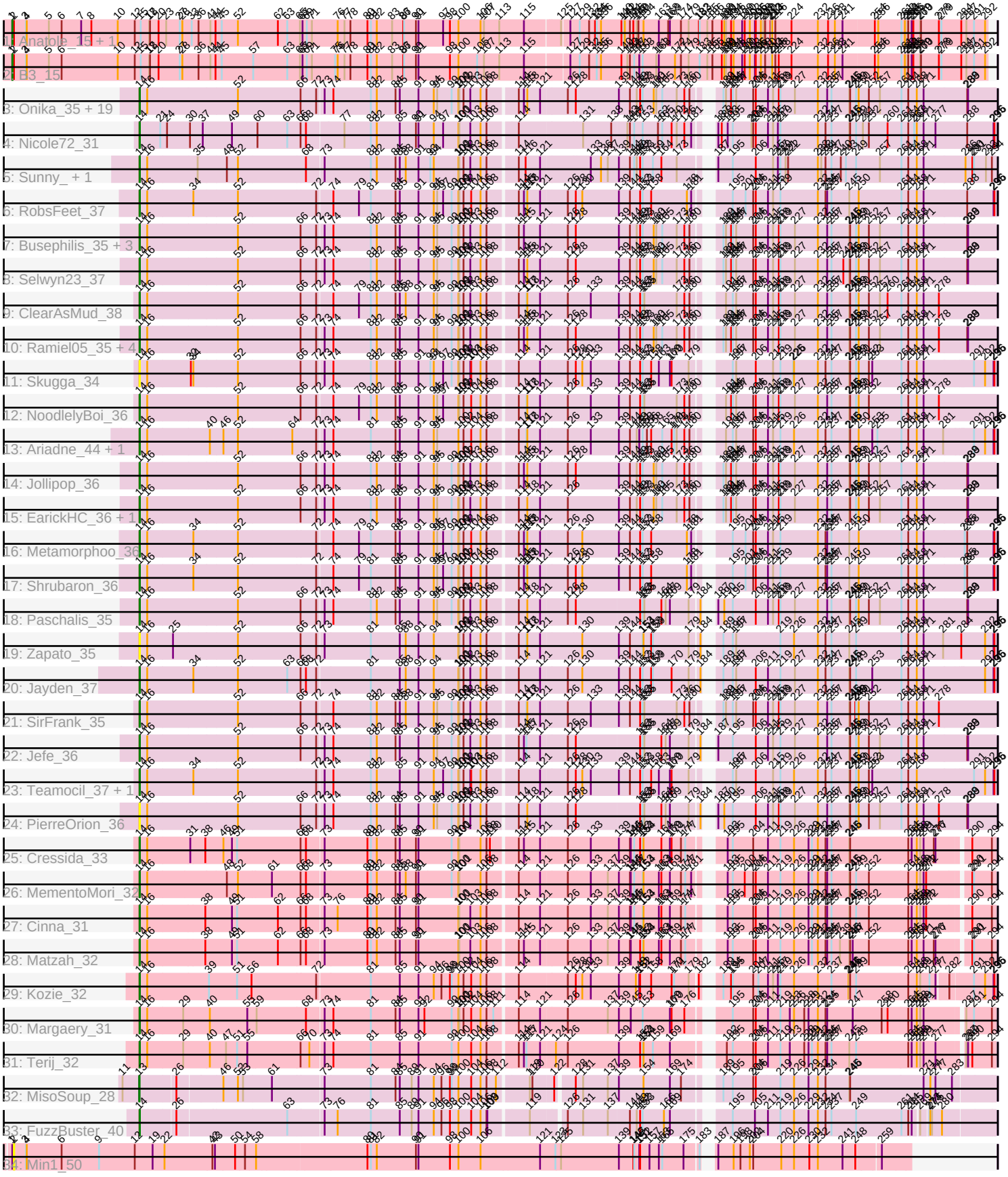
Pham 347610


1: Anatole_35 + 1
2: B3_35
3: Onika_35 + 19
4: Nicole72_31
5: Sunny_ + 1
6: RobsFeet_37
7: Busephilis_35 + 3
8: Selwyn23_37
9: ClearAsMud_38
10: Ramiel05_35 + 4
11: Skugga_34
12: NoodlelyBoi_36
13: Ariadne_44 + 1
14: Jollipop_36
15: EarickHC_36 + 1
16: Metamorphoo_36
17: Shrubaron_36
18: Paschalis_35
19: Zapato_35
20: Jayden_37
21: SirFrank_35
22: Jefe_36
23: Teamocil_37 + 1
24: PierreOrion_36
25: Cressida_33
26: MementoMori_32
27: Cinna_31
28: Matzah_32
29: Kozie_32
30: Margaery_31
31: Terij_32
32: MisoSoup_28
33: FuzzBuster_40
34: Min1_50

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 347610 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347610 has 65 members, 7 are drafts.

Phages represented in each track:
- Track 1 : Anatole_15, E1_15
- Track 2 : B3_15
- Track 3 : Onika_35, Yeti_36, Pulchra_37, Piperis_36, Scumberland_37, Cranjis_37, Lucretia_36, Quhwah_39, Glorp_37, Honeyfin_37, Antares_36, PiperSansNom_36, Phrancesco_36, BeagleBug_35, Germa_37, Shotgun_35, Hermeonysus_35, LittleFortune_37, BrazzalePHS_35, Phorgeous_35
- Track 4 : Nicole72_31
- Track 5 : Sunny_, Merry_
- Track 6 : RobsFeet_37
- Track 7 : Busephilis_35, PhedwardCullen_35, CrazyRich_35, Ganandorf_35
- Track 8 : Selwyn23_37
- Track 9 : ClearAsMud_38
- Track 10 : Ramiel05_35, Kowalski_35, Rockwell_35, Savannah_35, Crisis_37
- Track 11 : Skugga_34
- Track 12 : NoodlelyBoi_36
- Track 13 : Ariadne_44, Smarties_44
- Track 14 : Jollipop_36
- Track 15 : EarickHC_36, KaiHaiDragon_36
- Track 16 : Metamorphoo_36
- Track 17 : Shrubaron_36
- Track 18 : Paschalis_35
- Track 19 : Zapato_35
- Track 20 : Jayden_37
- Track 21 : SirFrank_35
- Track 22 : Jefe_36
- Track 23 : Teamocil_37, Gina_37
- Track 24 : PierreOrion_36
- Track 25 : Cressida_33
- Track 26 : MementoMori_32
- Track 27 : Cinna_31
- Track 28 : Matzah_32
- Track 29 : Kozie_32
- Track 30 : Margaery_31
- Track 31 : Terij_32
- Track 32 : MisoSoup_28
- Track 33 : FuzzBuster_40
- Track 34 : Min1_50

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

The start number called the most often in the published annotations is 14, it was called in 54 of the 58 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Antares_36, Ariadne_44, BeagleBug_35, BrazzalePHS_35, Busephilis_35, Cinna_31, ClearAsMud_38, Cranjis_37, CrazyRich_35, Cressida_33, Crisis_37, EarickHC_36, FuzzBuster_40, Ganandorf_35, Germa_37, Gina_37, Glorp_37, Hermeonysus_35, Honeyfin_37, Jayden_37, Jefe_36, Jollipop_36, KaiHaiDragon_36, Kowalski_35, Kozie_32, LittleFortune_37, Lucretia_36, Margaery_31, Matzah_32, MementoMori_32, Merry_, Metamorphoo_36, Nicole72_31, NoodlelyBoi_36, Onika_35, Paschalis_35, PhedwardCullen_35, Phorgeous_35, Phrancesco_36, PierreOrion_36, PiperSansNom_36, Piperis_36, Pulchra_37, Quhwah_39, Ramiel05_35, RobsFeet_37, Rockwell_35, Savannah_35, Scumberland_37, Selwyn23_37, Shotgun_35, Shrubaron_36, SirFrank_35, Skugga_34, Smarties_44, Sunny_, Teamocil_37, Terij_32, Yeti_36, Zapato_35,

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

Genes that do not have the "Most Annotated" start:
• Anatole_15, B3_15, E1_15, Min1_50, MisoSoup_28,

Summary by start number:

Start 1:
• Found in 4 of 65 (6.2%) of genes in pham
• Manual Annotations of this start: 3 of 58
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Anatole_15 (BV), B3_15 (BV), E1_15 (BV),

Start 2:
• Found in 4 of 65 (6.2%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Min1_50 (singleton),

Start 13:
• Found in 1 of 65 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 58
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MisoSoup_28 (GM),

Start 14:
• Found in 60 of 65 (92.3%) of genes in pham
• Manual Annotations of this start: 54 of 58
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Antares_36 (EC), Ariadne_44 (EC), BeagleBug_35 (EC), BrazzalePHS_35 (EC), Busephilis_35 (EC), Cinna_31 (EI), ClearAsMud_38 (EC), Cranjis_37 (EC), CrazyRich_35 (EC), Cressida_33 (EI), Crisis_37 (EC), EarickHC_36 (EC), FuzzBuster_40 (GM), Ganandorf_35 (EC), Germa_37 (EC), Gina_37 (EC), Glorp_37 (EC), Hermeonysus_35 (EC), Honeyfin_37 (EC), Jayden_37 (EC), Jefe_36 (EC), Jollipop_36 (EC), KaiHaiDragon_36 (EC), Kowalski_35 (EC), Kozie_32 (EI), LittleFortune_37 (EC), Lucretia_36 (EC), Margaery_31 (EI), Matzah_32 (EI), MementoMori_32 (EI), Merry_ (EC), Metamorphoo_36 (EC), Nicole72_31 (EC), NoodlelyBoi_36 (EC), Onika_35 (EC), Paschalis_35 (EC), PhedwardCullen_35 (EC), Phorgeous_35 (EC), Phrancesco_36 (EC), PierreOrion_36 (EC), PiperSansNom_36 (EC), Piperis_36 (EC), Pulchra_37 (EC), Quhwah_39 (EC), Ramiel05_35 (EC), RobsFeet_37 (EC), Rockwell_35 (EC), Savannah_35 (EC), Scumberland_37 (EC), Selwyn23_37 (EC), Shotgun_35 (EC), Shrubaron_36 (EC), SirFrank_35 (EC), Skugga_34 (EC), Smarties_44 (EC), Sunny_ (EC), Teamocil_37 (EC), Terij_32 (EI), Yeti_36 (EC), Zapato_35 (EC),

Summary by clusters:

There are 5 clusters represented in this pham: BV, EI, GM, EC, singleton,

Info for manual annotations of cluster BV:
•Start number 1 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster EC:
•Start number 14 was manually annotated 46 times for cluster EC.

Info for manual annotations of cluster EI:
•Start number 14 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster GM:
•Start number 13 was manually annotated 1 time for cluster GM.
•Start number 14 was manually annotated 1 time for cluster GM.

Gene Information:

Gene: Anatole_15 Start: 9581, Stop: 12979, Start Num: 1
Candidate Starts for Anatole_15:
(Start: 1 @9581 has 3 MA's), (2, 9587), (3, 9629), (4, 9632), (5, 9710), (6, 9755), (7, 9824), (8, 9860), (10, 9953), (12, 10013), (15, 10034), (17, 10064), (18, 10067), (20, 10097), (23, 10124), (27, 10172), (28, 10181), (33, 10214), (36, 10238), (41, 10280), (44, 10298), (45, 10319), (52, 10376), (62, 10517), (63, 10550), (65, 10595), (67, 10604), (69, 10619), (71, 10637), (76, 10727), (77, 10751), (78, 10772), (80, 10832), (81, 10844), (82, 10865), (83, 10919), (86, 10958), (87, 10961), (90, 11003), (91, 11012), (97, 11096), (98, 11120), (100, 11150), (106, 11228), (107, 11240), (113, 11294), (115, 11381), (125, 11498), (127, 11522), (129, 11555), (132, 11588), (134, 11609), (135, 11615), (136, 11630), (140, 11702), (141, 11711), (142, 11714), (144, 11732), (146, 11744), (149, 11756), (150, 11762), (154, 11780), (163, 11834), (168, 11867), (169, 11873), (174, 11912), (179, 11939), (182, 11975), (183, 11978), (185, 12005), (186, 12023), (188, 12056), (190, 12065), (191, 12071), (194, 12089), (196, 12098), (199, 12128), (200, 12137), (202, 12155), (205, 12173), (206, 12176), (208, 12194), (209, 12203), (210, 12209), (212, 12227), (213, 12230), (214, 12233), (216, 12242), (224, 12299), (232, 12392), (236, 12428), (238, 12452), (241, 12479), (254, 12587), (256, 12599), (261, 12680), (262, 12692), (263, 12701), (264, 12704), (265, 12716), (266, 12722), (269, 12746), (270, 12749), (278,

12812), (279, 12821), (284, 12887), (287, 12905), (291, 12932), (292, 12971),

Gene: Antares_36 Start: 20847, Stop: 23714, Start Num: 14
Candidate Starts for Antares_36:
(Start: 14 @20847 has 54 MA's), (16, 20871), (52, 21180), (66, 21396), (72, 21450), (73, 21471), (74, 21501), (81, 21633), (82, 21654), (84, 21720), (85, 21735), (91, 21798), (94, 21849), (95, 21861), (99, 21912), (100, 21936), (101, 21939), (102, 21954), (103, 21978), (106, 22014), (108, 22035), (114, 22128), (115, 22146), (118, 22158), (121, 22203), (126, 22293), (128, 22320), (139, 22464), (144, 22503), (149, 22527), (152, 22539), (153, 22548), (160, 22587), (161, 22596), (165, 22617), (173, 22668), (176, 22695), (180, 22713), (189, 22767), (191, 22776), (194, 22794), (195, 22800), (197, 22812), (204, 22872), (206, 22881), (211, 22923), (215, 22941), (218, 22959), (219, 22965), (227, 23016), (232, 23097), (235, 23130), (237, 23145), (245, 23208), (246, 23211), (249, 23232), (250, 23241), (252, 23277), (257, 23316), (261, 23391), (264, 23415), (268, 23445), (271, 23469), (288, 23619), (289, 23622),

Gene: Ariadne_44 Start: 22548, Stop: 25418, Start Num: 14
Candidate Starts for Ariadne_44:
(Start: 14 @22548 has 54 MA's), (16, 22572), (40, 22785), (46, 22830), (52, 22881), (64, 23070), (72, 23151), (73, 23172), (74, 23202), (81, 23334), (84, 23421), (85, 23436), (91, 23499), (94, 23550), (95, 23562), (100, 23637), (102, 23655), (104, 23682), (106, 23715), (108, 23736), (114, 23829), (117, 23856), (118, 23859), (121, 23904), (126, 23994), (133, 24072), (139, 24165), (144, 24204), (149, 24228), (151, 24237), (153, 24249), (156, 24264), (158, 24279), (165, 24318), (170, 24351), (171, 24360), (173, 24369), (176, 24396), (180, 24414), (191, 24477), (195, 24501), (197, 24513), (204, 24573), (206, 24582), (211, 24624), (215, 24642), (219, 24666), (226, 24714), (232, 24798), (234, 24825), (237, 24846), (245, 24909), (246, 24912), (250, 24942), (253, 24990), (255, 25008), (261, 25092), (264, 25116), (268, 25146), (271, 25170), (281, 25236), (291, 25335), (292, 25374), (295, 25404), (296, 25407),

Gene: B3_15 Start: 9584, Stop: 12982, Start Num: 1
Candidate Starts for B3_15:
(Start: 1 @9584 has 3 MA's), (2, 9590), (3, 9632), (4, 9635), (5, 9713), (6, 9758), (10, 9956), (12, 10016), (15, 10037), (17, 10067), (18, 10070), (20, 10100), (27, 10175), (28, 10184), (36, 10241), (41, 10283), (44, 10301), (45, 10322), (57, 10433), (63, 10553), (65, 10598), (67, 10607), (69, 10622), (71, 10640), (75, 10721), (76, 10730), (77, 10754), (78, 10775), (80, 10835), (81, 10847), (82, 10868), (83, 10922), (86, 10961), (87, 10964), (90, 11006), (91, 11015), (98, 11123), (100, 11153), (105, 11219), (107, 11243), (113, 11297), (115, 11384), (127, 11525), (129, 11558), (132, 11591), (135, 11618), (136, 11633), (140, 11705), (143, 11726), (144, 11735), (147, 11750), (151, 11768), (153, 11780), (161, 11828), (163, 11837), (172, 11894), (174, 11915), (179, 11942), (183, 11981), (185, 12008), (186, 12026), (188, 12059), (190, 12068), (191, 12074), (194, 12092), (196, 12101), (199, 12131), (200, 12140), (202, 12158), (205, 12176), (206, 12179), (208, 12197), (210, 12212), (213, 12233), (214, 12236), (216, 12245), (218, 12257), (224, 12302), (232, 12395), (236, 12431), (238, 12455), (241, 12482), (254, 12590), (256, 12602), (261, 12683), (262, 12695), (263, 12704), (264, 12707), (265, 12719), (266, 12725), (269, 12749), (270, 12752), (278, 12815), (279, 12824), (284, 12890), (287, 12908), (291, 12935), (292, 12974),

Gene: BeagleBug_35 Start: 20628, Stop: 23495, Start Num: 14
Candidate Starts for BeagleBug_35:
(Start: 14 @20628 has 54 MA's), (16, 20652), (52, 20961), (66, 21177), (72, 21231), (73, 21252), (74, 21282), (81, 21414), (82, 21435), (84, 21501), (85, 21516), (91, 21579), (94, 21630), (95, 21642), (99, 21693), (100, 21717), (101, 21720), (102, 21735), (103, 21759), (106, 21795), (108, 21816), (114, 21909), (115, 21927), (118, 21939), (121, 21984), (126, 22074), (128, 22101), (139, 22245), (144, 22284), (149, 22308), (152, 22320), (153, 22329), (160, 22368), (161, 22377), (165, 22398), (173, 22449), (176, 22476), (180, 22494), (189, 22548), (191, 22557), (194, 22575), (195, 22581), (197,

22593), (204, 22653), (206, 22662), (211, 22704), (215, 22722), (218, 22740), (219, 22746), (227, 22797), (232, 22878), (235, 22911), (237, 22926), (245, 22989), (246, 22992), (249, 23013), (250, 23022), (252, 23058), (257, 23097), (261, 23172), (264, 23196), (268, 23226), (271, 23250), (288, 23400), (289, 23403),

Gene: BrazzalePHS_35 Start: 20642, Stop: 23509, Start Num: 14
Candidate Starts for BrazzalePHS_35:
(Start: 14 @20642 has 54 MA's), (16, 20666), (52, 20975), (66, 21191), (72, 21245), (73, 21266), (74, 21296), (81, 21428), (82, 21449), (84, 21515), (85, 21530), (91, 21593), (94, 21644), (95, 21656), (99, 21707), (100, 21731), (101, 21734), (102, 21749), (103, 21773), (106, 21809), (108, 21830), (114, 21923), (115, 21941), (118, 21953), (121, 21998), (126, 22088), (128, 22115), (139, 22259), (144, 22298), (149, 22322), (152, 22334), (153, 22343), (160, 22382), (161, 22391), (165, 22412), (173, 22463), (176, 22490), (180, 22508), (189, 22562), (191, 22571), (194, 22589), (195, 22595), (197, 22607), (204, 22667), (206, 22676), (211, 22718), (215, 22736), (218, 22754), (219, 22760), (227, 22811), (232, 22892), (235, 22925), (237, 22940), (245, 23003), (246, 23006), (249, 23027), (250, 23036), (252, 23072), (257, 23111), (261, 23186), (264, 23210), (268, 23240), (271, 23264), (288, 23414), (289, 23417),

Gene: Busephilis_35 Start: 20577, Stop: 23444, Start Num: 14
Candidate Starts for Busephilis_35:
(Start: 14 @20577 has 54 MA's), (16, 20601), (52, 20910), (66, 21126), (72, 21180), (73, 21201), (74, 21231), (81, 21363), (82, 21384), (84, 21450), (85, 21465), (91, 21528), (94, 21579), (95, 21591), (99, 21642), (100, 21666), (101, 21669), (102, 21684), (103, 21708), (106, 21744), (108, 21765), (114, 21858), (115, 21876), (121, 21933), (126, 22023), (128, 22050), (139, 22194), (144, 22233), (149, 22257), (152, 22269), (153, 22278), (160, 22317), (161, 22326), (165, 22347), (173, 22398), (176, 22425), (180, 22443), (189, 22497), (191, 22506), (194, 22524), (195, 22530), (197, 22542), (204, 22602), (206, 22611), (211, 22653), (215, 22671), (218, 22689), (219, 22695), (227, 22746), (232, 22827), (235, 22860), (237, 22875), (245, 22938), (246, 22941), (249, 22962), (250, 22971), (252, 23007), (257, 23046), (261, 23121), (264, 23145), (268, 23175), (271, 23199), (288, 23349), (289, 23352),

Gene: Cinna_31 Start: 20016, Stop: 22862, Start Num: 14
Candidate Starts for Cinna_31:
(Start: 14 @20016 has 54 MA's), (16, 20043), (38, 20241), (49, 20334), (51, 20352), (62, 20496), (66, 20574), (68, 20592), (73, 20649), (76, 20694), (80, 20799), (81, 20811), (82, 20832), (84, 20898), (85, 20913), (90, 20967), (91, 20976), (100, 21114), (101, 21117), (103, 21156), (106, 21192), (108, 21213), (114, 21306), (121, 21381), (126, 21471), (133, 21549), (137, 21609), (139, 21642), (144, 21681), (145, 21684), (147, 21696), (153, 21726), (154, 21729), (163, 21783), (164, 21792), (169, 21822), (174, 21861), (177, 21876), (193, 21960), (195, 21978), (204, 22050), (206, 22059), (211, 22101), (219, 22143), (226, 22191), (229, 22242), (231, 22254), (232, 22275), (234, 22302), (235, 22308), (237, 22323), (245, 22386), (246, 22389), (249, 22410), (252, 22455), (264, 22593), (265, 22605), (268, 22623), (269, 22635), (271, 22647), (272, 22656), (290, 22785), (294, 22851),

Gene: ClearAsMud_38 Start: 21358, Stop: 24225, Start Num: 14
Candidate Starts for ClearAsMud_38:
(Start: 14 @21358 has 54 MA's), (16, 21382), (52, 21691), (66, 21907), (72, 21961), (74, 22012), (79, 22102), (81, 22144), (82, 22165), (84, 22231), (85, 22246), (88, 22264), (91, 22309), (94, 22360), (95, 22372), (99, 22423), (100, 22447), (101, 22450), (102, 22465), (103, 22489), (106, 22525), (108, 22546), (114, 22639), (117, 22666), (118, 22669), (121, 22714), (126, 22804), (133, 22882), (139, 22975), (144, 23014), (152, 23050), (153, 23059), (155, 23065), (173, 23179), (176, 23206), (180, 23224), (191, 23287), (195, 23311), (197, 23323), (204, 23383), (206, 23392), (211, 23434), (215, 23452), (218, 23470), (219, 23476), (227, 23527), (232, 23608), (235, 23641), (237, 23656), (245, 23719), (246, 23722), (249, 23743), (250, 23752), (252, 23788), (257, 23827), (260, 23854), (261,

23902), (264, 23926), (268, 23956), (271, 23980), (278, 24031),

Gene: Cranjis_37 Start: 20802, Stop: 23669, Start Num: 14
Candidate Starts for Cranjis_37:
(Start: 14 @20802 has 54 MA's), (16, 20826), (52, 21135), (66, 21351), (72, 21405), (73, 21426), (74, 21456), (81, 21588), (82, 21609), (84, 21675), (85, 21690), (91, 21753), (94, 21804), (95, 21816), (99, 21867), (100, 21891), (101, 21894), (102, 21909), (103, 21933), (106, 21969), (108, 21990), (114, 22083), (115, 22101), (118, 22113), (121, 22158), (126, 22248), (128, 22275), (139, 22419), (144, 22458), (149, 22482), (152, 22494), (153, 22503), (160, 22542), (161, 22551), (165, 22572), (173, 22623), (176, 22650), (180, 22668), (189, 22722), (191, 22731), (194, 22749), (195, 22755), (197, 22767), (204, 22827), (206, 22836), (211, 22878), (215, 22896), (218, 22914), (219, 22920), (227, 22971), (232, 23052), (235, 23085), (237, 23100), (245, 23163), (246, 23166), (249, 23187), (250, 23196), (252, 23232), (257, 23271), (261, 23346), (264, 23370), (268, 23400), (271, 23424), (288, 23574), (289, 23577),

Gene: CrazyRich_35 Start: 20611, Stop: 23478, Start Num: 14
Candidate Starts for CrazyRich_35:
(Start: 14 @20611 has 54 MA's), (16, 20635), (52, 20944), (66, 21160), (72, 21214), (73, 21235), (74, 21265), (81, 21397), (82, 21418), (84, 21484), (85, 21499), (91, 21562), (94, 21613), (95, 21625), (99, 21676), (100, 21700), (101, 21703), (102, 21718), (103, 21742), (106, 21778), (108, 21799), (114, 21892), (115, 21910), (121, 21967), (126, 22057), (128, 22084), (139, 22228), (144, 22267), (149, 22291), (152, 22303), (153, 22312), (160, 22351), (161, 22360), (165, 22381), (173, 22432), (176, 22459), (180, 22477), (189, 22531), (191, 22540), (194, 22558), (195, 22564), (197, 22576), (204, 22636), (206, 22645), (211, 22687), (215, 22705), (218, 22723), (219, 22729), (227, 22780), (232, 22861), (235, 22894), (237, 22909), (245, 22972), (246, 22975), (249, 22996), (250, 23005), (252, 23041), (257, 23080), (261, 23155), (264, 23179), (268, 23209), (271, 23233), (288, 23383), (289, 23386),

Gene: Cressida_33 Start: 20076, Stop: 22925, Start Num: 14
Candidate Starts for Cressida_33:
(Start: 14 @20076 has 54 MA's), (16, 20103), (31, 20250), (38, 20301), (46, 20364), (49, 20394), (51, 20412), (66, 20634), (68, 20652), (73, 20709), (80, 20859), (81, 20871), (82, 20892), (84, 20958), (85, 20973), (90, 21027), (91, 21036), (99, 21150), (100, 21174), (101, 21177), (106, 21252), (108, 21273), (110, 21285), (114, 21366), (115, 21384), (121, 21441), (126, 21531), (133, 21609), (139, 21702), (144, 21741), (145, 21744), (147, 21756), (152, 21777), (153, 21786), (154, 21789), (164, 21852), (169, 21882), (170, 21888), (174, 21921), (177, 21936), (193, 22020), (195, 22038), (204, 22110), (211, 22161), (219, 22203), (226, 22251), (229, 22302), (231, 22314), (232, 22335), (234, 22362), (235, 22368), (237, 22383), (245, 22446), (246, 22449), (264, 22653), (265, 22665), (268, 22683), (269, 22695), (271, 22707), (276, 22740), (277, 22746), (290, 22848), (294, 22914),

Gene: Crisis_37 Start: 20596, Stop: 23463, Start Num: 14
Candidate Starts for Crisis_37:
(Start: 14 @20596 has 54 MA's), (16, 20620), (52, 20929), (66, 21145), (72, 21199), (73, 21220), (74, 21250), (81, 21382), (82, 21403), (84, 21469), (85, 21484), (91, 21547), (94, 21598), (95, 21610), (99, 21661), (100, 21685), (101, 21688), (102, 21703), (103, 21727), (106, 21763), (108, 21784), (114, 21877), (115, 21895), (118, 21907), (121, 21952), (126, 22042), (128, 22069), (139, 22213), (144, 22252), (149, 22276), (152, 22288), (153, 22297), (160, 22336), (161, 22345), (165, 22366), (173, 22417), (176, 22444), (180, 22462), (189, 22516), (191, 22525), (194, 22543), (195, 22549), (197, 22561), (204, 22621), (206, 22630), (211, 22672), (215, 22690), (218, 22708), (219, 22714), (227, 22765), (232, 22846), (235, 22879), (237, 22894), (245, 22957), (246, 22960), (249, 22981), (250, 22990), (252, 23026), (257, 23065), (261, 23140), (264, 23164), (268, 23194), (271, 23218), (278, 23269), (288, 23368), (289, 23371),

Gene: E1_15 Start: 9581, Stop: 12979, Start Num: 1
Candidate Starts for E1_15:
(Start: 1 @9581 has 3 MA's), (2, 9587), (3, 9629), (4, 9632), (5, 9710), (6, 9755), (7, 9824), (8, 9860), (10, 9953), (12, 10013), (15, 10034), (17, 10064), (18, 10067), (20, 10097), (23, 10124), (27, 10172), (28, 10181), (33, 10214), (36, 10238), (41, 10280), (44, 10298), (45, 10319), (52, 10376), (62, 10517), (63, 10550), (65, 10595), (67, 10604), (69, 10619), (71, 10637), (76, 10727), (77, 10751), (78, 10772), (80, 10832), (81, 10844), (82, 10865), (83, 10919), (86, 10958), (87, 10961), (90, 11003), (91, 11012), (97, 11096), (98, 11120), (100, 11150), (106, 11228), (107, 11240), (113, 11294), (115, 11381), (125, 11498), (127, 11522), (129, 11555), (132, 11588), (134, 11609), (135, 11615), (136, 11630), (140, 11702), (141, 11711), (142, 11714), (144, 11732), (146, 11744), (149, 11756), (150, 11762), (154, 11780), (163, 11834), (168, 11867), (169, 11873), (174, 11912), (179, 11939), (182, 11975), (183, 11978), (185, 12005), (186, 12023), (188, 12056), (190, 12065), (191, 12071), (194, 12089), (196, 12098), (199, 12128), (200, 12137), (202, 12155), (205, 12173), (206, 12176), (208, 12194), (209, 12203), (210, 12209), (212, 12227), (213, 12230), (214, 12233), (216, 12242), (224, 12299), (232, 12392), (236, 12428), (238, 12452), (241, 12479), (254, 12587), (256, 12599), (261, 12680), (262, 12692), (263, 12701), (264, 12704), (265, 12716), (266, 12722), (269, 12746), (270, 12749), (278, 12812), (279, 12821), (284, 12887), (287, 12905), (291, 12932), (292, 12971),

Gene: EarickHC_36 Start: 20522, Stop: 23389, Start Num: 14
Candidate Starts for EarickHC_36:
(Start: 14 @20522 has 54 MA's), (16, 20546), (52, 20855), (66, 21071), (72, 21125), (73, 21146), (74, 21176), (81, 21308), (82, 21329), (84, 21395), (85, 21410), (91, 21473), (94, 21524), (95, 21536), (99, 21587), (100, 21611), (101, 21614), (102, 21629), (103, 21653), (106, 21689), (108, 21710), (114, 21803), (118, 21833), (121, 21878), (126, 21968), (139, 22139), (144, 22178), (149, 22202), (152, 22214), (153, 22223), (160, 22262), (161, 22271), (165, 22292), (173, 22343), (176, 22370), (180, 22388), (189, 22442), (191, 22451), (194, 22469), (195, 22475), (197, 22487), (204, 22547), (206, 22556), (211, 22598), (215, 22616), (218, 22634), (219, 22640), (227, 22691), (232, 22772), (235, 22805), (237, 22820), (245, 22883), (246, 22886), (249, 22907), (250, 22916), (252, 22952), (257, 22991), (261, 23066), (264, 23090), (268, 23120), (271, 23144), (288, 23294), (289, 23297),

Gene: FuzzBuster_40 Start: 20718, Stop: 23513, Start Num: 14
Candidate Starts for FuzzBuster_40:
(Start: 14 @20718 has 54 MA's), (26, 20832), (63, 21201), (73, 21321), (76, 21366), (81, 21483), (85, 21585), (89, 21624), (91, 21648), (94, 21699), (96, 21726), (98, 21756), (100, 21786), (104, 21831), (106, 21864), (108, 21885), (109, 21888), (119, 22017), (126, 22122), (131, 22173), (137, 22260), (144, 22332), (149, 22356), (152, 22368), (153, 22377), (166, 22452), (169, 22473), (195, 22629), (205, 22707), (211, 22752), (219, 22794), (226, 22842), (229, 22893), (232, 22926), (234, 22953), (237, 22974), (249, 23061), (261, 23220), (264, 23244), (265, 23256), (269, 23274), (273, 23298), (274, 23301), (275, 23307), (280, 23340),

Gene: Ganandorf_35 Start: 20658, Stop: 23525, Start Num: 14
Candidate Starts for Ganandorf_35:
(Start: 14 @20658 has 54 MA's), (16, 20682), (52, 20991), (66, 21207), (72, 21261), (73, 21282), (74, 21312), (81, 21444), (82, 21465), (84, 21531), (85, 21546), (91, 21609), (94, 21660), (95, 21672), (99, 21723), (100, 21747), (101, 21750), (102, 21765), (103, 21789), (106, 21825), (108, 21846), (114, 21939), (115, 21957), (121, 22014), (126, 22104), (128, 22131), (139, 22275), (144, 22314), (149, 22338), (152, 22350), (153, 22359), (160, 22398), (161, 22407), (165, 22428), (173, 22479), (176, 22506), (180, 22524), (189, 22578), (191, 22587), (194, 22605), (195, 22611), (197, 22623), (204, 22683), (206, 22692), (211, 22734), (215, 22752), (218, 22770), (219, 22776), (227, 22827), (232, 22908), (235, 22941), (237, 22956), (245, 23019), (246, 23022), (249, 23043), (250, 23052), (252, 23088), (257, 23127), (261, 23202), (264, 23226), (268, 23256), (271, 23280), (288, 23430), (289, 23433),

Gene: Germa_37 Start: 20487, Stop: 23354, Start Num: 14
Candidate Starts for Germa_37:
(Start: 14 @20487 has 54 MA's), (16, 20511), (52, 20820), (66, 21036), (72, 21090), (73, 21111), (74, 21141), (81, 21273), (82, 21294), (84, 21360), (85, 21375), (91, 21438), (94, 21489), (95, 21501), (99, 21552), (100, 21576), (101, 21579), (102, 21594), (103, 21618), (106, 21654), (108, 21675), (114, 21768), (115, 21786), (118, 21798), (121, 21843), (126, 21933), (128, 21960), (139, 22104), (144, 22143), (149, 22167), (152, 22179), (153, 22188), (160, 22227), (161, 22236), (165, 22257), (173, 22308), (176, 22335), (180, 22353), (189, 22407), (191, 22416), (194, 22434), (195, 22440), (197, 22452), (204, 22512), (206, 22521), (211, 22563), (215, 22581), (218, 22599), (219, 22605), (227, 22656), (232, 22737), (235, 22770), (237, 22785), (245, 22848), (246, 22851), (249, 22872), (250, 22881), (252, 22917), (257, 22956), (261, 23031), (264, 23055), (268, 23085), (271, 23109), (288, 23259), (289, 23262),

Gene: Gina_37 Start: 20438, Stop: 23305, Start Num: 14
Candidate Starts for Gina_37:
(Start: 14 @20438 has 54 MA's), (16, 20462), (34, 20618), (52, 20771), (72, 21041), (73, 21062), (74, 21092), (81, 21224), (82, 21245), (85, 21326), (91, 21389), (94, 21440), (97, 21473), (99, 21503), (100, 21527), (101, 21530), (102, 21545), (103, 21569), (104, 21572), (106, 21605), (108, 21626), (114, 21719), (121, 21794), (126, 21884), (128, 21911), (130, 21932), (133, 21962), (139, 22055), (144, 22094), (152, 22130), (153, 22139), (158, 22169), (163, 22196), (169, 22235), (170, 22241), (179, 22301), (195, 22391), (197, 22403), (206, 22472), (215, 22532), (219, 22556), (226, 22604), (232, 22688), (234, 22715), (237, 22736), (245, 22799), (246, 22802), (249, 22823), (250, 22832), (252, 22868), (253, 22880), (261, 22982), (264, 23006), (268, 23036), (291, 23222), (292, 23261), (295, 23291), (296, 23294),

Gene: Glorp_37 Start: 20659, Stop: 23526, Start Num: 14
Candidate Starts for Glorp_37:
(Start: 14 @20659 has 54 MA's), (16, 20683), (52, 20992), (66, 21208), (72, 21262), (73, 21283), (74, 21313), (81, 21445), (82, 21466), (84, 21532), (85, 21547), (91, 21610), (94, 21661), (95, 21673), (99, 21724), (100, 21748), (101, 21751), (102, 21766), (103, 21790), (106, 21826), (108, 21847), (114, 21940), (115, 21958), (118, 21970), (121, 22015), (126, 22105), (128, 22132), (139, 22276), (144, 22315), (149, 22339), (152, 22351), (153, 22360), (160, 22399), (161, 22408), (165, 22429), (173, 22480), (176, 22507), (180, 22525), (189, 22579), (191, 22588), (194, 22606), (195, 22612), (197, 22624), (204, 22684), (206, 22693), (211, 22735), (215, 22753), (218, 22771), (219, 22777), (227, 22828), (232, 22909), (235, 22942), (237, 22957), (245, 23020), (246, 23023), (249, 23044), (250, 23053), (252, 23089), (257, 23128), (261, 23203), (264, 23227), (268, 23257), (271, 23281), (288, 23431), (289, 23434),

Gene: Hermeonysus_35 Start: 20531, Stop: 23398, Start Num: 14
Candidate Starts for Hermeonysus_35:
(Start: 14 @20531 has 54 MA's), (16, 20555), (52, 20864), (66, 21080), (72, 21134), (73, 21155), (74, 21185), (81, 21317), (82, 21338), (84, 21404), (85, 21419), (91, 21482), (94, 21533), (95, 21545), (99, 21596), (100, 21620), (101, 21623), (102, 21638), (103, 21662), (106, 21698), (108, 21719), (114, 21812), (115, 21830), (118, 21842), (121, 21887), (126, 21977), (128, 22004), (139, 22148), (144, 22187), (149, 22211), (152, 22223), (153, 22232), (160, 22271), (161, 22280), (165, 22301), (173, 22352), (176, 22379), (180, 22397), (189, 22451), (191, 22460), (194, 22478), (195, 22484), (197, 22496), (204, 22556), (206, 22565), (211, 22607), (215, 22625), (218, 22643), (219, 22649), (227, 22700), (232, 22781), (235, 22814), (237, 22829), (245, 22892), (246, 22895), (249, 22916), (250, 22925), (252, 22961), (257, 23000), (261, 23075), (264, 23099), (268, 23129), (271, 23153), (288, 23303), (289, 23306),

Gene: Honeyfin_37 Start: 20846, Stop: 23713, Start Num: 14
Candidate Starts for Honeyfin_37:

(Start: 14 @20846 has 54 MA's), (16, 20870), (52, 21179), (66, 21395), (72, 21449), (73, 21470), (74, 21500), (81, 21632), (82, 21653), (84, 21719), (85, 21734), (91, 21797), (94, 21848), (95, 21860), (99, 21911), (100, 21935), (101, 21938), (102, 21953), (103, 21977), (106, 22013), (108, 22034), (114, 22127), (115, 22145), (118, 22157), (121, 22202), (126, 22292), (128, 22319), (139, 22463), (144, 22502), (149, 22526), (152, 22538), (153, 22547), (160, 22586), (161, 22595), (165, 22616), (173, 22667), (176, 22694), (180, 22712), (189, 22766), (191, 22775), (194, 22793), (195, 22799), (197, 22811), (204, 22871), (206, 22880), (211, 22922), (215, 22940), (218, 22958), (219, 22964), (227, 23015), (232, 23096), (235, 23129), (237, 23144), (245, 23207), (246, 23210), (249, 23231), (250, 23240), (252, 23276), (257, 23315), (261, 23390), (264, 23414), (268, 23444), (271, 23468), (288, 23618), (289, 23621),

Gene: Jayden_37 Start: 20588, Stop: 23455, Start Num: 14
Candidate Starts for Jayden_37:
(Start: 14 @20588 has 54 MA's), (16, 20612), (34, 20768), (52, 20921), (63, 21092), (66, 21137), (68, 21155), (72, 21191), (81, 21374), (85, 21476), (88, 21494), (91, 21539), (94, 21590), (100, 21677), (101, 21680), (102, 21695), (103, 21719), (106, 21755), (108, 21776), (114, 21869), (121, 21944), (126, 22034), (130, 22082), (139, 22205), (144, 22244), (152, 22280), (153, 22289), (158, 22319), (159, 22325), (170, 22391), (179, 22451), (184, 22481), (189, 22508), (195, 22541), (197, 22553), (206, 22622), (211, 22664), (219, 22706), (227, 22757), (232, 22838), (234, 22865), (237, 22886), (245, 22949), (246, 22952), (249, 22973), (253, 23030), (261, 23132), (264, 23156), (268, 23186), (271, 23210), (292, 23411), (295, 23441), (296, 23444),

Gene: Jefe_36 Start: 20583, Stop: 23450, Start Num: 14
Candidate Starts for Jefe_36:
(Start: 14 @20583 has 54 MA's), (16, 20607), (52, 20916), (66, 21132), (72, 21186), (73, 21207), (74, 21237), (81, 21369), (82, 21390), (84, 21456), (85, 21471), (91, 21534), (94, 21585), (95, 21597), (99, 21648), (100, 21672), (101, 21675), (102, 21690), (103, 21714), (106, 21750), (108, 21771), (114, 21864), (115, 21882), (117, 21891), (121, 21939), (126, 22029), (128, 22056), (152, 22275), (153, 22284), (155, 22290), (164, 22350), (167, 22365), (169, 22380), (179, 22446), (184, 22476), (187, 22485), (195, 22536), (206, 22617), (211, 22659), (215, 22677), (219, 22701), (227, 22752), (232, 22833), (235, 22866), (237, 22881), (245, 22944), (246, 22947), (249, 22968), (250, 22977), (252, 23013), (257, 23052), (261, 23127), (264, 23151), (268, 23181), (271, 23205), (288, 23355), (289, 23358),

Gene: Jollipop_36 Start: 20928, Stop: 23795, Start Num: 14
Candidate Starts for Jollipop_36:
(Start: 14 @20928 has 54 MA's), (16, 20952), (52, 21261), (66, 21477), (72, 21531), (73, 21552), (74, 21582), (81, 21714), (82, 21735), (84, 21801), (85, 21816), (91, 21879), (94, 21930), (95, 21942), (99, 21993), (100, 22017), (101, 22020), (102, 22035), (103, 22059), (106, 22095), (108, 22116), (114, 22209), (115, 22227), (118, 22239), (121, 22284), (126, 22374), (128, 22401), (139, 22545), (144, 22584), (149, 22608), (152, 22620), (153, 22629), (160, 22668), (161, 22677), (165, 22698), (173, 22749), (176, 22776), (180, 22794), (189, 22848), (191, 22857), (194, 22875), (195, 22881), (197, 22893), (204, 22953), (206, 22962), (211, 23004), (215, 23022), (218, 23040), (219, 23046), (227, 23097), (232, 23178), (235, 23211), (237, 23226), (245, 23289), (246, 23292), (249, 23313), (250, 23322), (252, 23358), (257, 23397), (261, 23472), (268, 23526), (271, 23550), (288, 23700), (289, 23703),

Gene: KaiHaiDragon_36 Start: 20522, Stop: 23389, Start Num: 14
Candidate Starts for KaiHaiDragon_36:
(Start: 14 @20522 has 54 MA's), (16, 20546), (52, 20855), (66, 21071), (72, 21125), (73, 21146), (74, 21176), (81, 21308), (82, 21329), (84, 21395), (85, 21410), (91, 21473), (94, 21524), (95, 21536), (99, 21587), (100, 21611), (101, 21614), (102, 21629), (103, 21653), (106, 21689), (108, 21710), (114, 21803), (118, 21833), (121, 21878), (126, 21968), (139, 22139), (144, 22178), (149, 22202), (152,

22214), (153, 22223), (160, 22262), (161, 22271), (165, 22292), (173, 22343), (176, 22370), (180, 22388), (189, 22442), (191, 22451), (194, 22469), (195, 22475), (197, 22487), (204, 22547), (206, 22556), (211, 22598), (215, 22616), (218, 22634), (219, 22640), (227, 22691), (232, 22772), (235, 22805), (237, 22820), (245, 22883), (246, 22886), (249, 22907), (250, 22916), (252, 22952), (257, 22991), (261, 23066), (264, 23090), (268, 23120), (271, 23144), (288, 23294), (289, 23297),

Gene: Kowalski_35 Start: 20638, Stop: 23505, Start Num: 14
Candidate Starts for Kowalski_35:
(Start: 14 @20638 has 54 MA's), (16, 20662), (52, 20971), (66, 21187), (72, 21241), (73, 21262), (74, 21292), (81, 21424), (82, 21445), (84, 21511), (85, 21526), (91, 21589), (94, 21640), (95, 21652), (99, 21703), (100, 21727), (101, 21730), (102, 21745), (103, 21769), (106, 21805), (108, 21826), (114, 21919), (115, 21937), (118, 21949), (121, 21994), (126, 22084), (128, 22111), (139, 22255), (144, 22294), (149, 22318), (152, 22330), (153, 22339), (160, 22378), (161, 22387), (165, 22408), (173, 22459), (176, 22486), (180, 22504), (189, 22558), (191, 22567), (194, 22585), (195, 22591), (197, 22603), (204, 22663), (206, 22672), (211, 22714), (215, 22732), (218, 22750), (219, 22756), (227, 22807), (232, 22888), (235, 22921), (237, 22936), (245, 22999), (246, 23002), (249, 23023), (250, 23032), (252, 23068), (257, 23107), (261, 23182), (264, 23206), (268, 23236), (271, 23260), (278, 23311), (288, 23410), (289, 23413),

Gene: Kozie_32 Start: 20311, Stop: 23169, Start Num: 14
Candidate Starts for Kozie_32:
(Start: 14 @20311 has 54 MA's), (16, 20338), (39, 20548), (51, 20647), (56, 20698), (72, 20923), (81, 21106), (85, 21208), (91, 21271), (94, 21322), (96, 21349), (98, 21379), (99, 21385), (100, 21409), (102, 21427), (104, 21454), (106, 21487), (108, 21508), (114, 21601), (126, 21766), (128, 21793), (130, 21814), (133, 21844), (139, 21937), (148, 21997), (151, 22009), (152, 22012), (158, 22051), (170, 22123), (171, 22132), (179, 22183), (182, 22207), (189, 22240), (194, 22267), (195, 22273), (204, 22345), (207, 22363), (211, 22396), (215, 22414), (217, 22429), (219, 22438), (226, 22486), (232, 22570), (237, 22618), (244, 22678), (245, 22681), (246, 22684), (249, 22705), (264, 22888), (268, 22918), (269, 22930), (273, 22954), (277, 22975), (282, 23011), (291, 23086), (292, 23125), (295, 23155), (296, 23158),

Gene: LittleFortune_37 Start: 20888, Stop: 23755, Start Num: 14
Candidate Starts for LittleFortune_37:
(Start: 14 @20888 has 54 MA's), (16, 20912), (52, 21221), (66, 21437), (72, 21491), (73, 21512), (74, 21542), (81, 21674), (82, 21695), (84, 21761), (85, 21776), (91, 21839), (94, 21890), (95, 21902), (99, 21953), (100, 21977), (101, 21980), (102, 21995), (103, 22019), (106, 22055), (108, 22076), (114, 22169), (115, 22187), (118, 22199), (121, 22244), (126, 22334), (128, 22361), (139, 22505), (144, 22544), (149, 22568), (152, 22580), (153, 22589), (160, 22628), (161, 22637), (165, 22658), (173, 22709), (176, 22736), (180, 22754), (189, 22808), (191, 22817), (194, 22835), (195, 22841), (197, 22853), (204, 22913), (206, 22922), (211, 22964), (215, 22982), (218, 23000), (219, 23006), (227, 23057), (232, 23138), (235, 23171), (237, 23186), (245, 23249), (246, 23252), (249, 23273), (250, 23282), (252, 23318), (257, 23357), (261, 23432), (264, 23456), (268, 23486), (271, 23510), (288, 23660), (289, 23663),

Gene: Lucretia_36 Start: 20575, Stop: 23442, Start Num: 14
Candidate Starts for Lucretia_36:
(Start: 14 @20575 has 54 MA's), (16, 20599), (52, 20908), (66, 21124), (72, 21178), (73, 21199), (74, 21229), (81, 21361), (82, 21382), (84, 21448), (85, 21463), (91, 21526), (94, 21577), (95, 21589), (99, 21640), (100, 21664), (101, 21667), (102, 21682), (103, 21706), (106, 21742), (108, 21763), (114, 21856), (115, 21874), (118, 21886), (121, 21931), (126, 22021), (128, 22048), (139, 22192), (144, 22231), (149, 22255), (152, 22267), (153, 22276), (160, 22315), (161, 22324), (165, 22345), (173, 22396), (176, 22423), (180, 22441), (189, 22495), (191, 22504), (194, 22522), (195, 22528), (197, 22540), (204, 22600), (206, 22609), (211, 22651), (215, 22669), (218, 22687), (219, 22693), (227,

22744), (232, 22825), (235, 22858), (237, 22873), (245, 22936), (246, 22939), (249, 22960), (250, 22969), (252, 23005), (257, 23044), (261, 23119), (264, 23143), (268, 23173), (271, 23197), (288, 23347), (289, 23350),

Gene: Margaery_31 Start: 19960, Stop: 22806, Start Num: 14
Candidate Starts for Margaery_31:
(Start: 14 @19960 has 54 MA's), (16, 19987), (29, 20110), (40, 20200), (55, 20332), (59, 20362), (68, 20533), (73, 20590), (74, 20620), (81, 20752), (84, 20839), (85, 20854), (91, 20917), (92, 20938), (99, 21031), (100, 21055), (101, 21058), (102, 21073), (104, 21100), (106, 21133), (108, 21154), (111, 21178), (114, 21247), (121, 21322), (126, 21412), (137, 21550), (139, 21583), (145, 21625), (153, 21667), (169, 21763), (170, 21769), (176, 21814), (195, 21919), (204, 21991), (206, 22000), (211, 22042), (219, 22084), (223, 22117), (226, 22132), (228, 22168), (229, 22183), (232, 22216), (234, 22243), (235, 22249), (247, 22339), (258, 22441), (260, 22462), (264, 22534), (265, 22546), (268, 22564), (269, 22576), (271, 22588), (287, 22708), (291, 22735), (294, 22795),

Gene: Matzah_32 Start: 19992, Stop: 22838, Start Num: 14
Candidate Starts for Matzah_32:
(Start: 14 @19992 has 54 MA's), (16, 20019), (38, 20217), (49, 20310), (51, 20328), (62, 20472), (66, 20550), (68, 20568), (73, 20625), (80, 20775), (81, 20787), (82, 20808), (84, 20874), (85, 20889), (90, 20943), (91, 20952), (100, 21090), (101, 21093), (103, 21132), (106, 21168), (108, 21189), (114, 21282), (115, 21300), (121, 21357), (126, 21447), (133, 21525), (137, 21585), (139, 21618), (144, 21657), (145, 21660), (152, 21693), (153, 21702), (154, 21705), (163, 21759), (164, 21768), (169, 21798), (174, 21837), (177, 21852), (193, 21936), (195, 21954), (204, 22026), (206, 22035), (211, 22077), (219, 22119), (226, 22167), (229, 22218), (231, 22230), (232, 22251), (234, 22278), (235, 22284), (237, 22299), (239, 22329), (245, 22362), (246, 22365), (247, 22374), (252, 22431), (264, 22569), (265, 22581), (268, 22599), (271, 22623), (276, 22656), (277, 22662), (290, 22761), (291, 22767), (294, 22827),

Gene: MementoMori_32 Start: 19722, Stop: 22562, Start Num: 14
Candidate Starts for MementoMori_32:
(Start: 14 @19722 has 54 MA's), (16, 19749), (48, 20019), (52, 20058), (61, 20175), (66, 20274), (68, 20292), (73, 20349), (80, 20499), (81, 20511), (82, 20532), (84, 20598), (85, 20613), (88, 20631), (90, 20667), (91, 20676), (99, 20790), (100, 20814), (101, 20817), (106, 20892), (108, 20913), (114, 21006), (121, 21081), (126, 21171), (133, 21249), (137, 21309), (139, 21342), (144, 21381), (145, 21384), (147, 21396), (153, 21426), (154, 21429), (163, 21483), (164, 21492), (169, 21522), (174, 21561), (177, 21576), (181, 21597), (193, 21660), (195, 21678), (200, 21720), (204, 21750), (206, 21759), (211, 21801), (219, 21843), (226, 21891), (229, 21942), (231, 21954), (232, 21975), (234, 22002), (235, 22008), (237, 22023), (245, 22086), (246, 22089), (249, 22110), (252, 22155), (264, 22293), (268, 22323), (269, 22335), (271, 22347), (272, 22356), (290, 22485), (291, 22491), (294, 22551),

Gene: Merry_ Start: 22696, Stop: 25560, Start Num: 14
Candidate Starts for Merry_:
(Start: 14 @22696 has 54 MA's), (16, 22720), (35, 22891), (48, 22990), (52, 23029), (68, 23263), (73, 23320), (81, 23482), (82, 23503), (84, 23569), (85, 23584), (88, 23602), (91, 23647), (93, 23686), (94, 23698), (100, 23785), (101, 23788), (102, 23803), (103, 23827), (106, 23863), (108, 23884), (114, 23977), (116, 24001), (121, 24052), (133, 24220), (136, 24256), (137, 24280), (139, 24313), (144, 24352), (147, 24367), (149, 24376), (152, 24388), (153, 24397), (159, 24433), (164, 24463), (173, 24517), (187, 24598), (195, 24649), (206, 24730), (215, 24790), (217, 24805), (219, 24814), (221, 24832), (222, 24841), (232, 24946), (233, 24958), (234, 24973), (237, 24994), (240, 25027), (243, 25045), (249, 25081), (257, 25165), (261, 25240), (264, 25264), (268, 25294), (271, 25318), (286, 25462), (290, 25483), (291, 25489), (293, 25528), (294, 25549),

Gene: Metamorphoo_36 Start: 20441, Stop: 23311, Start Num: 14
Candidate Starts for Metamorphoo_36:
(Start: 14 @20441 has 54 MA's), (16, 20465), (34, 20621), (52, 20774), (72, 21044), (74, 21095), (79, 21185), (81, 21227), (84, 21314), (85, 21329), (91, 21392), (94, 21443), (95, 21455), (97, 21476), (99, 21506), (100, 21530), (101, 21533), (102, 21548), (104, 21575), (106, 21608), (108, 21629), (114, 21722), (115, 21740), (117, 21749), (118, 21752), (121, 21797), (126, 21887), (130, 21935), (139, 22058), (144, 22097), (152, 22133), (153, 22142), (158, 22172), (178, 22298), (181, 22313), (195, 22394), (201, 22439), (204, 22466), (206, 22475), (211, 22517), (215, 22535), (219, 22559), (232, 22691), (234, 22718), (235, 22724), (237, 22739), (245, 22802), (250, 22835), (261, 22985), (264, 23009), (268, 23039), (271, 23063), (285, 23195), (288, 23204), (295, 23297), (296, 23300),

Gene: Min1_50 Start: 26451, Stop: 29483, Start Num: 2
Candidate Starts for Min1_50:
(Start: 1 @26445 has 3 MA's), (2, 26451), (3, 26493), (4, 26496), (6, 26619), (9, 26751), (12, 26877), (19, 26940), (22, 26982), (42, 27150), (43, 27159), (50, 27228), (54, 27261), (58, 27297), (80, 27663), (81, 27675), (82, 27696), (90, 27834), (91, 27843), (98, 27954), (100, 27984), (106, 28062), (121, 28266), (123, 28320), (125, 28338), (139, 28542), (146, 28593), (147, 28596), (151, 28614), (152, 28617), (157, 28650), (163, 28683), (165, 28695), (175, 28770), (183, 28815), (187, 28827), (196, 28881), (198, 28905), (202, 28938), (204, 28950), (220, 29049), (226, 29094), (230, 29148), (232, 29178), (241, 29265), (248, 29310), (259, 29385),

Gene: MisoSoup_28 Start: 17085, Stop: 19901, Start Num: 13
Candidate Starts for MisoSoup_28:
(11, 17028), (Start: 13 @17085 has 1 MA's), (26, 17196), (46, 17349), (52, 17400), (53, 17418), (61, 17517), (73, 17691), (81, 17853), (84, 17940), (85, 17955), (89, 17994), (91, 18018), (94, 18069), (96, 18096), (98, 18126), (99, 18132), (100, 18156), (104, 18201), (106, 18234), (108, 18255), (112, 18288), (119, 18387), (120, 18396), (122, 18465), (128, 18519), (131, 18543), (137, 18630), (139, 18663), (154, 18750), (169, 18843), (174, 18882), (189, 18966), (195, 18999), (204, 19071), (206, 19080), (219, 19164), (226, 19212), (229, 19263), (232, 19296), (234, 19323), (245, 19407), (246, 19410), (271, 19668), (274, 19692), (277, 19710), (283, 19764),

Gene: Nicole72_31 Start: 22378, Stop: 25257, Start Num: 14
Candidate Starts for Nicole72_31:
(Start: 14 @22378 has 54 MA's), (21, 22447), (24, 22471), (30, 22549), (37, 22594), (49, 22696), (60, 22786), (63, 22891), (66, 22936), (68, 22954), (77, 23080), (81, 23173), (82, 23194), (85, 23275), (90, 23329), (91, 23338), (94, 23389), (97, 23422), (100, 23476), (101, 23479), (103, 23518), (106, 23554), (108, 23575), (114, 23668), (131, 23884), (138, 23983), (143, 24034), (144, 24043), (147, 24058), (153, 24088), (162, 24142), (165, 24157), (170, 24190), (173, 24208), (176, 24235), (181, 24259), (187, 24289), (188, 24301), (193, 24322), (195, 24340), (203, 24406), (204, 24412), (206, 24421), (211, 24463), (215, 24481), (217, 24496), (219, 24505), (232, 24637), (234, 24664), (237, 24685), (245, 24748), (246, 24751), (249, 24772), (251, 24796), (252, 24817), (260, 24883), (261, 24931), (264, 24955), (267, 24976), (268, 24985), (271, 25009), (277, 25048), (288, 25150), (295, 25243), (296, 25246),

Gene: NoodlelyBoi_36 Start: 20968, Stop: 23835, Start Num: 14
Candidate Starts for NoodlelyBoi_36:
(Start: 14 @20968 has 54 MA's), (16, 20992), (52, 21301), (66, 21517), (72, 21571), (74, 21622), (79, 21712), (81, 21754), (82, 21775), (84, 21841), (85, 21856), (91, 21919), (94, 21970), (95, 21982), (97, 22003), (100, 22057), (101, 22060), (102, 22075), (104, 22102), (106, 22135), (108, 22156), (114, 22249), (117, 22276), (118, 22279), (121, 22324), (126, 22414), (133, 22492), (139, 22585), (144, 22624), (152, 22660), (153, 22669), (155, 22675), (173, 22789), (176, 22816), (180, 22834), (191, 22897), (194, 22915), (195, 22921), (197, 22933), (204, 22993), (206, 23002), (211, 23044), (215, 23062), (218, 23080), (219, 23086), (227, 23137), (232, 23218), (235, 23251), (237, 23266), (245,

23329), (246, 23332), (249, 23353), (250, 23362), (252, 23398), (261, 23512), (264, 23536), (268, 23566), (271, 23590), (278, 23641),

Gene: Onika_35 Start: 20613, Stop: 23480, Start Num: 14
Candidate Starts for Onika_35:
(Start: 14 @20613 has 54 MA's), (16, 20637), (52, 20946), (66, 21162), (72, 21216), (73, 21237), (74, 21267), (81, 21399), (82, 21420), (84, 21486), (85, 21501), (91, 21564), (94, 21615), (95, 21627), (99, 21678), (100, 21702), (101, 21705), (102, 21720), (103, 21744), (106, 21780), (108, 21801), (114, 21894), (115, 21912), (118, 21924), (121, 21969), (126, 22059), (128, 22086), (139, 22230), (144, 22269), (149, 22293), (152, 22305), (153, 22314), (160, 22353), (161, 22362), (165, 22383), (173, 22434), (176, 22461), (180, 22479), (189, 22533), (191, 22542), (194, 22560), (195, 22566), (197, 22578), (204, 22638), (206, 22647), (211, 22689), (215, 22707), (218, 22725), (219, 22731), (227, 22782), (232, 22863), (235, 22896), (237, 22911), (245, 22974), (246, 22977), (249, 22998), (250, 23007), (252, 23043), (257, 23082), (261, 23157), (264, 23181), (268, 23211), (271, 23235), (288, 23385), (289, 23388),

Gene: Paschalis_35 Start: 20626, Stop: 23493, Start Num: 14
Candidate Starts for Paschalis_35:
(Start: 14 @20626 has 54 MA's), (16, 20650), (52, 20959), (66, 21175), (72, 21229), (73, 21250), (74, 21280), (81, 21412), (82, 21433), (84, 21499), (85, 21514), (91, 21577), (94, 21628), (95, 21640), (99, 21691), (100, 21715), (101, 21718), (102, 21733), (103, 21757), (106, 21793), (108, 21814), (114, 21907), (118, 21937), (121, 21982), (126, 22072), (128, 22099), (152, 22318), (153, 22327), (155, 22333), (164, 22393), (167, 22408), (169, 22423), (179, 22489), (184, 22519), (187, 22528), (190, 22549), (195, 22579), (206, 22660), (211, 22702), (215, 22720), (218, 22738), (219, 22744), (227, 22795), (232, 22876), (235, 22909), (237, 22924), (245, 22987), (246, 22990), (249, 23011), (250, 23020), (252, 23056), (257, 23095), (261, 23170), (264, 23194), (268, 23224), (271, 23248), (288, 23398), (289, 23401),

Gene: PhedwardCullen_35 Start: 20371, Stop: 23238, Start Num: 14
Candidate Starts for PhedwardCullen_35:
(Start: 14 @20371 has 54 MA's), (16, 20395), (52, 20704), (66, 20920), (72, 20974), (73, 20995), (74, 21025), (81, 21157), (82, 21178), (84, 21244), (85, 21259), (91, 21322), (94, 21373), (95, 21385), (99, 21436), (100, 21460), (101, 21463), (102, 21478), (103, 21502), (106, 21538), (108, 21559), (114, 21652), (115, 21670), (121, 21727), (126, 21817), (128, 21844), (139, 21988), (144, 22027), (149, 22051), (152, 22063), (153, 22072), (160, 22111), (161, 22120), (165, 22141), (173, 22192), (176, 22219), (180, 22237), (189, 22291), (191, 22300), (194, 22318), (195, 22324), (197, 22336), (204, 22396), (206, 22405), (211, 22447), (215, 22465), (218, 22483), (219, 22489), (227, 22540), (232, 22621), (235, 22654), (237, 22669), (245, 22732), (246, 22735), (249, 22756), (250, 22765), (252, 22801), (257, 22840), (261, 22915), (264, 22939), (268, 22969), (271, 22993), (288, 23143), (289, 23146),

Gene: Phorgeous_35 Start: 20480, Stop: 23347, Start Num: 14
Candidate Starts for Phorgeous_35:
(Start: 14 @20480 has 54 MA's), (16, 20504), (52, 20813), (66, 21029), (72, 21083), (73, 21104), (74, 21134), (81, 21266), (82, 21287), (84, 21353), (85, 21368), (91, 21431), (94, 21482), (95, 21494), (99, 21545), (100, 21569), (101, 21572), (102, 21587), (103, 21611), (106, 21647), (108, 21668), (114, 21761), (115, 21779), (118, 21791), (121, 21836), (126, 21926), (128, 21953), (139, 22097), (144, 22136), (149, 22160), (152, 22172), (153, 22181), (160, 22220), (161, 22229), (165, 22250), (173, 22301), (176, 22328), (180, 22346), (189, 22400), (191, 22409), (194, 22427), (195, 22433), (197, 22445), (204, 22505), (206, 22514), (211, 22556), (215, 22574), (218, 22592), (219, 22598), (227, 22649), (232, 22730), (235, 22763), (237, 22778), (245, 22841), (246, 22844), (249, 22865), (250, 22874), (252, 22910), (257, 22949), (261, 23024), (264, 23048), (268, 23078), (271, 23102), (288, 23252), (289, 23255),

Gene: Phrancesco_36 Start: 20758, Stop: 23625, Start Num: 14
Candidate Starts for Phrancesco_36:
(Start: 14 @20758 has 54 MA's), (16, 20782), (52, 21091), (66, 21307), (72, 21361), (73, 21382), (74, 21412), (81, 21544), (82, 21565), (84, 21631), (85, 21646), (91, 21709), (94, 21760), (95, 21772), (99, 21823), (100, 21847), (101, 21850), (102, 21865), (103, 21889), (106, 21925), (108, 21946), (114, 22039), (115, 22057), (118, 22069), (121, 22114), (126, 22204), (128, 22231), (139, 22375), (144, 22414), (149, 22438), (152, 22450), (153, 22459), (160, 22498), (161, 22507), (165, 22528), (173, 22579), (176, 22606), (180, 22624), (189, 22678), (191, 22687), (194, 22705), (195, 22711), (197, 22723), (204, 22783), (206, 22792), (211, 22834), (215, 22852), (218, 22870), (219, 22876), (227, 22927), (232, 23008), (235, 23041), (237, 23056), (245, 23119), (246, 23122), (249, 23143), (250, 23152), (252, 23188), (257, 23227), (261, 23302), (264, 23326), (268, 23356), (271, 23380), (288, 23530), (289, 23533),

Gene: PierreOrion_36 Start: 20781, Stop: 23648, Start Num: 14
Candidate Starts for PierreOrion_36:
(Start: 14 @20781 has 54 MA's), (16, 20805), (52, 21114), (66, 21330), (72, 21384), (73, 21405), (74, 21435), (81, 21567), (82, 21588), (84, 21654), (85, 21669), (91, 21732), (94, 21783), (95, 21795), (99, 21846), (100, 21870), (101, 21873), (102, 21888), (103, 21912), (106, 21948), (108, 21969), (114, 22062), (118, 22092), (121, 22137), (126, 22227), (128, 22254), (152, 22473), (153, 22482), (155, 22488), (164, 22548), (167, 22563), (169, 22578), (179, 22644), (184, 22674), (187, 22683), (190, 22704), (195, 22734), (206, 22815), (211, 22857), (215, 22875), (218, 22893), (219, 22899), (227, 22950), (232, 23031), (235, 23064), (237, 23079), (245, 23142), (246, 23145), (249, 23166), (250, 23175), (252, 23211), (257, 23250), (261, 23325), (264, 23349), (268, 23379), (271, 23403), (278, 23454), (288, 23553), (289, 23556),

Gene: PiperSansNom_36 Start: 20933, Stop: 23800, Start Num: 14
Candidate Starts for PiperSansNom_36:
(Start: 14 @20933 has 54 MA's), (16, 20957), (52, 21266), (66, 21482), (72, 21536), (73, 21557), (74, 21587), (81, 21719), (82, 21740), (84, 21806), (85, 21821), (91, 21884), (94, 21935), (95, 21947), (99, 21998), (100, 22022), (101, 22025), (102, 22040), (103, 22064), (106, 22100), (108, 22121), (114, 22214), (115, 22232), (118, 22244), (121, 22289), (126, 22379), (128, 22406), (139, 22550), (144, 22589), (149, 22613), (152, 22625), (153, 22634), (160, 22673), (161, 22682), (165, 22703), (173, 22754), (176, 22781), (180, 22799), (189, 22853), (191, 22862), (194, 22880), (195, 22886), (197, 22898), (204, 22958), (206, 22967), (211, 23009), (215, 23027), (218, 23045), (219, 23051), (227, 23102), (232, 23183), (235, 23216), (237, 23231), (245, 23294), (246, 23297), (249, 23318), (250, 23327), (252, 23363), (257, 23402), (261, 23477), (264, 23501), (268, 23531), (271, 23555), (288, 23705), (289, 23708),

Gene: Piperis_36 Start: 20603, Stop: 23470, Start Num: 14
Candidate Starts for Piperis_36:
(Start: 14 @20603 has 54 MA's), (16, 20627), (52, 20936), (66, 21152), (72, 21206), (73, 21227), (74, 21257), (81, 21389), (82, 21410), (84, 21476), (85, 21491), (91, 21554), (94, 21605), (95, 21617), (99, 21668), (100, 21692), (101, 21695), (102, 21710), (103, 21734), (106, 21770), (108, 21791), (114, 21884), (115, 21902), (118, 21914), (121, 21959), (126, 22049), (128, 22076), (139, 22220), (144, 22259), (149, 22283), (152, 22295), (153, 22304), (160, 22343), (161, 22352), (165, 22373), (173, 22424), (176, 22451), (180, 22469), (189, 22523), (191, 22532), (194, 22550), (195, 22556), (197, 22568), (204, 22628), (206, 22637), (211, 22679), (215, 22697), (218, 22715), (219, 22721), (227, 22772), (232, 22853), (235, 22886), (237, 22901), (245, 22964), (246, 22967), (249, 22988), (250, 22997), (252, 23033), (257, 23072), (261, 23147), (264, 23171), (268, 23201), (271, 23225), (288, 23375), (289, 23378),

Gene: Pulchra_37 Start: 21003, Stop: 23870, Start Num: 14

Candidate Starts for Pulchra_37:
(Start: 14 @21003 has 54 MA's), (16, 21027), (52, 21336), (66, 21552), (72, 21606), (73, 21627), (74, 21657), (81, 21789), (82, 21810), (84, 21876), (85, 21891), (91, 21954), (94, 22005), (95, 22017), (99, 22068), (100, 22092), (101, 22095), (102, 22110), (103, 22134), (106, 22170), (108, 22191), (114, 22284), (115, 22302), (118, 22314), (121, 22359), (126, 22449), (128, 22476), (139, 22620), (144, 22659), (149, 22683), (152, 22695), (153, 22704), (160, 22743), (161, 22752), (165, 22773), (173, 22824), (176, 22851), (180, 22869), (189, 22923), (191, 22932), (194, 22950), (195, 22956), (197, 22968), (204, 23028), (206, 23037), (211, 23079), (215, 23097), (218, 23115), (219, 23121), (227, 23172), (232, 23253), (235, 23286), (237, 23301), (245, 23364), (246, 23367), (249, 23388), (250, 23397), (252, 23433), (257, 23472), (261, 23547), (264, 23571), (268, 23601), (271, 23625), (288, 23775), (289, 23778),

Gene: Quhwah_39 Start: 21229, Stop: 24096, Start Num: 14
Candidate Starts for Quhwah_39:
(Start: 14 @21229 has 54 MA's), (16, 21253), (52, 21562), (66, 21778), (72, 21832), (73, 21853), (74, 21883), (81, 22015), (82, 22036), (84, 22102), (85, 22117), (91, 22180), (94, 22231), (95, 22243), (99, 22294), (100, 22318), (101, 22321), (102, 22336), (103, 22360), (106, 22396), (108, 22417), (114, 22510), (115, 22528), (118, 22540), (121, 22585), (126, 22675), (128, 22702), (139, 22846), (144, 22885), (149, 22909), (152, 22921), (153, 22930), (160, 22969), (161, 22978), (165, 22999), (173, 23050), (176, 23077), (180, 23095), (189, 23149), (191, 23158), (194, 23176), (195, 23182), (197, 23194), (204, 23254), (206, 23263), (211, 23305), (215, 23323), (218, 23341), (219, 23347), (227, 23398), (232, 23479), (235, 23512), (237, 23527), (245, 23590), (246, 23593), (249, 23614), (250, 23623), (252, 23659), (257, 23698), (261, 23773), (264, 23797), (268, 23827), (271, 23851), (288, 24001), (289, 24004),

Gene: Ramiel05_35 Start: 20638, Stop: 23505, Start Num: 14
Candidate Starts for Ramiel05_35:
(Start: 14 @20638 has 54 MA's), (16, 20662), (52, 20971), (66, 21187), (72, 21241), (73, 21262), (74, 21292), (81, 21424), (82, 21445), (84, 21511), (85, 21526), (91, 21589), (94, 21640), (95, 21652), (99, 21703), (100, 21727), (101, 21730), (102, 21745), (103, 21769), (106, 21805), (108, 21826), (114, 21919), (115, 21937), (118, 21949), (121, 21994), (126, 22084), (128, 22111), (139, 22255), (144, 22294), (149, 22318), (152, 22330), (153, 22339), (160, 22378), (161, 22387), (165, 22408), (173, 22459), (176, 22486), (180, 22504), (189, 22558), (191, 22567), (194, 22585), (195, 22591), (197, 22603), (204, 22663), (206, 22672), (211, 22714), (215, 22732), (218, 22750), (219, 22756), (227, 22807), (232, 22888), (235, 22921), (237, 22936), (245, 22999), (246, 23002), (249, 23023), (250, 23032), (252, 23068), (257, 23107), (261, 23182), (264, 23206), (268, 23236), (271, 23260), (278, 23311), (288, 23410), (289, 23413),

Gene: RobsFeet_37 Start: 20722, Stop: 23592, Start Num: 14
Candidate Starts for RobsFeet_37:
(Start: 14 @20722 has 54 MA's), (16, 20746), (34, 20902), (52, 21055), (72, 21325), (74, 21376), (79, 21466), (81, 21508), (84, 21595), (85, 21610), (91, 21673), (94, 21724), (95, 21736), (97, 21757), (99, 21787), (100, 21811), (101, 21814), (102, 21829), (104, 21856), (106, 21889), (108, 21910), (114, 22003), (115, 22021), (117, 22030), (118, 22033), (121, 22078), (126, 22168), (128, 22195), (130, 22216), (139, 22339), (144, 22378), (152, 22414), (153, 22423), (158, 22453), (178, 22579), (181, 22594), (195, 22675), (201, 22720), (204, 22747), (206, 22756), (211, 22798), (215, 22816), (219, 22840), (232, 22972), (234, 22999), (235, 23005), (237, 23020), (245, 23083), (250, 23116), (261, 23266), (264, 23290), (268, 23320), (271, 23344), (288, 23485), (295, 23578), (296, 23581),

Gene: Rockwell_35 Start: 20638, Stop: 23505, Start Num: 14
Candidate Starts for Rockwell_35:
(Start: 14 @20638 has 54 MA's), (16, 20662), (52, 20971), (66, 21187), (72, 21241), (73, 21262), (74, 21292), (81, 21424), (82, 21445), (84, 21511), (85, 21526), (91, 21589), (94, 21640), (95, 21652), (99,

21703), (100, 21727), (101, 21730), (102, 21745), (103, 21769), (106, 21805), (108, 21826), (114, 21919), (115, 21937), (118, 21949), (121, 21994), (126, 22084), (128, 22111), (139, 22255), (144, 22294), (149, 22318), (152, 22330), (153, 22339), (160, 22378), (161, 22387), (165, 22408), (173, 22459), (176, 22486), (180, 22504), (189, 22558), (191, 22567), (194, 22585), (195, 22591), (197, 22603), (204, 22663), (206, 22672), (211, 22714), (215, 22732), (218, 22750), (219, 22756), (227, 22807), (232, 22888), (235, 22921), (237, 22936), (245, 22999), (246, 23002), (249, 23023), (250, 23032), (252, 23068), (257, 23107), (261, 23182), (264, 23206), (268, 23236), (271, 23260), (278, 23311), (288, 23410), (289, 23413),

Gene: Savannah_35 Start: 20665, Stop: 23532, Start Num: 14
Candidate Starts for Savannah_35:
(Start: 14 @20665 has 54 MA's), (16, 20689), (52, 20998), (66, 21214), (72, 21268), (73, 21289), (74, 21319), (81, 21451), (82, 21472), (84, 21538), (85, 21553), (91, 21616), (94, 21667), (95, 21679), (99, 21730), (100, 21754), (101, 21757), (102, 21772), (103, 21796), (106, 21832), (108, 21853), (114, 21946), (115, 21964), (118, 21976), (121, 22021), (126, 22111), (128, 22138), (139, 22282), (144, 22321), (149, 22345), (152, 22357), (153, 22366), (160, 22405), (161, 22414), (165, 22435), (173, 22486), (176, 22513), (180, 22531), (189, 22585), (191, 22594), (194, 22612), (195, 22618), (197, 22630), (204, 22690), (206, 22699), (211, 22741), (215, 22759), (218, 22777), (219, 22783), (227, 22834), (232, 22915), (235, 22948), (237, 22963), (245, 23026), (246, 23029), (249, 23050), (250, 23059), (252, 23095), (257, 23134), (261, 23209), (264, 23233), (268, 23263), (271, 23287), (278, 23338), (288, 23437), (289, 23440),

Gene: Scumberland_37 Start: 20854, Stop: 23721, Start Num: 14
Candidate Starts for Scumberland_37:
(Start: 14 @20854 has 54 MA's), (16, 20878), (52, 21187), (66, 21403), (72, 21457), (73, 21478), (74, 21508), (81, 21640), (82, 21661), (84, 21727), (85, 21742), (91, 21805), (94, 21856), (95, 21868), (99, 21919), (100, 21943), (101, 21946), (102, 21961), (103, 21985), (106, 22021), (108, 22042), (114, 22135), (115, 22153), (118, 22165), (121, 22210), (126, 22300), (128, 22327), (139, 22471), (144, 22510), (149, 22534), (152, 22546), (153, 22555), (160, 22594), (161, 22603), (165, 22624), (173, 22675), (176, 22702), (180, 22720), (189, 22774), (191, 22783), (194, 22801), (195, 22807), (197, 22819), (204, 22879), (206, 22888), (211, 22930), (215, 22948), (218, 22966), (219, 22972), (227, 23023), (232, 23104), (235, 23137), (237, 23152), (245, 23215), (246, 23218), (249, 23239), (250, 23248), (252, 23284), (257, 23323), (261, 23398), (264, 23422), (268, 23452), (271, 23476), (288, 23626), (289, 23629),

Gene: Selwyn23_37 Start: 20831, Stop: 23698, Start Num: 14
Candidate Starts for Selwyn23_37:
(Start: 14 @20831 has 54 MA's), (16, 20855), (52, 21164), (66, 21380), (72, 21434), (73, 21455), (74, 21485), (81, 21617), (82, 21638), (84, 21704), (85, 21719), (91, 21782), (94, 21833), (95, 21845), (99, 21896), (100, 21920), (101, 21923), (102, 21938), (103, 21962), (106, 21998), (108, 22019), (114, 22112), (115, 22130), (118, 22142), (121, 22187), (126, 22277), (128, 22304), (139, 22448), (144, 22487), (149, 22511), (152, 22523), (153, 22532), (160, 22571), (161, 22580), (165, 22601), (173, 22652), (176, 22679), (180, 22697), (189, 22751), (191, 22760), (194, 22778), (195, 22784), (197, 22796), (204, 22856), (206, 22865), (211, 22907), (215, 22925), (218, 22943), (219, 22949), (227, 23000), (232, 23081), (235, 23114), (237, 23129), (242, 23171), (245, 23192), (246, 23195), (249, 23216), (250, 23225), (252, 23261), (257, 23300), (261, 23375), (264, 23399), (268, 23429), (271, 23453), (288, 23603), (289, 23606),

Gene: Shotgun_35 Start: 20464, Stop: 23331, Start Num: 14
Candidate Starts for Shotgun_35:
(Start: 14 @20464 has 54 MA's), (16, 20488), (52, 20797), (66, 21013), (72, 21067), (73, 21088), (74, 21118), (81, 21250), (82, 21271), (84, 21337), (85, 21352), (91, 21415), (94, 21466), (95, 21478), (99, 21529), (100, 21553), (101, 21556), (102, 21571), (103, 21595), (106, 21631), (108, 21652), (114,

21745), (115, 21763), (118, 21775), (121, 21820), (126, 21910), (128, 21937), (139, 22081), (144, 22120), (149, 22144), (152, 22156), (153, 22165), (160, 22204), (161, 22213), (165, 22234), (173, 22285), (176, 22312), (180, 22330), (189, 22384), (191, 22393), (194, 22411), (195, 22417), (197, 22429), (204, 22489), (206, 22498), (211, 22540), (215, 22558), (218, 22576), (219, 22582), (227, 22633), (232, 22714), (235, 22747), (237, 22762), (245, 22825), (246, 22828), (249, 22849), (250, 22858), (252, 22894), (257, 22933), (261, 23008), (264, 23032), (268, 23062), (271, 23086), (288, 23236), (289, 23239),

Gene: Shrubaron_36 Start: 20356, Stop: 23226, Start Num: 14
Candidate Starts for Shrubaron_36:
(Start: 14 @20356 has 54 MA's), (16, 20380), (34, 20536), (52, 20689), (72, 20959), (74, 21010), (79, 21100), (81, 21142), (84, 21229), (85, 21244), (91, 21307), (94, 21358), (95, 21370), (97, 21391), (99, 21421), (100, 21445), (101, 21448), (102, 21463), (104, 21490), (106, 21523), (108, 21544), (114, 21637), (115, 21655), (117, 21664), (118, 21667), (121, 21712), (126, 21802), (128, 21829), (130, 21850), (139, 21973), (144, 22012), (152, 22048), (153, 22057), (158, 22087), (178, 22213), (181, 22228), (195, 22309), (201, 22354), (204, 22381), (206, 22390), (211, 22432), (215, 22450), (219, 22474), (232, 22606), (234, 22633), (235, 22639), (237, 22654), (245, 22717), (250, 22750), (261, 22900), (264, 22924), (268, 22954), (271, 22978), (285, 23110), (288, 23119), (295, 23212), (296, 23215),

Gene: SirFrank_35 Start: 20568, Stop: 23435, Start Num: 14
Candidate Starts for SirFrank_35:
(Start: 14 @20568 has 54 MA's), (16, 20592), (52, 20901), (66, 21117), (72, 21171), (74, 21222), (81, 21354), (82, 21375), (84, 21441), (85, 21456), (88, 21474), (91, 21519), (94, 21570), (95, 21582), (99, 21633), (100, 21657), (101, 21660), (102, 21675), (103, 21699), (106, 21735), (108, 21756), (114, 21849), (117, 21876), (118, 21879), (121, 21924), (126, 22014), (133, 22092), (139, 22185), (144, 22224), (152, 22260), (153, 22269), (155, 22275), (173, 22389), (176, 22416), (180, 22434), (189, 22488), (191, 22497), (195, 22521), (197, 22533), (204, 22593), (206, 22602), (211, 22644), (215, 22662), (218, 22680), (219, 22686), (227, 22737), (232, 22818), (235, 22851), (237, 22866), (245, 22929), (246, 22932), (248, 22950), (249, 22953), (250, 22962), (252, 22998), (261, 23112), (264, 23136), (268, 23166), (271, 23190), (278, 23241),

Gene: Skugga_34 Start: 20454, Stop: 23321, Start Num: 14
Candidate Starts for Skugga_34:
(Start: 14 @20454 has 54 MA's), (16, 20478), (32, 20625), (34, 20634), (52, 20787), (66, 21003), (72, 21057), (73, 21078), (74, 21108), (81, 21240), (82, 21261), (84, 21327), (85, 21342), (91, 21405), (93, 21444), (94, 21456), (97, 21489), (99, 21519), (100, 21543), (101, 21546), (102, 21561), (103, 21585), (104, 21588), (106, 21621), (108, 21642), (114, 21735), (121, 21810), (126, 21900), (128, 21927), (130, 21948), (133, 21978), (139, 22071), (144, 22110), (152, 22146), (153, 22155), (158, 22185), (163, 22212), (169, 22251), (170, 22257), (179, 22317), (195, 22407), (197, 22419), (206, 22488), (215, 22548), (219, 22572), (225, 22617), (226, 22620), (232, 22704), (234, 22731), (237, 22752), (245, 22815), (246, 22818), (249, 22839), (250, 22848), (252, 22884), (253, 22896), (261, 22998), (264, 23022), (268, 23052), (271, 23076), (291, 23238), (292, 23277), (295, 23307), (296, 23310),

Gene: Smarties_44 Start: 22548, Stop: 25418, Start Num: 14
Candidate Starts for Smarties_44:
(Start: 14 @22548 has 54 MA's), (16, 22572), (40, 22785), (46, 22830), (52, 22881), (64, 23070), (72, 23151), (73, 23172), (74, 23202), (81, 23334), (84, 23421), (85, 23436), (91, 23499), (94, 23550), (95, 23562), (100, 23637), (102, 23655), (104, 23682), (106, 23715), (108, 23736), (114, 23829), (117, 23856), (118, 23859), (121, 23904), (126, 23994), (133, 24072), (139, 24165), (144, 24204), (149, 24228), (151, 24237), (153, 24249), (156, 24264), (158, 24279), (165, 24318), (170, 24351), (171, 24360), (173, 24369), (176, 24396), (180, 24414), (191, 24477), (195, 24501), (197, 24513), (204, 24573), (206, 24582), (211, 24624), (215, 24642), (219, 24666), (226, 24714), (232, 24798), (234,

24825), (237, 24846), (245, 24909), (246, 24912), (250, 24942), (253, 24990), (255, 25008), (261, 25092), (264, 25116), (268, 25146), (271, 25170), (281, 25236), (291, 25335), (292, 25374), (295, 25404), (296, 25407),

Gene: Sunny_ Start: 22698, Stop: 25562, Start Num: 14
Candidate Starts for Sunny_:
(Start: 14 @22698 has 54 MA's), (16, 22722), (35, 22893), (48, 22992), (52, 23031), (68, 23265), (73, 23322), (81, 23484), (82, 23505), (84, 23571), (85, 23586), (88, 23604), (91, 23649), (93, 23688), (94, 23700), (100, 23787), (101, 23790), (102, 23805), (103, 23829), (106, 23865), (108, 23886), (114, 23979), (116, 24003), (121, 24054), (133, 24222), (136, 24258), (137, 24282), (139, 24315), (144, 24354), (147, 24369), (149, 24378), (152, 24390), (153, 24399), (159, 24435), (164, 24465), (173, 24519), (187, 24600), (195, 24651), (206, 24732), (215, 24792), (217, 24807), (219, 24816), (221, 24834), (222, 24843), (232, 24948), (233, 24960), (234, 24975), (237, 24996), (240, 25029), (243, 25047), (249, 25083), (257, 25167), (261, 25242), (264, 25266), (268, 25296), (271, 25320), (286, 25464), (290, 25485), (291, 25491), (293, 25530), (294, 25551),

Gene: Teamocil_37 Start: 20537, Stop: 23404, Start Num: 14
Candidate Starts for Teamocil_37:
(Start: 14 @20537 has 54 MA's), (16, 20561), (34, 20717), (52, 20870), (72, 21140), (73, 21161), (74, 21191), (81, 21323), (82, 21344), (85, 21425), (91, 21488), (94, 21539), (97, 21572), (99, 21602), (100, 21626), (101, 21629), (102, 21644), (103, 21668), (104, 21671), (106, 21704), (108, 21725), (114, 21818), (121, 21893), (126, 21983), (128, 22010), (130, 22031), (133, 22061), (139, 22154), (144, 22193), (152, 22229), (153, 22238), (158, 22268), (163, 22295), (169, 22334), (170, 22340), (179, 22400), (195, 22490), (197, 22502), (206, 22571), (215, 22631), (219, 22655), (226, 22703), (232, 22787), (234, 22814), (237, 22835), (245, 22898), (246, 22901), (249, 22922), (250, 22931), (252, 22967), (253, 22979), (261, 23081), (264, 23105), (268, 23135), (291, 23321), (292, 23360), (295, 23390), (296, 23393),

Gene: Terij_32 Start: 20048, Stop: 22894, Start Num: 14
Candidate Starts for Terij_32:
(Start: 14 @20048 has 54 MA's), (16, 20075), (29, 20198), (40, 20288), (47, 20345), (51, 20384), (55, 20420), (66, 20603), (70, 20633), (73, 20678), (74, 20708), (81, 20840), (85, 20942), (91, 21005), (99, 21119), (100, 21143), (104, 21188), (106, 21221), (108, 21242), (114, 21335), (115, 21353), (117, 21362), (121, 21410), (124, 21458), (126, 21500), (139, 21671), (152, 21746), (153, 21755), (154, 21758), (159, 21791), (169, 21851), (192, 21986), (195, 22007), (204, 22079), (206, 22088), (211, 22130), (219, 22172), (223, 22205), (228, 22256), (229, 22271), (231, 22283), (232, 22304), (234, 22331), (235, 22337), (237, 22352), (245, 22415), (249, 22439), (264, 22622), (265, 22634), (268, 22652), (269, 22664), (271, 22676), (277, 22715), (287, 22796), (289, 22802), (290, 22817), (294, 22883),

Gene: Yeti_36 Start: 20633, Stop: 23500, Start Num: 14
Candidate Starts for Yeti_36:
(Start: 14 @20633 has 54 MA's), (16, 20657), (52, 20966), (66, 21182), (72, 21236), (73, 21257), (74, 21287), (81, 21419), (82, 21440), (84, 21506), (85, 21521), (91, 21584), (94, 21635), (95, 21647), (99, 21698), (100, 21722), (101, 21725), (102, 21740), (103, 21764), (106, 21800), (108, 21821), (114, 21914), (115, 21932), (118, 21944), (121, 21989), (126, 22079), (128, 22106), (139, 22250), (144, 22289), (149, 22313), (152, 22325), (153, 22334), (160, 22373), (161, 22382), (165, 22403), (173, 22454), (176, 22481), (180, 22499), (189, 22553), (191, 22562), (194, 22580), (195, 22586), (197, 22598), (204, 22658), (206, 22667), (211, 22709), (215, 22727), (218, 22745), (219, 22751), (227, 22802), (232, 22883), (235, 22916), (237, 22931), (245, 22994), (246, 22997), (249, 23018), (250, 23027), (252, 23063), (257, 23102), (261, 23177), (264, 23201), (268, 23231), (271, 23255), (288, 23405), (289, 23408),

Gene: Zapato_35 Start: 20478, Stop: 23345, Start Num: 14
Candidate Starts for Zapato_35:
(Start: 14 @20478 has 54 MA's), (16, 20502), (25, 20589), (52, 20811), (66, 21027), (72, 21081), (73, 21102), (81, 21264), (85, 21366), (88, 21384), (91, 21429), (94, 21480), (100, 21567), (101, 21570), (102, 21585), (103, 21609), (106, 21645), (108, 21666), (114, 21759), (117, 21786), (118, 21789), (121, 21834), (130, 21972), (139, 22095), (144, 22134), (153, 22179), (154, 22182), (158, 22209), (159, 22215), (179, 22341), (184, 22371), (189, 22398), (195, 22431), (197, 22443), (219, 22596), (226, 22644), (232, 22728), (234, 22755), (237, 22776), (245, 22839), (249, 22863), (261, 23022), (264, 23046), (268, 23076), (271, 23100), (281, 23166), (284, 23220), (292, 23301), (295, 23331), (296, 23334),