), (37, 8952), (39, 9009), (41, 9039), (42, 9042), (43, 9054), (45, 9069), (46, 9072), (47, 9078), (49, 9114), (50, 9123), (51, 9126), (52, 9168), (53, 9180), (54, 9225), (55, 9246), (57, 9270), (58, 9282), (59, 9291), (61, 9312), (64, 9345), (66, 9366), (67, 9387), (68, 9390), (69, 9402), (70, 9420), (71, 9429), (73, 9441), (74, 9453), (75, 9465), (76, 9474), (77, 9495), (78, 9501), (79, 9516), (80, 9522), (81, 9531), (82, 9552), (83, 9564), (85, 9576), (87, 9606), (88, 9612), (89, 9618), (90, 9627), (91, 9630), (92, 9648), (93, 9678), (95, 9711), (96, 9720), (97, 9732), (98, 9765), (99, 9768), (100, 9777), (104, 9798), (105, 9810), (106, 9819), (109, 9837), (112, 9852), (113, 9861), (114, 9870), (115, 9891), (116, 9894), (117, 9903), (119, 9918), (120, 9924), (121, 9933), (125, 9957), (127, 9981), (129, 9999), (134, 10017), (135, 10023), (136, 10026), (138, 10038), (139, 10044), (140, 10065), (142, 10071), (144, 10080), (146, 10089), (147, 10092), (148, 10098), (150, 10113), (151, 10122), (152, 10125), (155, 10152), (159, 10179), (160, 10188), (162, 10197), (163, 10200), (164, 10218), (166, 10227), (167, 10230), (170, 10251), (174, 10272), (178, 10308), (183, 10362), (185, 10374), (186, 10383), (187, 10392), (195, 10482), (196, 10494), (198, 10524), (201, 10581), (202, 10599), (203, 10602), (204, 10611), (207, 10644), (210, 10713), (211, 10722), (212, 10734), (213, 10746), (214, 10755), (215, 10758), (218, 10809), (219, 10818), (220, 10821), (221, 10824), (222, 10842), (225, 10878), (228, 10899), (229, 10908), (230, 10920), (231, 10941), (232, 10944), (233, 10968), (235, 11007), (236, 11037), (237, 11043), (238, 11052), (239, 11061), (242, 11085), (243, 11103), (244, 11115), (246, 11169), (247, 11172), (249, 11247), (250, 11256), (251, 11265),

Gene: PHL037M02_14 Start: 8521, Stop: 11286, Start Num: 9

Candidate Starts for PHL037M02_14:

(Start: 9 @8521 has 43 MA's), (10, 8548), (11, 8554), (12, 8566), (17, 8611), (19, 8656), (20, 8662), (22, 8683), (23, 8686), (25, 8734), (26, 8764), (28, 8800), (29, 8833), (30, 8854), (31, 8875), (32, 8905), (33, 8920), (34, 8938), (35, 8947), (36, 8950), (37, 8968), (38, 9022), (39, 9025), (40, 9040), (41, 9055), (42, 9058), (43, 9070), (45, 9085), (47, 9094), (49, 9130), (50, 9139), (51, 9142), (52, 9184), (53, 9196), (54, 9241), (55, 9262), (57, 9286), (59, 9307), (61, 9328), (64, 9361), (65, 9370), (67, 9403), (68, 9406), (69, 9418), (70, 9436), (71, 9445), (73, 9457), (74, 9469), (75, 9481), (77, 9511), (78, 9517), (79, 9532), (80, 9538), (81, 9547), (82, 9568), (83, 9580), (85, 9592), (87, 9622), (88, 9628), (89, 9634), (92, 9664), (93, 9694), (95, 9727), (96, 9736), (97, 9748), (98, 9781), (99, 9784), (100, 9793), (102, 9799), (103, 9802), (104, 9814), (105, 9826), (107, 9844), (110, 9856), (112, 9868), (113, 9877), (114, 9886), (115, 9907), (117, 9919), (119, 9934), (120, 9940), (121, 9949), (125, 9973), (127, 9997), (129, 10015), (130, 10018), (131, 10021), (133, 10030), (134, 10033), (135, 10039), (138, 10054), (139, 10060), (141, 10084), (142, 10087), (144, 10096), (145, 10102), (146, 10105), (147, 10108), (148, 10114), (150, 10129), (151, 10138), (152, 10141), (153, 10147), (154, 10150), (155, 10168), (159, 10195), (160, 10204), (162, 10213), (163, 10216), (164, 10234), (165, 10237), (166, 10243), (170, 10267), (171, 10270), (174, 10288), (177, 10312), (178, 10324), (183, 10378), (185, 10390), (186, 10399), (187, 10408), (195, 10498), (197, 10534), (199, 10552), (201, 10597), (202, 10615), (203, 10618), (204, 10627), (207, 10660), (208, 10687), (210, 10729), (211, 10738), (212, 10750), (213, 10762), (218, 10825), (220, 10837), (221, 10840), (222, 10858), (223, 10861), (224, 10870), (225, 10894), (228, 10915), (229, 10924), (230, 10936), (231, 10957), (232, 10960), (233, 10984), (235, 11023), (236, 11053), (237, 11059), (238, 11068), (242, 11101), (243, 11119), (244, 11131), (246, 11185), (247, 11188), (248, 11194), (249, 11263), (250, 11272), (251, 11281),

Gene: PHL060L00_14 Start: 8521, Stop: 11286, Start Num: 9

Candidate Starts for PHL060L00_14:

(Start: 9 @8521 has 43 MA's), (10, 8548), (11, 8554), (12, 8566), (14, 8599), (16, 8608), (17, 8611), (18, 8641), (19, 8656), (20, 8662), (22, 8683), (23, 8686), (25, 8734), (26, 8764), (28, 8800), (29, 8833), (30, 8854), (31, 8875), (32, 8905), (33, 8920), (34, 8938), (35, 8947), (36, 8950), (37, 8968), (39, 9025), (40, 9040), (41, 9055), (42, 9058), (43, 9070), (45, 9085), (48, 9097), (49, 9130), (50, 9139), (51, 9142), (52, 9184), (53, 9196), (54, 9241), (56, 9271), (57, 9286), (58, 9298), (61, 9328), (64, 9361), (65, 9370), (66, 9382), (67, 9403), (68, 9406), (69, 9418), (70, 9436), (71, 9445), (73, 9457), (74, 9469), (76, 9490), (78, 9517), (79, 9532), (80, 9538), (81, 9547), (82, 9568), (87, 9622), (88, 9628), (89, 9634), (91, 9646), (92, 9664), (93, 9694), (95, 9727), (96, 9736), (97, 9748), (98, 9781), (99, 9784), (100, 9793), (104, 9814), (105, 9826), (106, 9835), (111, 9865), (113, 9877), (114, 9886), (115, 9907), (117, 9919), (119, 9934), (121, 9949), (124, 9967), (126, 9994), (129, 10015), (130, 10018), (131, 10021), (132, 10027), (134, 10033), (139, 10060), (140, 10081), (142, 10087), (143, 10093), (146, 10105), (147, 10108), (149, 10117), (150, 10129), (152, 10141), (154, 10150), (155, 10168), (158, 10189), (159, 10195), (160, 10204), (161, 10210), (162, 10213), (163, 10216), (164, 10234), (166, 10243), (167, 10246), (171, 10270), (174, 10288), (183, 10378), (185, 10390), (186, 10399), (187, 10408), (193, 10465), (196, 10510), (197, 10534), (199, 10552), (201, 10597), (203, 10618), (204, 10627), (207, 10660), (208, 10687), (210, 10729), (211, 10738), (212, 10750), (213, 10762), (214, 10771), (216, 10792), (217, 10816), (218, 10825), (220, 10837), (221, 10840), (222, 10858), (223, 10861), (224, 10870), (225, 10894), (228, 10915), (229, 10924), (231, 10957), (232, 10960), (233, 10984), (235, 11023), (236, 11053), (237, 11059), (238, 11068), (239, 11077), (243, 11119), (244, 11131), (246, 11185), (247, 11188), (248, 11194), (249, 11263), (250, 11272), (251, 11281),

Gene: PHL067M10_14 Start: 8488, Stop: 11253, Start Num: 9

Candidate Starts for PHL067M10_14:

(Start: 9 @8488 has 43 MA's), (10, 8515), (11, 8521), (12, 8533), (13, 8542), (16, 8575), (17, 8578), (19, 8623), (21, 8635), (22, 8650), (23, 8653), (25, 8701), (26, 8731), (27, 8758), (28, 8767), (29, 8800), (30, 8821), (31, 8842), (32, 8872), (33, 8887), (34, 8905), (35, 8914), (36, 8917), (37, 8935), (38, 8989), (39, 8992), (40, 9007), (41, 9022), (42, 9025), (43, 9037), (47, 9061), (49, 9097), (50, 9106), (51, 9109), (52, 9151), (53, 9163), (54, 9208), (57, 9253), (61, 9295), (63, 9316), (64, 9328), (65, 9337), (67, 9370), (68, 9373), (69, 9385), (70, 9403), (71, 9412), (73, 9424), (74, 9436), (76, 9457), (77, 9478), (78, 9484), (79, 9499), (80, 9505), (81, 9514), (82, 9535), (87, 9589), (88, 9595), (89, 9601), (92, 9631), (93, 9661), (94, 9673), (95, 9694), (96, 9703), (97, 9715), (98, 9748), (99, 9751), (100, 9760), (102, 9766), (105, 9793), (106, 9802), (108, 9814), (109, 9820), (112, 9835), (113, 9844), (114, 9853), (115, 9874), (117, 9886), (119, 9901), (120, 9907), (121, 9916), (125, 9940), (127, 9964), (129, 9982), (130, 9985), (131, 9988), (133, 9997), (134, 10000), (135, 10006), (136, 10009), (138, 10021), (139, 10027), (140, 10048), (142, 10054), (143, 10060), (144, 10063), (146, 10072), (147, 10075), (150, 10096), (152, 10108), (159, 10162), (160, 10171), (161, 10177), (162, 10180), (166, 10210), (167, 10213), (170, 10234), (172, 10243), (173, 10246), (174, 10255), (178, 10291), (179, 10300), (183, 10345), (185, 10357), (186, 10366), (187, 10375), (193, 10432), (195, 10465), (197, 10501), (199, 10519), (201, 10564), (202, 10582), (203, 10585), (204, 10594), (207, 10627), (210, 10696), (211, 10705), (212, 10717), (214, 10738), (217, 10783), (218, 10792), (219, 10801), (220, 10804), (221, 10807), (222, 10825), (223, 10828), (224, 10837), (225, 10861), (227, 10873), (228, 10882), (229, 10891), (231, 10924), (232, 10927), (233, 10951), (235, 10990), (236, 11020), (237, 11026), (238, 11035), (243, 11086), (244, 11098), (246, 11152), (247, 11155), (248, 11161), (249, 11230), (250, 11239), (251, 11248),

Gene: PHL071N05_14 Start: 8516, Stop: 11281, Start Num: 9

Candidate Starts for PHL071N05_14:

(Start: 9 @8516 has 43 MA's), (10, 8543), (11, 8549), (12, 8561), (13, 8570), (14, 8594), (17, 8606), (19, 8651), (20, 8657), (22, 8678), (23, 8681), (25, 8729), (26, 8759), (28, 8795), (29, 8828), (30, 8849), (31, 8870), (32, 8900), (33, 8915), (34, 8933), (35, 8942), (36, 8945), (37, 8963), (38, 9017),

(39, 9020), (40, 9035), (41, 9050), (42, 9053), (43, 9065), (45, 9080), (47, 9089), (49, 9125), (50, 9134), (51, 9137), (52, 9179), (53, 9191), (54, 9236), (55, 9257), (57, 9281), (61, 9323), (64, 9356), (65, 9365), (66, 9377), (67, 9398), (68, 9401), (69, 9413), (70, 9431), (71, 9440), (73, 9452), (74, 9464), (75, 9476), (76, 9485), (77, 9506), (78, 9512), (79, 9527), (80, 9533), (81, 9542), (82, 9563), (89, 9629), (92, 9659), (93, 9689), (95, 9722), (96, 9731), (97, 9743), (99, 9779), (100, 9788), (102, 9794), (104, 9809), (105, 9821), (106, 9830), (109, 9848), (112, 9863), (113, 9872), (115, 9902), (117, 9914), (119, 9929), (120, 9935), (121, 9944), (125, 9968), (127, 9992), (129, 10010), (130, 10013), (131, 10016), (133, 10025), (134, 10028), (139, 10055), (141, 10079), (142, 10082), (144, 10091), (146, 10100), (147, 10103), (148, 10109), (150, 10124), (152, 10136), (153, 10142), (156, 10175), (159, 10190), (160, 10199), (161, 10205), (162, 10208), (163, 10211), (164, 10229), (166, 10238), (167, 10241), (170, 10262), (171, 10265), (173, 10274), (174, 10283), (178, 10319), (183, 10373), (185, 10385), (186, 10394), (187, 10403), (194, 10478), (195, 10493), (196, 10505), (199, 10547), (201, 10592), (202, 10610), (203, 10613), (204, 10622), (207, 10655), (208, 10682), (210, 10724), (211, 10733), (212, 10745), (213, 10757), (214, 10766), (216, 10787), (218, 10820), (219, 10829), (220, 10832), (221, 10835), (222, 10853), (223, 10856), (224, 10865), (225, 10889), (226, 10898), (227, 10901), (228, 10910), (229, 10919), (231, 10952), (232, 10955), (233, 10979), (235, 11018), (236, 11048), (237, 11054), (238, 11063), (239, 11072), (242, 11096), (243, 11114), (244, 11126), (246, 11180), (247, 11183), (248, 11189), (249, 11258), (250, 11267), (251, 11276),

Gene: PHL111M01_14 Start: 8506, Stop: 11271, Start Num: 9

Candidate Starts for PHL111M01_14:

(Start: 9 @8506 has 43 MA's), (10, 8533), (11, 8539), (12, 8551), (13, 8560), (16, 8593), (17, 8596), (18, 8626), (19, 8641), (20, 8647), (22, 8668), (23, 8671), (25, 8719), (26, 8749), (28, 8785), (29, 8818), (30, 8839), (31, 8860), (32, 8890), (33, 8905), (34, 8923), (35, 8932), (36, 8935), (37, 8953), (38, 9007), (39, 9010), (40, 9025), (41, 9040), (42, 9043), (43, 9055), (47, 9079), (49, 9115), (50, 9124), (51, 9127), (52, 9169), (53, 9181), (54, 9226), (57, 9271), (59, 9292), (61, 9313), (64, 9346), (65, 9355), (67, 9388), (68, 9391), (69, 9403), (70, 9421), (71, 9430), (73, 9442), (74, 9454), (75, 9466), (76, 9475), (77, 9496), (78, 9502), (79, 9517), (80, 9523), (81, 9532), (82, 9553), (85, 9577), (87, 9607), (88, 9613), (89, 9619), (90, 9628), (91, 9631), (92, 9649), (93, 9679), (95, 9712), (97, 9733), (98, 9766), (99, 9769), (100, 9778), (102, 9784), (103, 9787), (104, 9799), (105, 9811), (112, 9853), (113, 9862), (115, 9892), (116, 9895), (117, 9904), (119, 9919), (120, 9925), (121, 9934), (125, 9958), (126, 9979), (127, 9982), (129, 10000), (130, 10003), (133, 10015), (134, 10018), (135, 10024), (136, 10027), (139, 10045), (140, 10066), (142, 10072), (143, 10078), (144, 10081), (146, 10090), (147, 10093), (148, 10099), (150, 10114), (152, 10126), (153, 10132), (158, 10174), (159, 10180), (160, 10189), (161, 10195), (162, 10198), (163, 10201), (164, 10219), (166, 10228), (167, 10231), (171, 10255), (174, 10273), (183, 10363), (185, 10375), (186, 10384), (187, 10393), (196, 10495), (197, 10519), (199, 10537), (201, 10582), (203, 10603), (204, 10612), (207, 10645), (208, 10672), (210, 10714), (211, 10723), (212, 10735), (213, 10747), (214, 10756), (216, 10777), (218, 10810), (220, 10822), (221, 10825), (222, 10843), (223, 10846), (224, 10855), (225, 10879), (226, 10888), (227, 10891), (228, 10900), (229, 10909), (231, 10942), (232, 10945), (233, 10969), (235, 11008), (236, 11038), (237, 11044), (239, 11062), (243, 11104), (244, 11116), (246, 11170), (247, 11173), (248, 11179), (249, 11248), (250, 11257), (251, 11266),

Gene: PHL112N00_14 Start: 8502, Stop: 11267, Start Num: 9

Candidate Starts for PHL112N00_14:

(Start: 9 @8502 has 43 MA's), (10, 8529), (11, 8535), (12, 8547), (13, 8556), (16, 8589), (17, 8592), (19, 8637), (20, 8643), (21, 8649), (22, 8664), (23, 8667), (25, 8715), (26, 8745), (27, 8772), (28, 8781), (29, 8814), (30, 8835), (31, 8856), (32, 8886), (33, 8901), (34, 8919), (35, 8928), (36, 8931), (37, 8949), (38, 9003), (39, 9006), (40, 9021), (41, 9036), (42, 9039), (43, 9051), (45, 9066), (47, 9075), (49, 9111), (50, 9120), (51, 9123), (52, 9165), (53, 9177), (54, 9222), (57, 9267), (61, 9309), (63, 9330), (64, 9342), (65, 9351), (67, 9384), (68, 9387), (69, 9399), (70, 9417), (71, 9426), (73, 9438), (74, 9450), (75, 9462), (76, 9471), (78, 9498), (79, 9513), (80, 9519), (81, 9528), (82, 9549), (84, 9567), (85, 9573), (87, 9603), (88, 9609), (89, 9615), (91, 9627), (92, 9645), (93, 9675), (95,

9708), (96, 9717), (97, 9729), (98, 9762), (99, 9765), (100, 9774), (104, 9795), (105, 9807), (111, 9846), (113, 9858), (115, 9888), (117, 9900), (119, 9915), (121, 9930), (126, 9975), (129, 9996), (130, 9999), (131, 10002), (132, 10008), (134, 10014), (139, 10041), (140, 10062), (142, 10068), (143, 10074), (144, 10077), (146, 10086), (147, 10089), (148, 10095), (150, 10110), (152, 10122), (154, 10131), (155, 10149), (158, 10170), (159, 10176), (160, 10185), (161, 10191), (162, 10194), (163, 10197), (164, 10215), (166, 10224), (167, 10227), (171, 10251), (174, 10269), (183, 10359), (185, 10371), (186, 10380), (187, 10389), (195, 10479), (196, 10491), (199, 10533), (201, 10578), (203, 10599), (204, 10608), (207, 10641), (208, 10668), (210, 10710), (211, 10719), (212, 10731), (213, 10743), (214, 10752), (216, 10773), (218, 10806), (219, 10815), (220, 10818), (221, 10821), (222, 10839), (223, 10842), (224, 10851), (225, 10875), (227, 10887), (228, 10896), (229, 10905), (232, 10941), (233, 10965), (235, 11004), (236, 11034), (237, 11040), (238, 11049), (239, 11058), (243, 11100), (244, 11112), (246, 11166), (247, 11169), (248, 11175), (249, 11244), (250, 11253), (251, 11262),

Gene: PHL113M01_14 Start: 8530, Stop: 11295, Start Num: 9

Candidate Starts for PHL113M01_14:

(Start: 9 @8530 has 43 MA's), (10, 8557), (11, 8563), (12, 8575), (13, 8584), (16, 8617), (17, 8620), (19, 8665), (20, 8671), (22, 8692), (23, 8695), (25, 8743), (26, 8773), (27, 8800), (28, 8809), (29, 8842), (30, 8863), (31, 8884), (33, 8929), (34, 8947), (35, 8956), (36, 8959), (37, 8977), (38, 9031), (39, 9034), (40, 9049), (41, 9064), (42, 9067), (43, 9079), (47, 9103), (49, 9139), (50, 9148), (51, 9151), (52, 9193), (53, 9205), (54, 9250), (55, 9271), (57, 9295), (59, 9316), (61, 9337), (64, 9370), (65, 9379), (67, 9412), (68, 9415), (69, 9427), (70, 9445), (71, 9454), (73, 9466), (74, 9478), (75, 9490), (76, 9499), (77, 9520), (78, 9526), (79, 9541), (80, 9547), (81, 9556), (82, 9577), (87, 9631), (88, 9637), (89, 9643), (90, 9652), (91, 9655), (92, 9673), (93, 9703), (94, 9715), (95, 9736), (96, 9745), (97, 9757), (98, 9790), (99, 9793), (100, 9802), (104, 9823), (105, 9835), (111, 9874), (113, 9886), (114, 9895), (115, 9916), (117, 9928), (119, 9943), (121, 9958), (126, 10003), (129, 10024), (130, 10027), (131, 10030), (132, 10036), (134, 10042), (139, 10069), (142, 10096), (143, 10102), (146, 10114), (147, 10117), (149, 10126), (150, 10138), (152, 10150), (154, 10159), (155, 10177), (158, 10198), (159, 10204), (160, 10213), (161, 10219), (162, 10222), (163, 10225), (164, 10243), (166, 10252), (167, 10255), (171, 10279), (174, 10297), (183, 10387), (185, 10399), (186, 10408), (187, 10417), (196, 10519), (197, 10543), (199, 10561), (201, 10606), (203, 10627), (204, 10636), (207, 10669), (208, 10696), (210, 10738), (211, 10747), (212, 10759), (213, 10771), (214, 10780), (218, 10834), (219, 10843), (220, 10846), (221, 10849), (222, 10867), (223, 10870), (224, 10879), (225, 10903), (228, 10924), (229, 10933), (232, 10969), (233, 10993), (235, 11032), (236, 11062), (237, 11068), (238, 11077), (239, 11086), (242, 11110), (243, 11128), (244, 11140), (246, 11194), (247, 11197), (249, 11272), (250, 11281), (251, 11290),

Gene: PHL114L00_14 Start: 8508, Stop: 11273, Start Num: 9

Candidate Starts for PHL114L00_14:

(Start: 9 @8508 has 43 MA's), (10, 8535), (11, 8541), (12, 8553), (13, 8562), (17, 8598), (18, 8628), (19, 8643), (20, 8649), (22, 8670), (23, 8673), (25, 8721), (26, 8751), (28, 8787), (29, 8820), (30, 8841), (31, 8862), (32, 8892), (33, 8907), (34, 8925), (35, 8934), (36, 8937), (37, 8955), (39, 9012), (40, 9027), (41, 9042), (42, 9045), (43, 9057), (44, 9066), (45, 9072), (46, 9075), (48, 9084), (49, 9117), (50, 9126), (51, 9129), (52, 9171), (53, 9183), (54, 9228), (57, 9273), (59, 9294), (61, 9315), (64, 9348), (65, 9357), (66, 9369), (67, 9390), (68, 9393), (69, 9405), (70, 9423), (71, 9432), (73, 9444), (74, 9456), (76, 9477), (77, 9498), (79, 9519), (80, 9525), (81, 9534), (82, 9555), (85, 9579), (87, 9609), (88, 9615), (89, 9621), (91, 9633), (92, 9651), (93, 9681), (95, 9714), (96, 9723), (97, 9735), (99, 9771), (100, 9780), (105, 9813), (106, 9822), (109, 9840), (112, 9855), (113, 9864), (115, 9894), (117, 9906), (119, 9921), (120, 9927), (121, 9936), (125, 9960), (127, 9984), (129, 10002), (134, 10020), (135, 10026), (136, 10029), (137, 10038), (138, 10041), (139, 10047), (140, 10068), (142, 10074), (144, 10083), (145, 10089), (146, 10092), (147, 10095), (148, 10101), (150, 10116), (152, 10128), (155, 10155), (158, 10176), (159, 10182), (160, 10191), (163, 10203), (164, 10221), (165, 10224), (166, 10230), (167, 10233), (168, 10245), (170, 10254), (171, 10257), (173, 10266),

(174, 10275), (178, 10311), (183, 10365), (184, 10374), (185, 10377), (186, 10386), (187, 10395), (196, 10497), (199, 10539), (201, 10584), (202, 10602), (203, 10605), (204, 10614), (207, 10647), (209, 10701), (210, 10716), (211, 10725), (212, 10737), (213, 10749), (214, 10758), (218, 10812), (220, 10824), (221, 10827), (222, 10845), (223, 10848), (224, 10857), (225, 10881), (226, 10890), (227, 10893), (228, 10902), (229, 10911), (230, 10923), (231, 10944), (232, 10947), (233, 10971), (235, 11010), (236, 11040), (237, 11046), (238, 11055), (239, 11064), (243, 11106), (244, 11118), (245, 11154), (246, 11172), (247, 11175), (248, 11181), (249, 11250), (250, 11259), (251, 11268),

Gene: Pirate_14 Start: 8499, Stop: 11264, Start Num: 9

Candidate Starts for Pirate_14:

(Start: 9 @8499 has 43 MA's), (10, 8526), (11, 8532), (12, 8544), (13, 8553), (17, 8589), (19, 8634), (20, 8640), (22, 8661), (23, 8664), (25, 8712), (26, 8742), (28, 8778), (29, 8811), (30, 8832), (31, 8853), (32, 8883), (33, 8898), (34, 8916), (35, 8925), (36, 8928), (37, 8946), (39, 9003), (40, 9018), (41, 9033), (42, 9036), (43, 9048), (45, 9063), (47, 9072), (49, 9108), (50, 9117), (51, 9120), (52, 9162), (53, 9174), (54, 9219), (57, 9264), (59, 9285), (61, 9306), (64, 9339), (65, 9348), (67, 9381), (68, 9384), (69, 9396), (70, 9414), (71, 9423), (73, 9435), (74, 9447), (75, 9459), (77, 9489), (78, 9495), (79, 9510), (80, 9516), (81, 9525), (82, 9546), (87, 9600), (88, 9606), (89, 9612), (92, 9642), (93, 9672), (95, 9705), (96, 9714), (97, 9726), (98, 9759), (99, 9762), (100, 9771), (102, 9777), (103, 9780), (104, 9792), (105, 9804), (107, 9822), (110, 9834), (112, 9846), (113, 9855), (114, 9864), (115, 9885), (117, 9897), (119, 9912), (120, 9918), (121, 9927), (124, 9945), (125, 9951), (127, 9975), (129, 9993), (130, 9996), (131, 9999), (133, 10008), (134, 10011), (135, 10017), (138, 10032), (139, 10038), (141, 10062), (142, 10065), (144, 10074), (145, 10080), (146, 10083), (147, 10086), (148, 10092), (150, 10107), (152, 10119), (154, 10128), (159, 10173), (160, 10182), (161, 10188), (162, 10191), (163, 10194), (164, 10212), (165, 10215), (166, 10221), (167, 10224), (170, 10245), (171, 10248), (174, 10266), (178, 10302), (183, 10356), (185, 10368), (186, 10377), (187, 10386), (195, 10476), (196, 10488), (197, 10512), (198, 10518), (201, 10575), (203, 10596), (204, 10605), (207, 10638), (208, 10665), (210, 10707), (211, 10716), (212, 10728), (213, 10740), (214, 10749), (218, 10803), (219, 10812), (220, 10815), (221, 10818), (222, 10836), (223, 10839), (224, 10848), (225, 10872), (228, 10893), (229, 10902), (230, 10914), (231, 10935), (232, 10938), (233, 10962), (234, 10989), (235, 11001), (236, 11031), (237, 11037), (238, 11046), (239, 11055), (242, 11079), (243, 11097), (244, 11109), (245, 11145), (246, 11163), (247, 11166), (249, 11241), (250, 11250), (251, 11259),

Gene: Procrass1_14 Start: 8513, Stop: 11278, Start Num: 9

Candidate Starts for Procrass1_14:

(Start: 9 @8513 has 43 MA's), (10, 8540), (11, 8546), (12, 8558), (13, 8567), (16, 8600), (17, 8603), (19, 8648), (20, 8654), (21, 8660), (22, 8675), (23, 8678), (25, 8726), (26, 8756), (27, 8783), (28, 8792), (29, 8825), (30, 8846), (31, 8867), (32, 8897), (33, 8912), (34, 8930), (35, 8939), (36, 8942), (37, 8960), (38, 9014), (39, 9017), (40, 9032), (41, 9047), (42, 9050), (43, 9062), (47, 9086), (49, 9122), (50, 9131), (51, 9134), (52, 9176), (53, 9188), (54, 9233), (55, 9254), (57, 9278), (59, 9299), (61, 9320), (63, 9341), (64, 9353), (65, 9362), (66, 9374), (67, 9395), (68, 9398), (69, 9410), (70, 9428), (71, 9437), (73, 9449), (74, 9461), (75, 9473), (77, 9503), (78, 9509), (79, 9524), (80, 9530), (81, 9539), (82, 9560), (85, 9584), (87, 9614), (88, 9620), (89, 9626), (91, 9638), (92, 9656), (93, 9686), (95, 9719), (96, 9728), (97, 9740), (99, 9776), (100, 9785), (104, 9806), (105, 9818), (111, 9857), (113, 9869), (115, 9899), (117, 9911), (119, 9926), (121, 9941), (126, 9986), (129, 10007), (130, 10010), (131, 10013), (132, 10019), (134, 10025), (139, 10052), (140, 10073), (142, 10079), (143, 10085), (146, 10097), (147, 10100), (149, 10109), (150, 10121), (152, 10133), (154, 10142), (155, 10160), (156, 10172), (158, 10181), (159, 10187), (160, 10196), (161, 10202), (162, 10205), (163, 10208), (164, 10226), (166, 10235), (167, 10238), (171, 10262), (174, 10280), (183, 10370), (185, 10382), (186, 10391), (187, 10400), (195, 10490), (196, 10502), (199, 10544), (201, 10589), (203, 10610), (204, 10619), (207, 10652), (208, 10679), (210, 10721), (211, 10730), (212, 10742), (213, 10754), (214, 10763), (216, 10784), (218, 10817), (219, 10826), (220, 10829), (221, 10832), (222, 10850), (223, 10853), (224, 10862), (225, 10886), (227, 10898), (228, 10907), (229, 10916), (231, 10949), (232, 10952), (233, 10976), (235, 11015), (236, 11045), (237, 11051), (238, 11060),

(239, 11069), (243, 11111), (244, 11123), (246, 11177), (247, 11180), (248, 11186), (249, 11255),
(250, 11264), (251, 11273),

Gene: QueenBey_14 Start: 8507, Stop: 11272, Start Num: 9

Candidate Starts for QueenBey_14:

(Start: 9 @8507 has 43 MA's), (10, 8534), (11, 8540), (12, 8552), (13, 8561), (17, 8597), (19, 8642),
(20, 8648), (21, 8654), (22, 8669), (23, 8672), (25, 8720), (26, 8750), (27, 8777), (28, 8786), (29,
8819), (30, 8840), (31, 8861), (32, 8891), (33, 8906), (34, 8924), (35, 8933), (36, 8936), (37, 8954),
(39, 9011), (40, 9026), (41, 9041), (42, 9044), (43, 9056), (47, 9080), (49, 9116), (50, 9125), (51,
9128), (52, 9170), (53, 9182), (54, 9227), (57, 9272), (61, 9314), (65, 9356), (66, 9368), (67, 9389),
(68, 9392), (69, 9404), (70, 9422), (71, 9431), (73, 9443), (74, 9455), (75, 9467), (76, 9476), (77,
9497), (78, 9503), (79, 9518), (80, 9524), (81, 9533), (82, 9554), (85, 9578), (87, 9608), (89, 9620),
(90, 9629), (91, 9632), (92, 9650), (93, 9680), (95, 9713), (96, 9722), (97, 9734), (99, 9770), (100,
9779), (102, 9785), (104, 9800), (105, 9812), (109, 9839), (110, 9842), (112, 9854), (113, 9863), (115,
9893), (116, 9896), (117, 9905), (119, 9920), (120, 9926), (121, 9935), (125, 9959), (127, 9983), (129,
10001), (134, 10019), (139, 10046), (141, 10070), (143, 10079), (144, 10082), (146, 10091), (147,
10094), (148, 10100), (150, 10115), (151, 10124), (152, 10127), (154, 10136), (155, 10154), (159,
10181), (160, 10190), (161, 10196), (162, 10199), (166, 10229), (167, 10232), (170, 10253), (172,
10262), (173, 10265), (178, 10310), (183, 10364), (185, 10376), (186, 10385), (187, 10394), (195,
10484), (199, 10538), (201, 10583), (202, 10601), (203, 10604), (204, 10613), (207, 10646), (208,
10673), (210, 10715), (211, 10724), (212, 10736), (213, 10748), (214, 10757), (218, 10811), (219,
10820), (220, 10823), (221, 10826), (222, 10844), (223, 10847), (224, 10856), (225, 10880), (226,
10889), (227, 10892), (228, 10901), (229, 10910), (231, 10943), (232, 10946), (233, 10970), (235,
11009), (236, 11039), (237, 11045), (238, 11054), (242, 11087), (243, 11105), (244, 11117), (245,
11153), (246, 11171), (247, 11174), (249, 11249), (250, 11258), (251, 11267),

Gene: Rileysaurus_14 Start: 8502, Stop: 11267, Start Num: 9

Candidate Starts for Rileysaurus_14:

(Start: 9 @8502 has 43 MA's), (10, 8529), (11, 8535), (12, 8547), (13, 8556), (14, 8580), (16, 8589),
(17, 8592), (19, 8637), (22, 8664), (23, 8667), (25, 8715), (26, 8745), (27, 8772), (28, 8781), (29,
8814), (30, 8835), (31, 8856), (32, 8886), (33, 8901), (34, 8919), (35, 8928), (36, 8931), (37, 8949),
(38, 9003), (39, 9006), (40, 9021), (41, 9036), (42, 9039), (43, 9051), (45, 9066), (47, 9075), (49,
9111), (50, 9120), (51, 9123), (52, 9165), (53, 9177), (54, 9222), (55, 9243), (57, 9267), (61, 9309),
(64, 9342), (65, 9351), (66, 9363), (67, 9384), (68, 9387), (69, 9399), (70, 9417), (71, 9426), (73,
9438), (74, 9450), (75, 9462), (76, 9471), (77, 9492), (78, 9498), (79, 9513), (80, 9519), (81, 9528),
(82, 9549), (85, 9573), (87, 9603), (88, 9609), (89, 9615), (90, 9624), (92, 9645), (93, 9675), (95,
9708), (96, 9717), (97, 9729), (98, 9762), (99, 9765), (100, 9774), (105, 9807), (106, 9816), (110,
9837), (112, 9849), (113, 9858), (114, 9867), (115, 9888), (117, 9900), (119, 9915), (120, 9921), (121,
9930), (125, 9954), (127, 9978), (129, 9996), (130, 9999), (131, 10002), (134, 10014), (135, 10020),
(136, 10023), (138, 10035), (139, 10041), (141, 10065), (142, 10068), (143, 10074), (144, 10077),
(145, 10083), (146, 10086), (147, 10089), (148, 10095), (150, 10110), (151, 10119), (152, 10122),
(155, 10149), (156, 10161), (159, 10176), (160, 10185), (163, 10197), (164, 10215), (165, 10218),
(166, 10224), (170, 10248), (171, 10251), (173, 10260), (174, 10269), (178, 10305), (183, 10359),
(185, 10371), (186, 10380), (187, 10389), (195, 10479), (196, 10491), (197, 10515), (199, 10533),
(200, 10566), (201, 10578), (202, 10596), (203, 10599), (204, 10608), (207, 10641), (208, 10668),
(210, 10710), (211, 10719), (212, 10731), (213, 10743), (214, 10752), (216, 10773), (218, 10806),
(219, 10815), (220, 10818), (221, 10821), (222, 10839), (223, 10842), (224, 10851), (225, 10875),
(228, 10896), (229, 10905), (230, 10917), (231, 10938), (232, 10941), (233, 10965), (235, 11004),
(236, 11034), (237, 11040), (238, 11049), (239, 11058), (243, 11100), (244, 11112), (245, 11148),
(246, 11166), (247, 11169), (248, 11175), (249, 11244), (250, 11253), (251, 11262),

Gene: SKKY_14 Start: 8549, Stop: 11314, Start Num: 9

Candidate Starts for SKKY_14:

(Start: 9 @8549 has 43 MA's), (10, 8576), (11, 8582), (12, 8594), (14, 8627), (16, 8636), (17, 8639), (19, 8684), (20, 8690), (22, 8711), (23, 8714), (25, 8762), (26, 8792), (28, 8828), (29, 8861), (30, 8882), (31, 8903), (32, 8933), (33, 8948), (34, 8966), (35, 8975), (36, 8978), (37, 8996), (38, 9050), (39, 9053), (40, 9068), (41, 9083), (42, 9086), (43, 9098), (45, 9113), (47, 9122), (49, 9158), (50, 9167), (51, 9170), (52, 9212), (53, 9224), (54, 9269), (57, 9314), (58, 9326), (61, 9356), (64, 9389), (65, 9398), (66, 9410), (67, 9431), (68, 9434), (69, 9446), (70, 9464), (71, 9473), (73, 9485), (74, 9497), (76, 9518), (78, 9545), (79, 9560), (81, 9575), (82, 9596), (83, 9608), (85, 9620), (88, 9656), (92, 9692), (93, 9722), (94, 9734), (95, 9755), (97, 9776), (98, 9809), (99, 9812), (100, 9821), (102, 9827), (104, 9842), (105, 9854), (106, 9863), (107, 9872), (111, 9893), (112, 9896), (113, 9905), (115, 9935), (117, 9947), (119, 9962), (120, 9968), (121, 9977), (124, 9995), (127, 10025), (129, 10043), (130, 10046), (131, 10049), (133, 10058), (134, 10061), (135, 10067), (136, 10070), (139, 10088), (140, 10109), (142, 10115), (143, 10121), (144, 10124), (146, 10133), (147, 10136), (148, 10142), (150, 10157), (152, 10169), (153, 10175), (156, 10208), (157, 10211), (158, 10217), (160, 10232), (161, 10238), (162, 10241), (164, 10262), (166, 10271), (167, 10274), (170, 10295), (172, 10304), (173, 10307), (174, 10316), (178, 10352), (179, 10361), (185, 10418), (186, 10427), (187, 10436), (188, 10445), (194, 10511), (195, 10526), (196, 10538), (199, 10580), (201, 10625), (203, 10646), (204, 10655), (207, 10688), (208, 10715), (210, 10757), (211, 10766), (212, 10778), (213, 10790), (214, 10799), (217, 10844), (218, 10853), (219, 10862), (220, 10865), (221, 10868), (222, 10886), (223, 10889), (224, 10898), (225, 10922), (228, 10943), (229, 10952), (231, 10985), (232, 10988), (233, 11012), (235, 11051), (236, 11081), (237, 11087), (238, 11096), (239, 11105), (242, 11129), (243, 11147), (244, 11159), (246, 11213), (247, 11216), (248, 11222), (249, 11291), (250, 11300), (251, 11309),

Gene: Solid_14 Start: 8502, Stop: 11267, Start Num: 9

Candidate Starts for Solid_14:

(Start: 9 @8502 has 43 MA's), (10, 8529), (11, 8535), (12, 8547), (13, 8556), (17, 8592), (19, 8637), (20, 8643), (21, 8649), (22, 8664), (23, 8667), (25, 8715), (26, 8745), (27, 8772), (28, 8781), (29, 8814), (30, 8835), (31, 8856), (32, 8886), (33, 8901), (34, 8919), (35, 8928), (36, 8931), (37, 8949), (38, 9003), (39, 9006), (40, 9021), (41, 9036), (42, 9039), (43, 9051), (45, 9066), (47, 9075), (49, 9111), (50, 9120), (51, 9123), (52, 9165), (53, 9177), (54, 9222), (57, 9267), (59, 9288), (61, 9309), (63, 9330), (64, 9342), (65, 9351), (67, 9384), (68, 9387), (69, 9399), (70, 9417), (71, 9426), (73, 9438), (74, 9450), (75, 9462), (77, 9492), (78, 9498), (79, 9513), (80, 9519), (81, 9528), (82, 9549), (85, 9573), (87, 9603), (88, 9609), (89, 9615), (92, 9645), (93, 9675), (95, 9708), (96, 9717), (97, 9729), (99, 9765), (104, 9795), (105, 9807), (106, 9816), (107, 9825), (109, 9834), (112, 9849), (113, 9858), (114, 9867), (115, 9888), (118, 9912), (119, 9915), (120, 9921), (121, 9930), (122, 9933), (125, 9954), (127, 9978), (129, 9996), (130, 9999), (134, 10014), (135, 10020), (136, 10023), (139, 10041), (142, 10068), (143, 10074), (144, 10077), (146, 10086), (147, 10089), (148, 10095), (150, 10110), (152, 10122), (153, 10128), (156, 10161), (159, 10176), (160, 10185), (161, 10191), (162, 10194), (163, 10197), (164, 10215), (166, 10224), (167, 10227), (171, 10251), (174, 10269), (183, 10359), (185, 10371), (186, 10380), (187, 10389), (196, 10491), (197, 10515), (199, 10533), (201, 10578), (203, 10599), (204, 10608), (207, 10641), (208, 10668), (210, 10710), (211, 10719), (212, 10731), (213, 10743), (214, 10752), (216, 10773), (218, 10806), (219, 10815), (220, 10818), (221, 10821), (222, 10839), (223, 10842), (224, 10851), (225, 10875), (227, 10887), (228, 10896), (229, 10905), (231, 10938), (232, 10941), (233, 10965), (234, 10992), (235, 11004), (236, 11034), (237, 11040), (238, 11049), (239, 11058), (243, 11100), (244, 11112), (245, 11148), (246, 11166), (247, 11169), (248, 11175), (249, 11244), (250, 11253), (251, 11262),

Gene: Stormborn_14 Start: 8516, Stop: 11281, Start Num: 9

Candidate Starts for Stormborn_14:

(Start: 9 @8516 has 43 MA's), (10, 8543), (11, 8549), (12, 8561), (16, 8603), (17, 8606), (19, 8651), (20, 8657), (21, 8663), (22, 8678), (23, 8681), (25, 8729), (26, 8759), (27, 8786), (28, 8795), (29, 8828), (30, 8849), (31, 8870), (32, 8900), (33, 8915), (34, 8933), (35, 8942), (36, 8945), (37, 8963), (39, 9020), (40, 9035), (41, 9050), (42, 9053), (43, 9065), (45, 9080), (46, 9083), (47, 9089), (49,

9125), (50, 9134), (51, 9137), (52, 9179), (53, 9191), (54, 9236), (57, 9281), (59, 9302), (61, 9323), (63, 9344), (64, 9356), (65, 9365), (66, 9377), (67, 9398), (68, 9401), (69, 9413), (70, 9431), (71, 9440), (73, 9452), (74, 9464), (75, 9476), (76, 9485), (77, 9506), (78, 9512), (79, 9527), (80, 9533), (81, 9542), (82, 9563), (85, 9587), (86, 9599), (87, 9617), (89, 9629), (90, 9638), (91, 9641), (92, 9659), (93, 9689), (95, 9722), (96, 9731), (97, 9743), (99, 9779), (104, 9809), (105, 9821), (107, 9839), (109, 9848), (112, 9863), (113, 9872), (114, 9881), (115, 9902), (117, 9914), (119, 9929), (120, 9935), (121, 9944), (125, 9968), (127, 9992), (129, 10010), (134, 10028), (135, 10034), (136, 10037), (137, 10046), (138, 10049), (139, 10055), (140, 10076), (142, 10082), (144, 10091), (146, 10100), (147, 10103), (148, 10109), (151, 10133), (152, 10136), (154, 10145), (158, 10184), (159, 10190), (160, 10199), (161, 10205), (162, 10208), (164, 10229), (165, 10232), (166, 10238), (170, 10262), (171, 10265), (173, 10274), (174, 10283), (178, 10319), (183, 10373), (185, 10385), (186, 10394), (187, 10403), (190, 10418), (195, 10493), (196, 10505), (199, 10547), (201, 10592), (203, 10613), (204, 10622), (207, 10655), (208, 10682), (210, 10724), (211, 10733), (212, 10745), (213, 10757), (214, 10766), (216, 10787), (218, 10820), (220, 10832), (221, 10835), (222, 10853), (223, 10856), (224, 10865), (225, 10889), (227, 10901), (228, 10910), (229, 10919), (230, 10931), (231, 10952), (232, 10955), (233, 10979), (235, 11018), (236, 11048), (237, 11054), (238, 11063), (239, 11072), (243, 11114), (244, 11126), (245, 11162), (246, 11180), (247, 11183), (249, 11258), (251, 11276),

Gene: Supernova_14 Start: 8521, Stop: 11286, Start Num: 9

Candidate Starts for Supernova_14:

(Start: 9 @8521 has 43 MA's), (10, 8548), (11, 8554), (12, 8566), (16, 8608), (17, 8611), (19, 8656), (20, 8662), (22, 8683), (23, 8686), (25, 8734), (26, 8764), (27, 8791), (28, 8800), (29, 8833), (30, 8854), (31, 8875), (32, 8905), (33, 8920), (34, 8938), (35, 8947), (36, 8950), (37, 8968), (38, 9022), (39, 9025), (40, 9040), (41, 9055), (42, 9058), (43, 9070), (45, 9085), (47, 9094), (49, 9130), (50, 9139), (51, 9142), (52, 9184), (53, 9196), (54, 9241), (56, 9271), (57, 9286), (58, 9298), (61, 9328), (64, 9361), (66, 9382), (67, 9403), (68, 9406), (69, 9418), (70, 9436), (71, 9445), (73, 9457), (74, 9469), (75, 9481), (76, 9490), (77, 9511), (78, 9517), (79, 9532), (80, 9538), (81, 9547), (82, 9568), (85, 9592), (87, 9622), (88, 9628), (89, 9634), (91, 9646), (92, 9664), (93, 9694), (94, 9706), (95, 9727), (96, 9736), (97, 9748), (98, 9781), (99, 9784), (100, 9793), (102, 9799), (104, 9814), (105, 9826), (106, 9835), (108, 9847), (109, 9853), (111, 9865), (112, 9868), (113, 9877), (115, 9907), (117, 9919), (119, 9934), (120, 9940), (121, 9949), (127, 9997), (129, 10015), (130, 10018), (131, 10021), (133, 10030), (134, 10033), (135, 10039), (136, 10042), (139, 10060), (140, 10081), (142, 10087), (143, 10093), (144, 10096), (146, 10105), (147, 10108), (148, 10114), (150, 10129), (152, 10141), (153, 10147), (154, 10150), (156, 10180), (158, 10189), (159, 10195), (160, 10204), (161, 10210), (162, 10213), (164, 10234), (166, 10243), (167, 10246), (170, 10267), (172, 10276), (173, 10279), (174, 10288), (178, 10324), (179, 10333), (184, 10387), (185, 10390), (186, 10399), (187, 10408), (188, 10417), (195, 10498), (196, 10510), (199, 10552), (201, 10597), (203, 10618), (204, 10627), (207, 10660), (208, 10687), (210, 10729), (211, 10738), (212, 10750), (213, 10762), (214, 10771), (217, 10816), (218, 10825), (220, 10837), (221, 10840), (222, 10858), (223, 10861), (224, 10870), (225, 10894), (227, 10906), (228, 10915), (229, 10924), (233, 10984), (235, 11023), (236, 11053), (237, 11059), (238, 11068), (242, 11101), (243, 11119), (244, 11131), (246, 11185), (247, 11188), (248, 11194), (249, 11263), (250, 11272), (251, 11281),

Gene: Wizzo_14 Start: 8534, Stop: 11299, Start Num: 9

Candidate Starts for Wizzo_14:

(Start: 9 @8534 has 43 MA's), (10, 8561), (11, 8567), (12, 8579), (13, 8588), (16, 8621), (17, 8624), (19, 8669), (20, 8675), (21, 8681), (22, 8696), (23, 8699), (25, 8747), (26, 8777), (29, 8846), (31, 8888), (32, 8918), (33, 8933), (34, 8951), (35, 8960), (36, 8963), (37, 8981), (38, 9035), (39, 9038), (40, 9053), (41, 9068), (42, 9071), (43, 9083), (47, 9107), (49, 9143), (50, 9152), (52, 9197), (53, 9209), (54, 9254), (57, 9299), (59, 9320), (61, 9341), (64, 9374), (65, 9383), (67, 9416), (68, 9419), (69, 9431), (70, 9449), (71, 9458), (73, 9470), (74, 9482), (75, 9494), (76, 9503), (77, 9524), (78, 9530), (79, 9545), (80, 9551), (81, 9560), (82, 9581), (85, 9605), (87, 9635), (88, 9641), (89, 9647), (91, 9659), (92, 9677), (93, 9707), (94, 9719), (95, 9740), (96, 9749), (97, 9761), (99, 9797), (104,

9827), (105, 9839), (106, 9848), (109, 9866), (112, 9881), (113, 9890), (115, 9920), (119, 9947), (120, 9953), (121, 9962), (127, 10010), (128, 10019), (129, 10028), (130, 10031), (131, 10034), (134, 10046), (135, 10052), (138, 10067), (139, 10073), (142, 10100), (143, 10106), (144, 10109), (147, 10121), (148, 10127), (150, 10142), (152, 10154), (156, 10193), (159, 10208), (160, 10217), (161, 10223), (162, 10226), (163, 10229), (164, 10247), (165, 10250), (166, 10256), (167, 10259), (170, 10280), (171, 10283), (173, 10292), (174, 10301), (178, 10337), (183, 10391), (185, 10403), (186, 10412), (187, 10421), (190, 10436), (194, 10496), (195, 10511), (196, 10523), (199, 10565), (201, 10610), (203, 10631), (204, 10640), (207, 10673), (208, 10700), (210, 10742), (211, 10751), (212, 10763), (213, 10775), (214, 10784), (216, 10805), (218, 10838), (219, 10847), (220, 10850), (221, 10853), (222, 10871), (223, 10874), (224, 10883), (225, 10907), (227, 10919), (228, 10928), (229, 10937), (231, 10970), (232, 10973), (233, 10997), (236, 11066), (237, 11072), (238, 11081), (239, 11090), (243, 11132), (244, 11144), (246, 11198), (247, 11201), (248, 11207), (249, 11276), (250, 11285), (251, 11294),