

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 308365 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308365 has 78 members, 8 are drafts.

Phages represented in each track:

- Track 1 : BelmontSKP_17, CroZenni_16, AnnaLie_17
- Track 2 : DirtyBubble_16
- Track 3 : BubbaBear_16, SirBeanington_16, Albedo_16
- Track 4 : Nicky22_17
- Track 5 : Stromboli_16
- Track 6 : Albright_16
- Track 7 : Jovita_16
- Track 8 : Celaena_15
- Track 9 : Softsoap_15
- Track 10 : Elva_17
- Track 11 : BabyYoda_16
- Track 12 : Buldak_15
- Track 13 : Quenya_16
- Track 14 : PastaFagioli_16
- Track 15 : Slay_16
- Track 16 : Swervy_16, SarBear_16
- Track 17 : CanFranMach_17
- Track 18 : Johnathan_16
- Track 19 : Arroyo_17
- Track 20 : BAjuniper_16
- Track 21 : Icarian_17
- Track 22 : LimaBean_16
- Track 23 : Stoor_16, SanaSana_17
- Track 24 : Cashington_16
- Track 25 : AylexOG_17
- Track 26 : CliffHanger_16
- Track 27 : Lynlen_16, Kenzers_16
- Track 28 : MsUbiquitous_16, CupcakePrincess_16, Jabb_16
- Track 29 : QMacho_17, Pecas_16, Eula_16
- Track 30 : Bachaco_15
- Track 31 : Abigail_16
- Track 32 : Kieran_15
- Track 33 : Squircle_15, Olliecat_15
- Track 34 : Bengal_16
- Track 35 : FlameThrower_15
- Track 36 : ChiliPepper_15, Kamdara_15, Sharkboy_15
- Track 37 : Phisb_16

- Track 38 : Didgeridoo_17
- Track 39 : Shayna_15, SunnyD_15
- Track 40 : TukTuk_16
- Track 41 : Lahqtemish_16
- Track 42 : Burritobowl_16
- Track 43 : DickRichards_16
- Track 44 : Loviatar_16, Akino08_15
- Track 45 : SansAfet_16
- Track 46 : Milomuff_17, Solea_18
- Track 47 : Katzastrophic_15
- Track 48 : Finalfrontier_17
- Track 49 : Lilo27_16
- Track 50 : WalkingDead_16
- Track 51 : IndyLu_16, Kate33_16
- Track 52 : Dismas_15, Rona_15
- Track 53 : Teagster_15
- Track 54 : Doobus_16
- Track 55 : Avocadoman_16
- Track 56 : PondAmelia_20
- Track 57 : PhigPhack_17
- Track 58 : AvGardian_16
- Track 59 : BabyDaisy_17

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

The start number called the most often in the published annotations is 7, it was called in 64 of the 70 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_16, Akino08_15, Albedo_16, Albright_16, AnnaLie_17, Arroyo_17, AvGardian_16, Avocadoman_16, AylexOG_17, BAjuniper_16, BabyDaisy_17, BabyYoda_16, Bachaco_15, BelmontSKP_17, Bengal_16, BubbaBear_16, Burritobowl_16, CanFranMach_17, Cashington_16, Celaena_15, ChiliPepper_15, CliffHanger_16, CroZenni_16, CupcakePrincess_16, DickRichards_16, Didgeridoo_17, DirtyBubble_16, Dismas_15, Doobus_16, Elva_17, Eula_16, Finalfrontier_17, FlameThrower_15, Icarian_17, IndyLu_16, Jabb_16, Johnathan_16, Jovita_16, Kamdara_15, Kate33_16, Katzastrophic_15, Kenzers_16, Kieran_15, Lahqtemish_16, Lilo27_16, LimaBean_16, Loviatar_16, Lynlen_16, Milomuff_17, MsUbiquitous_16, Nicky22_17, PastaFagioli_16, Pecas_16, PhigPhack_17, Phisb_16, PondAmelia_20, QMacho_17, Quenya_16, Rona_15, SanaSana_17, SansAfet_16, SarBear_16, Sharkboy_15, SirBeanington_16, Slay_16, Softsoap_15, Solea_18, Stoor_16, Stromboli_16, Swervy_16, TukTuk_16, WalkingDead_16,

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

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

- Buldak_15, Olliecat_15, Shayna_15, Squiracle_15, SunnyD_15, Teagster_15,

Summary by start number:

Start 2:

- Found in 3 of 78 (3.8%) of genes in pham
- Manual Annotations of this start: 3 of 70
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Buldak_15 (EB), Olliecat_15 (EB), Squiracle_15 (EB),

Start 3:

- Found in 3 of 78 (3.8%) of genes in pham
- Manual Annotations of this start: 3 of 70
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shayna_15 (EB), SunnyD_15 (EB), Teagster_15 (EB),

Start 7:

- Found in 72 of 78 (92.3%) of genes in pham
- Manual Annotations of this start: 64 of 70
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abigail_16 (EB), Akino08_15 (EB), Albedo_16 (EB), Albright_16 (EB), AnnaLie_17 (EB), Arroyo_17 (EB), AvGuardian_16 (EB), Avocadoman_16 (EB), AylexOG_17 (EB), BAjuniper_16 (EB), BabyDaisy_17 (EB), BabyYoda_16 (EB), Bachaco_15 (EB), BelmontSKP_17 (EB), Bengal_16 (EB), BubbaBear_16 (EB), Burritobowl_16 (EB), CanFranMach_17 (EB), Cashington_16 (EB), Celaena_15 (EB), ChiliPepper_15 (EB), CliffHanger_16 (EB), CroZenni_16 (EB), CupcakePrincess_16 (EB), DickRichards_16 (EB), Didgeridoo_17 (EB), DirtyBubble_16 (EB), Dismas_15 (EB), Doobus_16 (EB), Elva_17 (EB), Eula_16 (EB), Finalfrontier_17 (EB), FlameThrower_15 (EB), Icarian_17 (EB), IndyLu_16 (EB), Jabb_16 (EB), Johnathan_16 (EB), Jovita_16 (EB), Kamdara_15 (EB), Kate33_16 (EB), Katzastrophic_15 (EB), Kenzers_16 (EB), Kieran_15 (EB), Lahqtemish_16 (EB), Lilo27_16 (EB), LimaBean_16 (EB), Loviatar_16 (EB), Lynlen_16 (EB), Milomuff_17 (EB), MsUbiquitous_16 (EB), Nicky22_17 (EB), PastaFagioli_16 (EB), Pecas_16 (EB), PhigPhack_17 (EB), Phisb_16 (EB), PondAmelia_20 (EB), QMacho_17 (EB), Quenya_16 (EB), Rona_15 (EB), SanaSana_17 (EB), SansAfet_16 (EB), SarBear_16 (EB), Sharkboy_15 (EB), SirBeanington_16 (EB), Slay_16 (EB), Softsoap_15 (EB), Solea_18 (EB), Stoor_16 (EB), Stromboli_16 (EB), Swervy_16 (EB), TukTuk_16 (EB), WalkingDead_16 (EB),

Summary by clusters:

There is one cluster represented in this pham: EB

Info for manual annotations of cluster EB:

- Start number 2 was manually annotated 3 times for cluster EB.
- Start number 3 was manually annotated 3 times for cluster EB.
- Start number 7 was manually annotated 64 times for cluster EB.

Gene Information:

Gene: Abigail_16 Start: 10507, Stop: 13266, Start Num: 7

Candidate Starts for Abigail_16:

(Start: 7 @10507 has 64 MA's), (17, 10660), (18, 10666), (25, 10705), (38, 10891), (48, 10993), (65, 11164), (72, 11230), (74, 11242), (76, 11251), (79, 11266), (82, 11299), (84, 11308), (86, 11326), (96, 11386), (97, 11392), (99, 11401), (100, 11407), (103, 11431), (105, 11443), (109, 11461), (116, 11524), (132, 11638), (136, 11650), (142, 11746), (147, 11785), (164, 11944), (169, 11995), (171, 12004), (174, 12016), (178, 12094), (181, 12208), (184, 12235), (190, 12319), (198, 12430), (199, 12439), (205, 12505), (211, 12571), (225, 12667), (227, 12712), (228, 12727), (233, 12766), (237, 12835), (238, 12853), (239, 12856), (240, 12868), (242, 12895), (247, 13009), (248, 13021), (251, 13051), (256, 13159),

Gene: Akino08_15 Start: 10420, Stop: 13050, Start Num: 7

Candidate Starts for Akino08_15:

(Start: 7 @10420 has 64 MA's), (13, 10480), (17, 10573), (24, 10609), (25, 10618), (34, 10714), (43, 10867), (48, 10906), (65, 11077), (68, 11113), (73, 11146), (77, 11167), (79, 11179), (81, 11197), (84, 11221), (92, 11272), (96, 11299), (97, 11305), (99, 11314), (102, 11332), (111, 11392), (116, 11437), (142, 11524), (145, 11551), (146, 11560), (156, 11626), (162, 11683), (181, 11986), (182, 11989), (184, 12013), (186, 12037), (191, 12148), (196, 12208), (205, 12292), (211, 12358), (213, 12370), (215, 12385), (220, 12433), (223, 12442), (224, 12445), (227, 12505), (228, 12520), (236, 12604), (240, 12652), (248, 12805), (249, 12820), (251, 12835), (255, 12922), (259, 12964),

Gene: Albedo_16 Start: 10372, Stop: 13134, Start Num: 7

Candidate Starts for Albedo_16:

(Start: 7 @10372 has 64 MA's), (17, 10525), (25, 10570), (38, 10756), (48, 10858), (65, 11029), (72, 11095), (74, 11107), (76, 11116), (82, 11164), (84, 11173), (86, 11191), (97, 11257), (99, 11266), (100, 11272), (103, 11296), (105, 11308), (116, 11389), (130, 11476), (132, 11503), (135, 11512), (142, 11611), (162, 11770), (166, 11824), (174, 11881), (178, 11959), (181, 12073), (184, 12100), (187, 12145), (191, 12235), (193, 12268), (196, 12295), (205, 12373), (208, 12394), (212, 12442), (225, 12535), (227, 12580), (228, 12595), (233, 12634), (237, 12703), (238, 12721), (239, 12724), (240, 12736), (242, 12763), (248, 12889), (249, 12904), (251, 12919), (256, 13027),

Gene: Albright_16 Start: 10286, Stop: 13045, Start Num: 7

Candidate Starts for Albright_16:

(1, 10133), (4, 10214), (Start: 7 @10286 has 64 MA's), (17, 10439), (18, 10445), (25, 10484), (38, 10670), (48, 10772), (65, 10943), (72, 11009), (74, 11021), (76, 11030), (79, 11045), (82, 11078), (84, 11087), (96, 11165), (97, 11171), (99, 11180), (100, 11186), (103, 11210), (105, 11222), (109, 11240), (116, 11303), (132, 11417), (136, 11429), (142, 11525), (147, 11564), (164, 11723), (169, 11774), (171, 11783), (174, 11795), (178, 11873), (181, 11987), (184, 12014), (190, 12098), (195, 12191), (198, 12209), (199, 12218), (205, 12284), (211, 12350), (225, 12446), (227, 12491), (228, 12506), (233, 12545), (237, 12614), (238, 12632), (239, 12635), (240, 12647), (242, 12674), (247, 12788), (248, 12800), (251, 12830), (256, 12938),

Gene: AnnaLie_17 Start: 10694, Stop: 13453, Start Num: 7

Candidate Starts for AnnaLie_17:

(Start: 7 @10694 has 64 MA's), (17, 10847), (18, 10853), (25, 10892), (38, 11078), (46, 11162), (48, 11180), (59, 11279), (65, 11351), (72, 11417), (74, 11429), (76, 11438), (79, 11453), (82, 11486), (84, 11495), (86, 11513), (96, 11573), (97, 11579), (99, 11588), (100, 11594), (103, 11618), (105, 11630), (116, 11711), (132, 11825), (136, 11837), (142, 11933), (147, 11972), (159, 12068), (162, 12092), (166, 12146), (169, 12182), (171, 12191), (174, 12203), (178, 12281), (181, 12395), (184, 12422), (190, 12506), (198, 12617), (199, 12626), (205, 12692), (211, 12758), (225, 12854), (227, 12899), (228, 12914), (233, 12953), (237, 13022), (238, 13040), (239, 13043), (240, 13055), (242, 13082), (247, 13196), (248, 13208), (251, 13238), (256, 13346),

Gene: Arroyo_17 Start: 10895, Stop: 13654, Start Num: 7

Candidate Starts for Arroyo_17:

(Start: 7 @10895 has 64 MA's), (17, 11048), (25, 11093), (38, 11279), (46, 11363), (48, 11381), (59, 11480), (65, 11552), (72, 11618), (74, 11630), (76, 11639), (79, 11654), (82, 11687), (84, 11696), (86, 11714), (96, 11774), (97, 11780), (99, 11789), (100, 11795), (103, 11819), (105, 11831), (110, 11861), (116, 11912), (132, 12026), (136, 12038), (142, 12134), (147, 12173), (159, 12269), (162, 12293), (166, 12347), (169, 12383), (171, 12392), (178, 12482), (181, 12596), (184, 12623), (190, 12707), (195, 12800), (198, 12818), (199, 12827), (211, 12959), (225, 13055), (227, 13100), (228, 13115), (233, 13154), (237, 13223), (238, 13241), (239, 13244), (240, 13256), (242, 13283), (247, 13397), (248, 13409), (251, 13439), (256, 13547),

Gene: AvGardian_16 Start: 10175, Stop: 12796, Start Num: 7

Candidate Starts for AvGardian_16:

(Start: 7 @10175 has 64 MA's), (17, 10328), (19, 10340), (25, 10373), (29, 10397), (34, 10469), (43, 10622), (48, 10661), (65, 10832), (74, 10910), (80, 10946), (82, 10967), (89, 11006), (99, 11069), (107, 11120), (109, 11129), (111, 11147), (116, 11192), (121, 11210), (142, 11279), (144, 11303), (153, 11351), (156, 11381), (160, 11420), (162, 11438), (167, 11507), (171, 11537), (174, 11549), (181, 11741), (182, 11744), (184, 11768), (190, 11852), (195, 11945), (198, 11963), (199, 11972), (201, 12005), (218, 12167), (222, 12185), (224, 12191), (226, 12209), (227, 12242), (228, 12257), (229, 12266), (230, 12269), (233, 12296), (235, 12344), (239, 12386), (240, 12398), (242, 12425), (248, 12551), (249, 12566), (251, 12581), (255, 12668), (259, 12710),

Gene: Avocadoman_16 Start: 10450, Stop: 13209, Start Num: 7

Candidate Starts for Avocadoman_16:

(Start: 7 @10450 has 64 MA's), (17, 10603), (18, 10609), (25, 10648), (38, 10834), (48, 10936), (65, 11107), (72, 11173), (74, 11185), (76, 11194), (79, 11209), (82, 11242), (84, 11251), (86, 11269), (96, 11329), (97, 11335), (99, 11344), (100, 11350), (103, 11374), (105, 11386), (109, 11404), (116, 11467), (132, 11581), (136, 11593), (139, 11620), (142, 11689), (147, 11728), (164, 11887), (169, 11938), (171, 11947), (174, 11959), (178, 12037), (181, 12151), (184, 12178), (190, 12262), (198, 12373), (199, 12382), (205, 12448), (211, 12514), (225, 12610), (227, 12655), (228, 12670), (233, 12709), (237, 12778), (238, 12796), (239, 12799), (240, 12811), (242, 12838), (247, 12952), (248, 12964), (251, 12994), (256, 13102),

Gene: AylexOG_17 Start: 10706, Stop: 13468, Start Num: 7

Candidate Starts for AylexOG_17:

(Start: 7 @10706 has 64 MA's), (17, 10859), (18, 10865), (24, 10895), (25, 10904), (29, 10928), (34, 11000), (48, 11192), (59, 11291), (65, 11363), (74, 11441), (76, 11450), (77, 11453), (82, 11498), (84, 11507), (97, 11591), (99, 11600), (100, 11606), (103, 11630), (105, 11642), (116, 11723), (130, 11810), (132, 11837), (135, 11846), (142, 11945), (159, 12080), (162, 12104), (166, 12158), (174, 12215), (178, 12293), (181, 12407), (184, 12434), (191, 12569), (196, 12629), (205, 12707), (208, 12728), (212, 12776), (225, 12869), (227, 12914), (228, 12929), (233, 12968), (237, 13037), (239, 13058), (240, 13070), (242, 13097), (248, 13223), (249, 13238), (251, 13253),

Gene: BAjuniper_16 Start: 10103, Stop: 12796, Start Num: 7

Candidate Starts for BAjuniper_16:

(Start: 7 @10103 has 64 MA's), (16, 10244), (29, 10322), (45, 10580), (47, 10583), (60, 10724), (62, 10769), (75, 10880), (80, 10910), (85, 10943), (88, 10955), (106, 11042), (116, 11087), (133, 11183), (141, 11237), (145, 11297), (147, 11309), (151, 11336), (152, 11339), (153, 11342), (155, 11363), (162, 11429), (169, 11519), (171, 11528), (174, 11540), (177, 11582), (179, 11636), (181, 11732), (182, 11735), (184, 11759), (186, 11783), (187, 11804), (188, 11807), (191, 11894), (196, 11954), (200, 11993), (201, 12005), (202, 12008), (205, 12038), (212, 12107), (215, 12131), (218, 12167), (220, 12179), (223, 12188), (227, 12251), (228, 12266), (233, 12305), (239, 12386), (240, 12398), (249, 12566), (251, 12581), (255, 12668),

Gene: BabyDaisy_17 Start: 10507, Stop: 13269, Start Num: 7

Candidate Starts for BabyDaisy_17:

(Start: 7 @10507 has 64 MA's), (17, 10660), (19, 10672), (29, 10729), (34, 10801), (43, 10954), (48, 10993), (65, 11164), (74, 11242), (77, 11254), (78, 11257), (82, 11299), (95, 11380), (99, 11401), (109, 11461), (111, 11479), (116, 11524), (121, 11542), (126, 11578), (132, 11638), (136, 11650), (139, 11677), (147, 11785), (158, 11869), (162, 11905), (169, 11995), (171, 12004), (174, 12016), (178, 12094), (181, 12208), (184, 12235), (189, 12310), (191, 12370), (196, 12430), (205, 12508), (208, 12529), (212, 12577), (225, 12670), (227, 12715), (228, 12730), (230, 12742), (233, 12769), (237, 12838), (239, 12859), (240, 12871), (242, 12898), (248, 13024), (249, 13039), (251, 13054), (258, 13180), (260, 13255),

Gene: BabyYoda_16 Start: 10507, Stop: 13137, Start Num: 7

Candidate Starts for BabyYoda_16:

(Start: 7 @10507 has 64 MA's), (13, 10567), (17, 10660), (18, 10666), (19, 10672), (25, 10705), (34, 10801), (43, 10954), (48, 10993), (55, 11053), (56, 11080), (65, 11164), (74, 11242), (78, 11257), (80, 11278), (82, 11299), (95, 11380), (99, 11401), (109, 11461), (111, 11479), (116, 11524), (118, 11530), (121, 11542), (145, 11638), (146, 11647), (147, 11650), (153, 11683), (155, 11704), (162, 11770), (181, 12073), (182, 12076), (184, 12100), (186, 12124), (191, 12235), (196, 12295), (205, 12379), (211, 12445), (213, 12457), (215, 12472), (220, 12520), (223, 12529), (224, 12532), (227, 12592), (228, 12607), (236, 12691), (240, 12739), (248, 12892), (249, 12907), (251, 12922), (255, 13009), (259, 13051),

Gene: Bachaco_15 Start: 9893, Stop: 12670, Start Num: 7

Candidate Starts for Bachaco_15:

(Start: 7 @9893 has 64 MA's), (10, 9926), (16, 10034), (29, 10112), (44, 10364), (45, 10370), (47, 10373), (60, 10514), (67, 10622), (71, 10646), (72, 10655), (87, 10754), (94, 10802), (106, 10874), (113, 10922), (114, 10925), (117, 10943), (120, 10952), (123, 10973), (145, 11171), (146, 11180), (147, 11183), (156, 11246), (171, 11402), (173, 11408), (174, 11414), (181, 11606), (184, 11633), (187, 11678), (191, 11768), (192, 11792), (194, 11810), (196, 11828), (202, 11882), (205, 11912), (212, 11981), (215, 12005), (223, 12062), (224, 12065), (227, 12125), (228, 12140), (239, 12260), (240, 12272), (242, 12299), (243, 12341), (248, 12425), (249, 12440), (250, 12443), (260, 12656),

Gene: BelmontSKP_17 Start: 10694, Stop: 13453, Start Num: 7

Candidate Starts for BelmontSKP_17:

(Start: 7 @10694 has 64 MA's), (17, 10847), (18, 10853), (25, 10892), (38, 11078), (46, 11162), (48, 11180), (59, 11279), (65, 11351), (72, 11417), (74, 11429), (76, 11438), (79, 11453), (82, 11486), (84, 11495), (86, 11513), (96, 11573), (97, 11579), (99, 11588), (100, 11594), (103, 11618), (105, 11630), (116, 11711), (132, 11825), (136, 11837), (142, 11933), (147, 11972), (159, 12068), (162, 12092), (166, 12146), (169, 12182), (171, 12191), (174, 12203), (178, 12281), (181, 12395), (184, 12422), (190, 12506), (198, 12617), (199, 12626), (205, 12692), (211, 12758), (225, 12854), (227, 12899), (228, 12914), (233, 12953), (237, 13022), (238, 13040), (239, 13043), (240, 13055), (242, 13082), (247, 13196), (248, 13208), (251, 13238), (256, 13346),

Gene: Bengal_16 Start: 10285, Stop: 13044, Start Num: 7

Candidate Starts for Bengal_16:

(Start: 7 @10285 has 64 MA's), (17, 10438), (18, 10444), (25, 10483), (38, 10669), (48, 10771), (65, 10942), (72, 11008), (74, 11020), (76, 11029), (79, 11044), (82, 11077), (84, 11086), (86, 11104), (96, 11164), (97, 11170), (99, 11179), (100, 11185), (103, 11209), (105, 11221), (109, 11239), (116, 11302), (132, 11416), (136, 11428), (139, 11455), (142, 11524), (147, 11563), (164, 11722), (169, 11773), (171, 11782), (174, 11794), (178, 11872), (181, 11986), (184, 12013), (190, 12097), (195, 12190), (198, 12208), (199, 12217), (205, 12283), (211, 12349), (225, 12445), (227, 12490), (228, 12505), (233, 12544), (237, 12613), (238, 12631), (239, 12634), (240, 12646), (242, 12673), (247, 12787), (248, 12799), (251, 12829), (256, 12937),

Gene: BubbaBear_16 Start: 10372, Stop: 13134, Start Num: 7

Candidate Starts for BubbaBear_16:

(Start: 7 @10372 has 64 MA's), (17, 10525), (25, 10570), (38, 10756), (48, 10858), (65, 11029), (72, 11095), (74, 11107), (76, 11116), (82, 11164), (84, 11173), (86, 11191), (97, 11257), (99, 11266), (100, 11272), (103, 11296), (105, 11308), (116, 11389), (130, 11476), (132, 11503), (135, 11512), (142, 11611), (162, 11770), (166, 11824), (174, 11881), (178, 11959), (181, 12073), (184, 12100), (187, 12145), (191, 12235), (193, 12268), (196, 12295), (205, 12373), (208, 12394), (212, 12442), (225, 12535), (227, 12580), (228, 12595), (233, 12634), (237, 12703), (238, 12721), (239, 12724), (240, 12736), (242, 12763), (248, 12889), (249, 12904), (251, 12919), (256, 13027),

Gene: Buldak_15 Start: 10073, Stop: 13042, Start Num: 2

Candidate Starts for Buldak_15:

(Start: 2 @10073 has 3 MA's), (5, 10148), (6, 10163), (11, 10271), (12, 10274), (15, 10340), (20, 10397), (22, 10409), (31, 10493), (33, 10544), (36, 10607), (37, 10625), (40, 10670), (41, 10679), (42, 10691), (51, 10772), (53, 10784), (54, 10799), (61, 10871), (66, 10946), (68, 10976), (69, 10988), (81, 11066), (83, 11087), (88, 11114), (93, 11150), (109, 11240), (112, 11273), (115, 11300), (127, 11366), (129, 11384), (134, 11423), (138, 11438), (143, 11534), (149, 11582), (161, 11678), (163, 11699), (165, 11729), (176, 11810), (179, 11882), (180, 11888), (181, 11978), (187, 12050), (191, 12140), (192, 12164), (196, 12200), (205, 12281), (206, 12290), (210, 12335), (221, 12425), (224, 12434), (227, 12494), (228, 12509), (233, 12548), (234, 12587), (240, 12650), (242, 12677), (246, 12776), (248, 12803), (252, 12848), (254, 12872),

Gene: Burritobowl_16 Start: 10453, Stop: 13212, Start Num: 7

Candidate Starts for Burritobowl_16:

(Start: 7 @10453 has 64 MA's), (17, 10606), (18, 10612), (25, 10651), (38, 10837), (46, 10921), (48, 10939), (59, 11038), (65, 11110), (72, 11176), (74, 11188), (76, 11197), (79, 11212), (82, 11245), (84, 11254), (86, 11272), (96, 11332), (97, 11338), (99, 11347), (100, 11353), (103, 11377), (105, 11389), (109, 11407), (116, 11470), (132, 11584), (136, 11596), (142, 11692), (147, 11731), (159, 11827), (162, 11851), (166, 11905), (169, 11941), (171, 11950), (174, 11962), (178, 12040), (181, 12154), (184, 12181), (190, 12265), (198, 12376), (199, 12385), (205, 12451), (211, 12517), (225, 12613), (227, 12658), (228, 12673), (233, 12712), (234, 12751), (237, 12781), (238, 12799), (239, 12802), (240, 12814), (242, 12841), (247, 12955), (248, 12967), (251, 12997), (256, 13105),

Gene: CanFranMach_17 Start: 10379, Stop: 13138, Start Num: 7

Candidate Starts for CanFranMach_17:

(Start: 7 @10379 has 64 MA's), (17, 10532), (18, 10538), (26, 10580), (38, 10763), (48, 10865), (59, 10964), (65, 11036), (74, 11114), (76, 11123), (84, 11180), (87, 11201), (97, 11264), (99, 11273), (100, 11279), (103, 11303), (104, 11312), (116, 11396), (125, 11441), (135, 11519), (142, 11618), (147, 11657), (162, 11777), (169, 11867), (171, 11876), (178, 11966), (181, 12080), (184, 12107), (189, 12182), (191, 12242), (193, 12275), (196, 12302), (205, 12380), (208, 12401), (225, 12542), (227, 12587), (228, 12602), (233, 12641), (237, 12710), (239, 12731), (240, 12743), (242, 12770), (248, 12896), (249, 12911), (251, 12926), (256, 13034),

Gene: Cashington_16 Start: 10302, Stop: 13061, Start Num: 7

Candidate Starts for Cashington_16:

(Start: 7 @10302 has 64 MA's), (17, 10455), (18, 10461), (24, 10491), (25, 10500), (29, 10524), (34, 10596), (48, 10788), (59, 10887), (65, 10959), (74, 11037), (76, 11046), (77, 11049), (82, 11094), (84, 11103), (96, 11181), (97, 11187), (99, 11196), (100, 11202), (103, 11226), (105, 11238), (109, 11256), (116, 11319), (132, 11433), (136, 11445), (139, 11472), (142, 11541), (147, 11580), (164, 11739), (169, 11790), (171, 11799), (174, 11811), (178, 11889), (181, 12003), (184, 12030), (190, 12114), (198, 12225), (199, 12234), (205, 12300), (211, 12366), (225, 12462), (227, 12507), (228, 12522), (233, 12561), (237, 12630), (238, 12648), (239, 12651), (240, 12663), (242, 12690), (248, 12816), (249, 12831), (251, 12846),

Gene: Celaena_15 Start: 9829, Stop: 12606, Start Num: 7

Candidate Starts for Celaena_15:

(Start: 7 @9829 has 64 MA's), (10, 9862), (16, 9970), (29, 10048), (44, 10300), (45, 10306), (47, 10309), (60, 10450), (67, 10558), (71, 10582), (72, 10591), (87, 10690), (106, 10810), (113, 10858), (114, 10861), (117, 10879), (120, 10888), (123, 10909), (145, 11107), (146, 11116), (147, 11119), (156, 11182), (171, 11338), (173, 11344), (174, 11350), (181, 11542), (184, 11569), (187, 11614), (191, 11704), (192, 11728), (194, 11746), (196, 11764), (202, 11818), (205, 11848), (212, 11917), (215, 11941), (223, 11998), (224, 12001), (227, 12061), (228, 12076), (239, 12196), (240, 12208), (242, 12235), (243, 12277), (248, 12361), (249, 12376), (250, 12379), (260, 12592),

Gene: ChiliPepper_15 Start: 10180, Stop: 12810, Start Num: 7

Candidate Starts for ChiliPepper_15:

(Start: 7 @10180 has 64 MA's), (10, 10213), (13, 10240), (17, 10333), (19, 10345), (24, 10369), (29, 10402), (34, 10474), (43, 10627), (48, 10666), (65, 10837), (74, 10915), (77, 10927), (91, 11029), (99, 11074), (109, 11134), (116, 11197), (126, 11251), (145, 11311), (147, 11323), (152, 11353), (153, 11356), (155, 11377), (162, 11443), (173, 11548), (174, 11554), (178, 11632), (184, 11773), (186, 11797), (188, 11821), (191, 11908), (215, 12145), (218, 12181), (219, 12190), (226, 12223), (227, 12265), (228, 12280), (231, 12304), (240, 12412), (248, 12565), (249, 12580), (251, 12595),

Gene: CliffHanger_16 Start: 9935, Stop: 12646, Start Num: 7

Candidate Starts for CliffHanger_16:

(Start: 7 @9935 has 64 MA's), (10, 9968), (20, 10109), (21, 10115), (27, 10151), (29, 10163), (49, 10415), (50, 10421), (60, 10514), (64, 10565), (70, 10631), (98, 10793), (104, 10826), (111, 10862), (122, 10928), (124, 10937), (131, 11000), (137, 11033), (144, 11153), (150, 11189), (154, 11219), (164, 11321), (168, 11363), (170, 11375), (175, 11396), (176, 11408), (181, 11576), (191, 11738), (194, 11780), (196, 11798), (197, 11804), (200, 11834), (209, 11912), (211, 11945), (216, 11999), (217, 12005), (227, 12092), (228, 12107), (229, 12116), (233, 12146), (240, 12248), (242, 12275), (244, 12332), (246, 12374), (248, 12401), (257, 12548),

Gene: CroZenni_16 Start: 10285, Stop: 13044, Start Num: 7

Candidate Starts for CroZenni_16:

(Start: 7 @10285 has 64 MA's), (17, 10438), (18, 10444), (25, 10483), (38, 10669), (46, 10753), (48, 10771), (59, 10870), (65, 10942), (72, 11008), (74, 11020), (76, 11029), (79, 11044), (82, 11077), (84, 11086), (86, 11104), (96, 11164), (97, 11170), (99, 11179), (100, 11185), (103, 11209), (105, 11221), (116, 11302), (132, 11416), (136, 11428), (142, 11524), (147, 11563), (159, 11659), (162, 11683), (166, 11737), (169, 11773), (171, 11782), (174, 11794), (178, 11872), (181, 11986), (184, 12013), (190, 12097), (198, 12208), (199, 12217), (205, 12283), (211, 12349), (225, 12445), (227, 12490), (228, 12505), (233, 12544), (237, 12613), (238, 12631), (239, 12634), (240, 12646), (242, 12673), (247, 12787), (248, 12799), (251, 12829), (256, 12937),

Gene: CupcakePrincess_16 Start: 10399, Stop: 13161, Start Num: 7

Candidate Starts for CupcakePrincess_16:

(Start: 7 @10399 has 64 MA's), (17, 10552), (18, 10558), (24, 10588), (25, 10597), (29, 10621), (34, 10693), (48, 10885), (59, 10984), (65, 11056), (74, 11134), (76, 11143), (77, 11146), (82, 11191), (84, 11200), (97, 11284), (99, 11293), (100, 11299), (102, 11311), (103, 11323), (105, 11335), (116, 11416), (130, 11503), (132, 11530), (135, 11539), (142, 11638), (147, 11677), (159, 11773), (162, 11797), (166, 11851), (174, 11908), (178, 11986), (181, 12100), (184, 12127), (191, 12262), (196, 12322), (205, 12400), (208, 12421), (212, 12469), (225, 12562), (227, 12607), (228, 12622), (233, 12661), (237, 12730), (238, 12748), (239, 12751), (240, 12763), (242, 12790), (248, 12916), (249, 12931), (251, 12946),

Gene: DickRichards_16 Start: 10780, Stop: 13539, Start Num: 7

Candidate Starts for DickRichards_16:

(Start: 7 @10780 has 64 MA's), (17, 10933), (18, 10939), (25, 10978), (38, 11164), (46, 11248), (48, 11266), (59, 11365), (65, 11437), (72, 11503), (74, 11515), (76, 11524), (79, 11539), (82, 11572), (84, 11581), (86, 11599), (96, 11659), (97, 11665), (99, 11674), (100, 11680), (103, 11704), (105, 11716), (110, 11746), (116, 11797), (132, 11911), (136, 11923), (142, 12019), (147, 12058), (159, 12154), (166, 12232), (169, 12268), (171, 12277), (174, 12289), (178, 12367), (181, 12481), (184, 12508), (190, 12592), (195, 12685), (198, 12703), (199, 12712), (205, 12778), (211, 12844), (225, 12940), (227, 12985), (228, 13000), (233, 13039), (237, 13108), (238, 13126), (239, 13129), (240, 13141), (242, 13168), (247, 13282), (248, 13294), (251, 13324), (256, 13432),

Gene: Didgeridoo_17 Start: 10509, Stop: 13271, Start Num: 7

Candidate Starts for Didgeridoo_17:

(Start: 7 @10509 has 64 MA's), (17, 10662), (19, 10674), (29, 10731), (34, 10803), (43, 10956), (48, 10995), (65, 11166), (74, 11244), (77, 11256), (78, 11259), (82, 11301), (95, 11382), (99, 11403), (109, 11463), (111, 11481), (116, 11526), (126, 11580), (132, 11640), (136, 11652), (139, 11679), (147, 11787), (158, 11871), (162, 11907), (169, 11997), (171, 12006), (174, 12018), (178, 12096), (181, 12210), (184, 12237), (189, 12312), (191, 12372), (196, 12432), (205, 12510), (208, 12531), (212, 12579), (225, 12672), (227, 12717), (228, 12732), (230, 12744), (233, 12771), (237, 12840), (239, 12861), (240, 12873), (242, 12900), (248, 13026), (249, 13041), (251, 13056), (258, 13182), (260, 13257),

Gene: DirtyBubble_16 Start: 10465, Stop: 13095, Start Num: 7

Candidate Starts for DirtyBubble_16:

(Start: 7 @10465 has 64 MA's), (13, 10525), (17, 10618), (18, 10624), (19, 10630), (25, 10663), (34, 10759), (43, 10912), (48, 10951), (55, 11011), (56, 11038), (65, 11122), (74, 11200), (78, 11215), (80, 11236), (81, 11242), (89, 11296), (95, 11338), (99, 11359), (109, 11419), (111, 11437), (116, 11482), (121, 11500), (145, 11596), (146, 11605), (147, 11608), (153, 11641), (155, 11662), (162, 11728), (181, 12031), (182, 12034), (184, 12058), (186, 12082), (191, 12193), (196, 12253), (205, 12337), (211, 12403), (213, 12415), (215, 12430), (220, 12478), (223, 12487), (224, 12490), (227, 12550), (228, 12565), (236, 12649), (240, 12697), (248, 12850), (249, 12865), (251, 12880), (255, 12967), (259, 13009),

Gene: Dismas_15 Start: 10180, Stop: 12810, Start Num: 7

Candidate Starts for Dismas_15:

(Start: 7 @10180 has 64 MA's), (10, 10213), (13, 10240), (17, 10333), (19, 10345), (24, 10369), (29, 10402), (34, 10474), (43, 10627), (48, 10666), (65, 10837), (74, 10915), (77, 10927), (91, 11029), (99, 11074), (109, 11134), (116, 11197), (126, 11251), (145, 11311), (147, 11323), (151, 11350), (152, 11353), (153, 11356), (155, 11377), (162, 11443), (173, 11548), (174, 11554), (178, 11632), (184, 11773), (186, 11797), (188, 11821), (191, 11908), (215, 12145), (218, 12181), (219, 12190), (226, 12223), (227, 12265), (228, 12280), (231, 12304), (240, 12412), (248, 12565), (249, 12580), (251, 12595),

Gene: Doobus_16 Start: 10637, Stop: 13396, Start Num: 7

Candidate Starts for Doobus_16:

(Start: 7 @10637 has 64 MA's), (17, 10790), (25, 10835), (35, 10976), (48, 11123), (65, 11294), (72, 11360), (74, 11372), (76, 11381), (82, 11429), (84, 11438), (96, 11516), (97, 11522), (99, 11531), (100, 11537), (103, 11561), (105, 11573), (109, 11591), (116, 11654), (132, 11768), (136, 11780), (142, 11876), (147, 11915), (164, 12074), (169, 12125), (171, 12134), (174, 12146), (178, 12224), (181, 12338), (184, 12365), (190, 12449), (195, 12542), (198, 12560), (199, 12569), (205, 12635), (211, 12701), (225, 12797), (227, 12842), (228, 12857), (233, 12896), (237, 12965), (238, 12983), (239, 12986), (240, 12998), (242, 13025), (247, 13139), (248, 13151), (251, 13181), (256, 13289),

Gene: Elva_17 Start: 10426, Stop: 13056, Start Num: 7

Candidate Starts for Elva_17:

(Start: 7 @10426 has 64 MA's), (13, 10486), (17, 10579), (19, 10591), (25, 10624), (34, 10720), (43, 10873), (48, 10912), (55, 10972), (65, 11083), (74, 11161), (76, 11170), (78, 11176), (80, 11197), (82, 11218), (89, 11257), (95, 11299), (99, 11320), (109, 11380), (116, 11443), (121, 11461), (126, 11497), (144, 11554), (147, 11569), (153, 11602), (160, 11671), (162, 11689), (167, 11758), (181, 11992), (184, 12019), (186, 12043), (191, 12154), (196, 12214), (205, 12298), (207, 12316), (211, 12364), (215, 12391), (223, 12448), (224, 12451), (227, 12511), (228, 12526), (236, 12610), (240, 12658), (248, 12811), (249, 12826), (251, 12841), (255, 12928), (259, 12970),

Gene: Eula_16 Start: 10360, Stop: 13122, Start Num: 7

Candidate Starts for Eula_16:

(Start: 7 @10360 has 64 MA's), (17, 10513), (24, 10549), (25, 10558), (35, 10699), (38, 10744), (46, 10828), (48, 10846), (65, 11017), (72, 11083), (74, 11095), (76, 11104), (82, 11152), (84, 11161), (97, 11245), (99, 11254), (100, 11260), (102, 11272), (103, 11284), (105, 11296), (116, 11377), (130, 11464), (132, 11491), (135, 11500), (142, 11599), (159, 11734), (162, 11758), (178, 11947), (181, 12061), (184, 12088), (191, 12223), (196, 12283), (205, 12361), (208, 12382), (212, 12430), (225, 12523), (227, 12568), (228, 12583), (233, 12622), (237, 12691), (238, 12709), (239, 12712), (240, 12724), (242, 12751), (248, 12877), (249, 12892), (251, 12907),

Gene: Finalfrontier_17 Start: 10873, Stop: 13635, Start Num: 7

Candidate Starts for Finalfrontier_17:

(Start: 7 @10873 has 64 MA's), (17, 11026), (18, 11032), (24, 11062), (25, 11071), (29, 11095), (34, 11167), (48, 11359), (59, 11458), (65, 11530), (74, 11608), (76, 11617), (77, 11620), (82, 11665), (84, 11674), (97, 11758), (99, 11767), (100, 11773), (102, 11785), (103, 11797), (105, 11809), (116, 11890), (130, 11977), (132, 12004), (135, 12013), (142, 12112), (147, 12151), (159, 12247), (162, 12271), (166, 12325), (174, 12382), (178, 12460), (181, 12574), (184, 12601), (189, 12676), (191, 12736), (196, 12796), (205, 12874), (208, 12895), (212, 12943), (225, 13036), (227, 13081), (228, 13096), (230, 13108), (233, 13135), (237, 13204), (239, 13225), (240, 13237), (242, 13264), (248, 13390), (249, 13405), (251, 13420), (258, 13546), (260, 13621),

Gene: FlameThrower_15 Start: 9717, Stop: 12494, Start Num: 7

Candidate Starts for FlameThrower_15:

(Start: 7 @9717 has 64 MA's), (10, 9750), (16, 9858), (29, 9936), (44, 10188), (45, 10194), (47, 10197), (60, 10338), (67, 10446), (71, 10470), (106, 10698), (113, 10746), (114, 10749), (117, 10767), (120, 10776), (123, 10797), (145, 10995), (146, 11004), (147, 11007), (156, 11070), (162, 11127), (171, 11226), (173, 11232), (174, 11238), (181, 11430), (184, 11457), (187, 11502), (191, 11592), (192, 11616), (194, 11634), (196, 11652), (202, 11706), (205, 11736), (212, 11805), (215, 11829), (223, 11886), (224, 11889), (227, 11949), (228, 11964), (239, 12084), (240, 12096), (242, 12123), (243, 12165), (248, 12249), (249, 12264), (250, 12267), (260, 12480),

Gene: Icarian_17 Start: 10347, Stop: 12977, Start Num: 7

Candidate Starts for Icarian_17:

(Start: 7 @10347 has 64 MA's), (13, 10407), (17, 10500), (19, 10512), (25, 10545), (34, 10641), (43, 10794), (48, 10833), (65, 11004), (74, 11082), (78, 11097), (80, 11118), (81, 11124), (89, 11178), (99, 11241), (109, 11301), (116, 11364), (121, 11382), (126, 11418), (145, 11478), (146, 11487), (147, 11490), (153, 11523), (155, 11544), (162, 11610), (167, 11679), (181, 11913), (182, 11916), (184, 11940), (186, 11964), (191, 12075), (196, 12135), (205, 12219), (207, 12237), (211, 12285), (214, 12309), (215, 12312), (218, 12348), (223, 12369), (224, 12372), (227, 12432), (228, 12447), (239, 12567), (240, 12579), (248, 12732), (249, 12747), (251, 12762), (255, 12849), (259, 12891),

Gene: IndyLu_16 Start: 10331, Stop: 13093, Start Num: 7

Candidate Starts for IndyLu_16:

(Start: 7 @10331 has 64 MA's), (17, 10484), (19, 10496), (29, 10553), (34, 10625), (43, 10778), (48, 10817), (65, 10988), (74, 11066), (77, 11078), (78, 11081), (82, 11123), (95, 11204), (99, 11225), (109, 11285), (111, 11303), (116, 11348), (121, 11366), (126, 11402), (132, 11462), (136, 11474), (139, 11501), (147, 11609), (158, 11693), (162, 11729), (169, 11819), (178, 11918), (181, 12032), (184, 12059), (189, 12134), (191, 12194), (196, 12254), (205, 12332), (208, 12353), (212, 12401), (225, 12494), (227, 12539), (228, 12554), (230, 12566), (233, 12593), (237, 12662), (239, 12683), (240, 12695), (242, 12722), (248, 12848), (249, 12863), (251, 12878), (258, 13004), (260, 13079),

Gene: Jabb_16 Start: 10399, Stop: 13161, Start Num: 7

Candidate Starts for Jabb_16:

(Start: 7 @10399 has 64 MA's), (17, 10552), (18, 10558), (24, 10588), (25, 10597), (29, 10621), (34, 10693), (48, 10885), (59, 10984), (65, 11056), (74, 11134), (76, 11143), (77, 11146), (82, 11191), (84, 11200), (97, 11284), (99, 11293), (100, 11299), (102, 11311), (103, 11323), (105, 11335), (116, 11416), (130, 11503), (132, 11530), (135, 11539), (142, 11638), (147, 11677), (159, 11773), (162, 11797), (166, 11851), (174, 11908), (178, 11986), (181, 12100), (184, 12127), (191, 12262), (196, 12322), (205, 12400), (208, 12421), (212, 12469), (225, 12562), (227, 12607), (228, 12622), (233, 12661), (237, 12730), (238, 12748), (239, 12751), (240, 12763), (242, 12790), (248, 12916), (249, 12931), (251, 12946),

Gene: Johnathan_16 Start: 10389, Stop: 13148, Start Num: 7

Candidate Starts for Johnathan_16:

(1, 10236), (4, 10317), (Start: 7 @10389 has 64 MA's), (17, 10542), (18, 10548), (25, 10587), (38, 10773), (48, 10875), (65, 11046), (72, 11112), (74, 11124), (76, 11133), (79, 11148), (82, 11181), (84, 11190), (86, 11208), (96, 11268), (97, 11274), (99, 11283), (100, 11289), (103, 11313), (105, 11325), (109, 11343), (116, 11406), (132, 11520), (136, 11532), (142, 11628), (147, 11667), (164, 11826), (169, 11877), (171, 11886), (174, 11898), (178, 11976), (181, 12090), (184, 12117), (190, 12201), (195, 12294), (198, 12312), (199, 12321), (205, 12387), (211, 12453), (225, 12549), (227, 12594), (228, 12609), (233, 12648), (237, 12717), (238, 12735), (239, 12738), (240, 12750), (242, 12777), (247, 12891), (248, 12903), (251, 12933), (256, 13041),

Gene: Jovita_16 Start: 10461, Stop: 13223, Start Num: 7

Candidate Starts for Jovita_16:

(Start: 7 @10461 has 64 MA's), (17, 10614), (18, 10620), (25, 10659), (29, 10683), (34, 10755), (48, 10947), (59, 11046), (65, 11118), (74, 11196), (76, 11205), (77, 11208), (82, 11253), (84, 11262), (97, 11346), (99, 11355), (100, 11361), (102, 11373), (103, 11385), (105, 11397), (116, 11478), (130, 11565), (132, 11592), (135, 11601), (142, 11700), (147, 11739), (159, 11835), (162, 11859), (166, 11913), (169, 11949), (171, 11958), (174, 11970), (181, 12162), (184, 12189), (191, 12324), (196, 12384), (205, 12462), (225, 12624), (227, 12669), (228, 12684), (233, 12723), (237, 12792), (238, 12810), (239, 12813), (240, 12825), (242, 12852), (248, 12978), (249, 12993), (251, 13008),

Gene: Kamdara_15 Start: 10179, Stop: 12809, Start Num: 7

Candidate Starts for Kamdara_15:

(Start: 7 @10179 has 64 MA's), (10, 10212), (13, 10239), (17, 10332), (19, 10344), (24, 10368), (29, 10401), (34, 10473), (43, 10626), (48, 10665), (65, 10836), (74, 10914), (77, 10926), (91, 11028), (99, 11073), (109, 11133), (116, 11196), (126, 11250), (145, 11310), (147, 11322), (152, 11352), (153, 11355), (155, 11376), (162, 11442), (173, 11547), (174, 11553), (178, 11631), (184, 11772), (186, 11796), (188, 11820), (191, 11907), (215, 12144), (218, 12180), (219, 12189), (226, 12222), (227, 12264), (228, 12279), (231, 12303), (240, 12411), (248, 12564), (249, 12579), (251, 12594),

Gene: Kate33_16 Start: 10330, Stop: 13092, Start Num: 7

Candidate Starts for Kate33_16:

(Start: 7 @10330 has 64 MA's), (17, 10483), (19, 10495), (29, 10552), (34, 10624), (43, 10777), (48, 10816), (65, 10987), (74, 11065), (77, 11077), (78, 11080), (82, 11122), (95, 11203), (99, 11224), (109,

11284), (111, 11302), (116, 11347), (121, 11365), (126, 11401), (132, 11461), (136, 11473), (139, 11500), (147, 11608), (158, 11692), (162, 11728), (169, 11818), (178, 11917), (181, 12031), (184, 12058), (189, 12133), (191, 12193), (196, 12253), (205, 12331), (208, 12352), (212, 12400), (225, 12493), (227, 12538), (228, 12553), (230, 12565), (233, 12592), (237, 12661), (239, 12682), (240, 12694), (242, 12721), (248, 12847), (249, 12862), (251, 12877), (258, 13003), (260, 13078),

Gene: Katzastrophic_15 Start: 9892, Stop: 12669, Start Num: 7

Candidate Starts for Katzastrophic_15:

(Start: 7 @9892 has 64 MA's), (10, 9925), (16, 10033), (29, 10111), (44, 10363), (45, 10369), (47, 10372), (60, 10513), (67, 10621), (71, 10645), (72, 10654), (87, 10753), (106, 10873), (113, 10921), (114, 10924), (117, 10942), (120, 10951), (123, 10972), (145, 11170), (146, 11179), (147, 11182), (156, 11245), (162, 11302), (171, 11401), (173, 11407), (174, 11413), (181, 11605), (184, 11632), (187, 11677), (191, 11767), (192, 11791), (194, 11809), (196, 11827), (202, 11881), (205, 11911), (212, 11980), (215, 12004), (223, 12061), (224, 12064), (227, 12124), (228, 12139), (239, 12259), (240, 12271), (242, 12298), (243, 12340), (248, 12424), (249, 12439), (250, 12442), (260, 12655),

Gene: Kenzers_16 Start: 10373, Stop: 13135, Start Num: 7

Candidate Starts for Kenzers_16:

(Start: 7 @10373 has 64 MA's), (17, 10526), (25, 10571), (38, 10757), (48, 10859), (65, 11030), (72, 11096), (74, 11108), (76, 11117), (82, 11165), (84, 11174), (86, 11192), (97, 11258), (99, 11267), (100, 11273), (103, 11297), (105, 11309), (116, 11390), (136, 11516), (142, 11612), (147, 11651), (162, 11771), (174, 11882), (176, 11906), (181, 12074), (184, 12101), (191, 12236), (192, 12260), (196, 12296), (204, 12365), (211, 12443), (224, 12530), (225, 12539), (227, 12590), (228, 12605), (231, 12629), (239, 12725), (240, 12737), (248, 12890), (251, 12920), (256, 13028),

Gene: Kieran_15 Start: 10183, Stop: 12813, Start Num: 7

Candidate Starts for Kieran_15:

(Start: 7 @10183 has 64 MA's), (10, 10216), (13, 10243), (17, 10336), (19, 10348), (24, 10372), (29, 10405), (34, 10477), (43, 10630), (48, 10669), (65, 10840), (74, 10918), (77, 10930), (91, 11032), (99, 11077), (109, 11137), (111, 11155), (116, 11200), (126, 11254), (145, 11314), (147, 11326), (151, 11353), (152, 11356), (153, 11359), (155, 11380), (159, 11422), (162, 11446), (173, 11551), (178, 11635), (184, 11776), (186, 11800), (188, 11824), (191, 11911), (215, 12148), (218, 12184), (219, 12193), (226, 12226), (227, 12268), (228, 12283), (231, 12307), (240, 12415), (248, 12568), (249, 12583), (251, 12598),

Gene: Lahqtemish_16 Start: 10376, Stop: 13138, Start Num: 7

Candidate Starts for Lahqtemish_16:

(Start: 7 @10376 has 64 MA's), (17, 10529), (19, 10541), (29, 10598), (34, 10670), (43, 10823), (48, 10862), (65, 11033), (74, 11111), (78, 11126), (82, 11168), (95, 11249), (99, 11270), (109, 11330), (111, 11348), (116, 11393), (119, 11402), (132, 11507), (136, 11519), (139, 11546), (147, 11654), (158, 11738), (162, 11774), (169, 11864), (171, 11873), (174, 11885), (178, 11963), (181, 12077), (184, 12104), (187, 12149), (191, 12239), (193, 12272), (196, 12299), (205, 12377), (208, 12398), (212, 12446), (225, 12539), (227, 12584), (228, 12599), (230, 12611), (233, 12638), (239, 12728), (240, 12740), (242, 12767), (248, 12893), (249, 12908), (251, 12923), (254, 12962), (259, 13052),

Gene: Lilo27_16 Start: 10336, Stop: 13095, Start Num: 7

Candidate Starts for Lilo27_16:

(Start: 7 @10336 has 64 MA's), (17, 10489), (18, 10495), (25, 10534), (29, 10558), (34, 10630), (48, 10822), (55, 10882), (59, 10921), (65, 10993), (74, 11071), (76, 11080), (77, 11083), (82, 11128), (84, 11137), (97, 11221), (99, 11230), (100, 11236), (102, 11248), (103, 11260), (105, 11272), (116, 11353), (130, 11440), (135, 11476), (142, 11575), (162, 11734), (169, 11824), (171, 11833), (174, 11845), (178, 11923), (181, 12037), (184, 12064), (190, 12148), (198, 12259), (199, 12268), (205, 12334), (224, 12487), (225, 12496), (227, 12541), (228, 12556), (233, 12595), (237, 12664), (238,

12682), (239, 12685), (240, 12697), (242, 12724), (247, 12838), (248, 12850), (251, 12880),

Gene: LimaBean_16 Start: 10388, Stop: 13147, Start Num: 7

Candidate Starts for LimaBean_16:

(Start: 7 @10388 has 64 MA's), (17, 10541), (18, 10547), (25, 10586), (38, 10772), (48, 10874), (65, 11045), (72, 11111), (74, 11123), (76, 11132), (79, 11147), (82, 11180), (84, 11189), (86, 11207), (96, 11267), (97, 11273), (99, 11282), (100, 11288), (103, 11312), (105, 11324), (109, 11342), (116, 11405), (132, 11519), (136, 11531), (139, 11558), (142, 11627), (147, 11666), (164, 11825), (169, 11876), (171, 11885), (178, 11975), (181, 12089), (184, 12116), (190, 12200), (195, 12293), (198, 12311), (199, 12320), (205, 12386), (211, 12452), (225, 12548), (227, 12593), (228, 12608), (233, 12647), (237, 12716), (238, 12734), (239, 12737), (240, 12749), (242, 12776), (247, 12890), (248, 12902), (251, 12932), (256, 13040),

Gene: Loviatar_16 Start: 10435, Stop: 13065, Start Num: 7

Candidate Starts for Loviatar_16:

(Start: 7 @10435 has 64 MA's), (13, 10495), (17, 10588), (24, 10624), (25, 10633), (34, 10729), (43, 10882), (48, 10921), (65, 11092), (68, 11128), (73, 11161), (77, 11182), (79, 11194), (81, 11212), (84, 11236), (92, 11287), (96, 11314), (97, 11320), (99, 11329), (102, 11347), (111, 11407), (116, 11452), (142, 11539), (145, 11566), (146, 11575), (156, 11641), (162, 11698), (181, 12001), (182, 12004), (184, 12028), (186, 12052), (191, 12163), (196, 12223), (205, 12307), (211, 12373), (213, 12385), (215, 12400), (220, 12448), (223, 12457), (224, 12460), (227, 12520), (228, 12535), (236, 12619), (240, 12667), (248, 12820), (249, 12835), (251, 12850), (255, 12937), (259, 12979),

Gene: Lynlen_16 Start: 10373, Stop: 13135, Start Num: 7

Candidate Starts for Lynlen_16:

(Start: 7 @10373 has 64 MA's), (17, 10526), (25, 10571), (38, 10757), (48, 10859), (65, 11030), (72, 11096), (74, 11108), (76, 11117), (82, 11165), (84, 11174), (86, 11192), (97, 11258), (99, 11267), (100, 11273), (103, 11297), (105, 11309), (116, 11390), (136, 11516), (142, 11612), (147, 11651), (162, 11771), (174, 11882), (176, 11906), (181, 12074), (184, 12101), (191, 12236), (192, 12260), (196, 12296), (204, 12365), (211, 12443), (224, 12530), (225, 12539), (227, 12590), (228, 12605), (231, 12629), (239, 12725), (240, 12737), (248, 12890), (251, 12920), (256, 13028),

Gene: Milomuff_17 Start: 10774, Stop: 13533, Start Num: 7

Candidate Starts for Milomuff_17:

(Start: 7 @10774 has 64 MA's), (17, 10927), (18, 10933), (25, 10972), (38, 11158), (48, 11260), (65, 11431), (72, 11497), (74, 11509), (76, 11518), (79, 11533), (82, 11566), (84, 11575), (86, 11593), (96, 11653), (97, 11659), (99, 11668), (100, 11674), (103, 11698), (105, 11710), (109, 11728), (116, 11791), (132, 11905), (136, 11917), (142, 12013), (147, 12052), (164, 12211), (169, 12262), (171, 12271), (174, 12283), (178, 12361), (181, 12475), (184, 12502), (190, 12586), (195, 12679), (198, 12697), (199, 12706), (205, 12772), (211, 12838), (225, 12934), (227, 12979), (228, 12994), (233, 13033), (237, 13102), (238, 13120), (239, 13123), (240, 13135), (242, 13162), (247, 13276), (248, 13288), (250, 13306), (251, 13318), (256, 13426),

Gene: MsUbiquitous_16 Start: 10399, Stop: 13161, Start Num: 7

Candidate Starts for MsUbiquitous_16:

(Start: 7 @10399 has 64 MA's), (17, 10552), (18, 10558), (24, 10588), (25, 10597), (29, 10621), (34, 10693), (48, 10885), (59, 10984), (65, 11056), (74, 11134), (76, 11143), (77, 11146), (82, 11191), (84, 11200), (97, 11284), (99, 11293), (100, 11299), (102, 11311), (103, 11323), (105, 11335), (116, 11416), (130, 11503), (132, 11530), (135, 11539), (142, 11638), (147, 11677), (159, 11773), (162, 11797), (166, 11851), (174, 11908), (178, 11986), (181, 12100), (184, 12127), (191, 12262), (196, 12322), (205, 12400), (208, 12421), (212, 12469), (225, 12562), (227, 12607), (228, 12622), (233, 12661), (237, 12730), (238, 12748), (239, 12751), (240, 12763), (242, 12790), (248, 12916), (249, 12931), (251, 12946),

Gene: Nicky22_17 Start: 10807, Stop: 13566, Start Num: 7

Candidate Starts for Nicky22_17:

(Start: 7 @10807 has 64 MA's), (17, 10960), (18, 10966), (25, 11005), (29, 11029), (34, 11101), (48, 11293), (55, 11353), (59, 11392), (65, 11464), (74, 11542), (76, 11551), (77, 11554), (82, 11599), (84, 11608), (97, 11692), (99, 11701), (100, 11707), (102, 11719), (103, 11731), (105, 11743), (116, 11824), (130, 11911), (135, 11947), (142, 12046), (162, 12205), (169, 12295), (171, 12304), (174, 12316), (178, 12394), (181, 12508), (184, 12535), (190, 12619), (195, 12712), (198, 12730), (199, 12739), (205, 12805), (224, 12958), (225, 12967), (227, 13012), (228, 13027), (233, 13066), (237, 13135), (238, 13153), (239, 13156), (240, 13168), (242, 13195), (248, 13321), (251, 13351),

Gene: Olliecat_15 Start: 10032, Stop: 13001, Start Num: 2

Candidate Starts for Olliecat_15:

(Start: 2 @10032 has 3 MA's), (5, 10107), (6, 10122), (11, 10230), (20, 10356), (22, 10368), (28, 10401), (35, 10554), (36, 10566), (37, 10584), (39, 10602), (40, 10629), (41, 10638), (42, 10650), (51, 10731), (53, 10743), (54, 10758), (58, 10806), (61, 10830), (63, 10875), (66, 10905), (68, 10935), (69, 10947), (81, 11025), (83, 11046), (90, 11085), (93, 11109), (106, 11190), (108, 11196), (115, 11259), (127, 11325), (129, 11343), (131, 11361), (134, 11382), (149, 11541), (161, 11637), (163, 11658), (180, 11847), (181, 11937), (187, 12009), (191, 12099), (192, 12123), (194, 12141), (196, 12159), (203, 12216), (205, 12240), (206, 12249), (221, 12384), (224, 12393), (227, 12453), (228, 12468), (229, 12477), (233, 12507), (234, 12546), (240, 12609), (242, 12636), (246, 12735), (248, 12762), (249, 12777), (253, 12828), (254, 12831),

Gene: PastaFagioli_16 Start: 10364, Stop: 13126, Start Num: 7

Candidate Starts for PastaFagioli_16:

(Start: 7 @10364 has 64 MA's), (17, 10517), (19, 10529), (29, 10586), (34, 10658), (43, 10811), (48, 10850), (65, 11021), (74, 11099), (77, 11111), (78, 11114), (82, 11156), (95, 11237), (99, 11258), (109, 11318), (111, 11336), (116, 11381), (119, 11390), (132, 11495), (136, 11507), (139, 11534), (147, 11642), (158, 11726), (162, 11762), (169, 11852), (174, 11873), (178, 11951), (181, 12065), (184, 12092), (187, 12137), (191, 12227), (193, 12260), (196, 12287), (205, 12365), (208, 12386), (212, 12434), (225, 12527), (227, 12572), (228, 12587), (230, 12599), (233, 12626), (239, 12716), (240, 12728), (242, 12755), (248, 12881), (249, 12896), (251, 12911), (254, 12950), (259, 13040),

Gene: Pecas_16 Start: 10360, Stop: 13122, Start Num: 7

Candidate Starts for Pecas_16:

(Start: 7 @10360 has 64 MA's), (17, 10513), (24, 10549), (25, 10558), (35, 10699), (38, 10744), (46, 10828), (48, 10846), (65, 11017), (72, 11083), (74, 11095), (76, 11104), (82, 11152), (84, 11161), (97, 11245), (99, 11254), (100, 11260), (102, 11272), (103, 11284), (105, 11296), (116, 11377), (130, 11464), (132, 11491), (135, 11500), (142, 11599), (159, 11734), (162, 11758), (178, 11947), (181, 12061), (184, 12088), (191, 12223), (196, 12283), (205, 12361), (208, 12382), (212, 12430), (225, 12523), (227, 12568), (228, 12583), (233, 12622), (237, 12691), (238, 12709), (239, 12712), (240, 12724), (242, 12751), (248, 12877), (249, 12892), (251, 12907),

Gene: PhigPhack_17 Start: 10362, Stop: 13121, Start Num: 7

Candidate Starts for PhigPhack_17:

(Start: 7 @10362 has 64 MA's), (17, 10515), (18, 10521), (25, 10560), (38, 10746), (46, 10830), (48, 10848), (59, 10947), (65, 11019), (72, 11085), (74, 11097), (76, 11106), (79, 11121), (82, 11154), (84, 11163), (86, 11181), (96, 11241), (97, 11247), (99, 11256), (100, 11262), (103, 11286), (105, 11298), (110, 11328), (116, 11379), (132, 11493), (136, 11505), (142, 11601), (147, 11640), (159, 11736), (162, 11760), (166, 11814), (169, 11850), (171, 11859), (174, 11871), (178, 11949), (181, 12063), (184, 12090), (190, 12174), (195, 12267), (198, 12285), (199, 12294), (205, 12360), (211, 12426), (225, 12522), (227, 12567), (228, 12582), (233, 12621), (237, 12690), (238, 12708), (239, 12711), (240, 12723), (242, 12750), (247, 12864), (248, 12876), (251, 12906), (256, 13014),

Gene: Phisb_16 Start: 10373, Stop: 13135, Start Num: 7

Candidate Starts for Phisb_16:

(Start: 7 @10373 has 64 MA's), (17, 10526), (25, 10571), (38, 10757), (48, 10859), (65, 11030), (72, 11096), (74, 11108), (76, 11117), (82, 11165), (84, 11174), (86, 11192), (97, 11258), (99, 11267), (100, 11273), (103, 11297), (105, 11309), (116, 11390), (130, 11477), (132, 11504), (135, 11513), (142, 11612), (162, 11771), (166, 11825), (174, 11882), (178, 11960), (181, 12074), (184, 12101), (187, 12146), (191, 12236), (193, 12269), (196, 12296), (205, 12374), (208, 12395), (212, 12443), (225, 12536), (227, 12581), (228, 12596), (233, 12635), (237, 12704), (238, 12722), (239, 12725), (240, 12737), (242, 12764), (248, 12890), (249, 12905), (251, 12920),

Gene: PondAmelia_20 Start: 10487, Stop: 13117, Start Num: 7

Candidate Starts for PondAmelia_20:

(Start: 7 @10487 has 64 MA's), (13, 10547), (17, 10640), (19, 10652), (25, 10685), (34, 10781), (43, 10934), (48, 10973), (65, 11144), (74, 11222), (78, 11237), (80, 11258), (82, 11279), (89, 11318), (95, 11360), (99, 11381), (109, 11441), (111, 11459), (115, 11501), (116, 11504), (121, 11522), (128, 11579), (145, 11618), (146, 11627), (147, 11630), (153, 11663), (155, 11684), (181, 12053), (182, 12056), (184, 12080), (186, 12104), (191, 12215), (196, 12275), (205, 12359), (211, 12425), (215, 12452), (220, 12500), (223, 12509), (224, 12512), (227, 12572), (228, 12587), (236, 12671), (240, 12719), (248, 12872), (249, 12887), (251, 12902), (255, 12989), (259, 13031),

Gene: QMacho_17 Start: 10843, Stop: 13605, Start Num: 7

Candidate Starts for QMacho_17:

(Start: 7 @10843 has 64 MA's), (17, 10996), (24, 11032), (25, 11041), (35, 11182), (38, 11227), (46, 11311), (48, 11329), (65, 11500), (72, 11566), (74, 11578), (76, 11587), (82, 11635), (84, 11644), (97, 11728), (99, 11737), (100, 11743), (102, 11755), (103, 11767), (105, 11779), (116, 11860), (130, 11947), (132, 11974), (135, 11983), (142, 12082), (159, 12217), (162, 12241), (178, 12430), (181, 12544), (184, 12571), (191, 12706), (196, 12766), (205, 12844), (208, 12865), (212, 12913), (225, 13006), (227, 13051), (228, 13066), (233, 13105), (237, 13174), (238, 13192), (239, 13195), (240, 13207), (242, 13234), (248, 13360), (249, 13375), (251, 13390),

Gene: Quenya_16 Start: 9890, Stop: 12667, Start Num: 7

Candidate Starts for Quenya_16:

(Start: 7 @9890 has 64 MA's), (10, 9923), (16, 10031), (29, 10109), (44, 10361), (45, 10367), (47, 10370), (57, 10490), (60, 10511), (67, 10619), (71, 10643), (72, 10652), (106, 10871), (114, 10922), (117, 10940), (120, 10949), (123, 10970), (125, 10982), (145, 11168), (156, 11243), (162, 11300), (169, 11390), (171, 11399), (173, 11405), (174, 11411), (181, 11603), (184, 11630), (186, 11654), (188, 11678), (191, 11765), (194, 11807), (196, 11825), (202, 11879), (205, 11909), (212, 11978), (215, 12002), (223, 12059), (224, 12062), (227, 12122), (228, 12137), (230, 12149), (239, 12257), (240, 12269), (242, 12296), (243, 12338), (245, 12386), (248, 12422), (249, 12437), (250, 12440), (252, 12467),

Gene: Rona_15 Start: 10180, Stop: 12810, Start Num: 7

Candidate Starts for Rona_15:

(Start: 7 @10180 has 64 MA's), (10, 10213), (13, 10240), (17, 10333), (19, 10345), (24, 10369), (29, 10402), (34, 10474), (43, 10627), (48, 10666), (65, 10837), (74, 10915), (77, 10927), (91, 11029), (99, 11074), (109, 11134), (116, 11197), (126, 11251), (145, 11311), (147, 11323), (151, 11350), (152, 11353), (153, 11356), (155, 11377), (162, 11443), (173, 11548), (174, 11554), (178, 11632), (184, 11773), (186, 11797), (188, 11821), (191, 11908), (215, 12145), (218, 12181), (219, 12190), (226, 12223), (227, 12265), (228, 12280), (231, 12304), (240, 12412), (248, 12565), (249, 12580), (251, 12595),

Gene: SanaSana_17 Start: 10377, Stop: 13007, Start Num: 7

Candidate Starts for SanaSana_17:

(Start: 7 @10377 has 64 MA's), (13, 10437), (17, 10530), (18, 10536), (19, 10542), (25, 10575), (34, 10671), (43, 10824), (48, 10863), (65, 11034), (74, 11112), (78, 11127), (80, 11148), (82, 11169), (89, 11208), (95, 11250), (99, 11271), (109, 11331), (111, 11349), (116, 11394), (118, 11400), (121, 11412), (145, 11508), (146, 11517), (147, 11520), (153, 11553), (155, 11574), (162, 11640), (181, 11943), (182, 11946), (184, 11970), (186, 11994), (191, 12105), (196, 12165), (205, 12249), (211, 12315), (215, 12342), (220, 12390), (223, 12399), (224, 12402), (227, 12462), (228, 12477), (236, 12561), (240, 12609), (248, 12762), (249, 12777), (251, 12792), (255, 12879), (259, 12921),

Gene: SansAfet_16 Start: 10296, Stop: 13055, Start Num: 7

Candidate Starts for SansAfet_16:

(Start: 7 @10296 has 64 MA's), (17, 10449), (18, 10455), (25, 10494), (38, 10680), (46, 10764), (48, 10782), (59, 10881), (65, 10953), (72, 11019), (74, 11031), (76, 11040), (79, 11055), (82, 11088), (84, 11097), (86, 11115), (96, 11175), (97, 11181), (99, 11190), (100, 11196), (103, 11220), (105, 11232), (116, 11313), (132, 11427), (136, 11439), (142, 11535), (147, 11574), (159, 11670), (162, 11694), (166, 11748), (169, 11784), (171, 11793), (174, 11805), (178, 11883), (181, 11997), (184, 12024), (190, 12108), (198, 12219), (199, 12228), (205, 12294), (211, 12360), (225, 12456), (227, 12501), (228, 12516), (233, 12555), (237, 12624), (238, 12642), (239, 12645), (240, 12657), (242, 12684), (247, 12798), (248, 12810), (251, 12840), (256, 12948),

Gene: SarBear_16 Start: 10338, Stop: 13100, Start Num: 7

Candidate Starts for SarBear_16:

(Start: 7 @10338 has 64 MA's), (17, 10491), (18, 10497), (24, 10527), (25, 10536), (29, 10560), (34, 10632), (48, 10824), (59, 10923), (65, 10995), (74, 11073), (76, 11082), (77, 11085), (82, 11130), (84, 11139), (97, 11223), (99, 11232), (100, 11238), (102, 11250), (103, 11262), (105, 11274), (116, 11355), (130, 11442), (132, 11469), (135, 11478), (142, 11577), (147, 11616), (159, 11712), (162, 11736), (166, 11790), (174, 11847), (178, 11925), (181, 12039), (184, 12066), (191, 12201), (196, 12261), (205, 12339), (208, 12360), (212, 12408), (225, 12501), (227, 12546), (228, 12561), (233, 12600), (237, 12669), (238, 12687), (239, 12690), (240, 12702), (242, 12729), (248, 12855), (249, 12870), (251, 12885),

Gene: Sharkboy_15 Start: 10179, Stop: 12809, Start Num: 7

Candidate Starts for Sharkboy_15:

(Start: 7 @10179 has 64 MA's), (10, 10212), (13, 10239), (17, 10332), (19, 10344), (24, 10368), (29, 10401), (34, 10473), (43, 10626), (48, 10665), (65, 10836), (74, 10914), (77, 10926), (91, 11028), (99, 11073), (109, 11133), (116, 11196), (126, 11250), (145, 11310), (147, 11322), (152, 11352), (153, 11355), (155, 11376), (162, 11442), (173, 11547), (174, 11553), (178, 11631), (184, 11772), (186, 11796), (188, 11820), (191, 11907), (215, 12144), (218, 12180), (219, 12189), (226, 12222), (227, 12264), (228, 12279), (231, 12303), (240, 12411), (248, 12564), (249, 12579), (251, 12594),

Gene: Shayna_15 Start: 9869, Stop: 12856, Start Num: 3

Candidate Starts for Shayna_15:

(Start: 3 @9869 has 3 MA's), (8, 10031), (9, 10037), (11, 10064), (14, 10094), (36, 10400), (37, 10418), (42, 10484), (52, 10568), (66, 10739), (68, 10769), (93, 10943), (101, 10991), (108, 11030), (127, 11159), (137, 11228), (138, 11231), (140, 11276), (148, 11369), (157, 11435), (164, 11516), (173, 11573), (176, 11603), (183, 11783), (185, 11801), (191, 11933), (200, 12041), (201, 12053), (206, 12095), (209, 12119), (215, 12179), (217, 12212), (227, 12308), (228, 12323), (233, 12362), (240, 12464), (242, 12491), (246, 12590), (248, 12617), (254, 12686), (257, 12764),

Gene: SirBeanington_16 Start: 10380, Stop: 13142, Start Num: 7

Candidate Starts for SirBeanington_16:

(Start: 7 @10380 has 64 MA's), (17, 10533), (25, 10578), (38, 10764), (48, 10866), (65, 11037), (72, 11103), (74, 11115), (76, 11124), (82, 11172), (84, 11181), (86, 11199), (97, 11265), (99, 11274), (100,

11280), (103, 11304), (105, 11316), (116, 11397), (130, 11484), (132, 11511), (135, 11520), (142, 11619), (162, 11778), (166, 11832), (174, 11889), (178, 11967), (181, 12081), (184, 12108), (187, 12153), (191, 12243), (193, 12276), (196, 12303), (205, 12381), (208, 12402), (212, 12450), (225, 12543), (227, 12588), (228, 12603), (233, 12642), (237, 12711), (238, 12729), (239, 12732), (240, 12744), (242, 12771), (248, 12897), (249, 12912), (251, 12927), (256, 13035),

Gene: Slay_16 Start: 10880, Stop: 13642, Start Num: 7

Candidate Starts for Slay_16:

(Start: 7 @10880 has 64 MA's), (17, 11033), (18, 11039), (24, 11069), (25, 11078), (29, 11102), (34, 11174), (48, 11366), (59, 11465), (65, 11537), (74, 11615), (76, 11624), (77, 11627), (82, 11672), (84, 11681), (97, 11765), (99, 11774), (100, 11780), (102, 11792), (103, 11804), (105, 11816), (116, 11897), (130, 11984), (132, 12011), (135, 12020), (142, 12119), (147, 12158), (159, 12254), (162, 12278), (166, 12332), (174, 12389), (178, 12467), (181, 12581), (184, 12608), (191, 12743), (193, 12776), (196, 12803), (205, 12881), (208, 12902), (212, 12950), (225, 13043), (227, 13088), (228, 13103), (233, 13142), (237, 13211), (238, 13229), (239, 13232), (240, 13244), (242, 13271), (248, 13397), (249, 13412), (251, 13427),

Gene: Softsoap_15 Start: 10114, Stop: 12876, Start Num: 7

Candidate Starts for Softsoap_15:

(Start: 7 @10114 has 64 MA's), (17, 10267), (23, 10297), (24, 10303), (25, 10312), (38, 10498), (48, 10600), (65, 10771), (68, 10807), (73, 10840), (74, 10849), (84, 10915), (92, 10966), (97, 10999), (99, 11008), (103, 11038), (105, 11050), (116, 11131), (130, 11218), (132, 11245), (136, 11257), (142, 11353), (147, 11392), (162, 11512), (169, 11602), (171, 11611), (174, 11623), (178, 11701), (181, 11815), (184, 11842), (187, 11887), (191, 11977), (193, 12010), (196, 12037), (205, 12115), (208, 12136), (212, 12184), (225, 12277), (227, 12322), (228, 12337), (233, 12376), (237, 12445), (238, 12463), (239, 12466), (240, 12478), (242, 12505), (248, 12631), (249, 12646), (251, 12661), (256, 12769),

Gene: Solea_18 Start: 10774, Stop: 13533, Start Num: 7

Candidate Starts for Solea_18:

(Start: 7 @10774 has 64 MA's), (17, 10927), (18, 10933), (25, 10972), (38, 11158), (48, 11260), (65, 11431), (72, 11497), (74, 11509), (76, 11518), (79, 11533), (82, 11566), (84, 11575), (86, 11593), (96, 11653), (97, 11659), (99, 11668), (100, 11674), (103, 11698), (105, 11710), (109, 11728), (116, 11791), (132, 11905), (136, 11917), (142, 12013), (147, 12052), (164, 12211), (169, 12262), (171, 12271), (174, 12283), (178, 12361), (181, 12475), (184, 12502), (190, 12586), (195, 12679), (198, 12697), (199, 12706), (205, 12772), (211, 12838), (225, 12934), (227, 12979), (228, 12994), (233, 13033), (237, 13102), (238, 13120), (239, 13123), (240, 13135), (242, 13162), (247, 13276), (248, 13288), (250, 13306), (251, 13318), (256, 13426),

Gene: Squirle_15 Start: 10031, Stop: 13000, Start Num: 2

Candidate Starts for Squirle_15:

(Start: 2 @10031 has 3 MA's), (5, 10106), (6, 10121), (11, 10229), (20, 10355), (22, 10367), (28, 10400), (35, 10553), (36, 10565), (37, 10583), (39, 10601), (40, 10628), (41, 10637), (42, 10649), (51, 10730), (53, 10742), (54, 10757), (58, 10805), (61, 10829), (63, 10874), (66, 10904), (68, 10934), (69, 10946), (81, 11024), (83, 11045), (90, 11084), (93, 11108), (106, 11189), (108, 11195), (115, 11258), (127, 11324), (129, 11342), (131, 11360), (134, 11381), (149, 11540), (161, 11636), (163, 11657), (180, 11846), (181, 11936), (187, 12008), (191, 12098), (192, 12122), (194, 12140), (196, 12158), (203, 12215), (205, 12239), (206, 12248), (221, 12383), (224, 12392), (227, 12452), (228, 12467), (229, 12476), (233, 12506), (234, 12545), (240, 12608), (242, 12635), (246, 12734), (248, 12761), (249, 12776), (253, 12827), (254, 12830),

Gene: Stoor_16 Start: 10374, Stop: 13004, Start Num: 7

Candidate Starts for Stoor_16:

(Start: 7 @10374 has 64 MA's), (13, 10434), (17, 10527), (18, 10533), (19, 10539), (25, 10572), (34, 10668), (43, 10821), (48, 10860), (65, 11031), (74, 11109), (78, 11124), (80, 11145), (82, 11166), (89, 11205), (95, 11247), (99, 11268), (109, 11328), (111, 11346), (116, 11391), (118, 11397), (121, 11409), (145, 11505), (146, 11514), (147, 11517), (153, 11550), (155, 11571), (162, 11637), (181, 11940), (182, 11943), (184, 11967), (186, 11991), (191, 12102), (196, 12162), (205, 12246), (211, 12312), (215, 12339), (220, 12387), (223, 12396), (224, 12399), (227, 12459), (228, 12474), (236, 12558), (240, 12606), (248, 12759), (249, 12774), (251, 12789), (255, 12876), (259, 12918),

Gene: Stromboli_16 Start: 10505, Stop: 13135, Start Num: 7

Candidate Starts for Stromboli_16:

(Start: 7 @10505 has 64 MA's), (17, 10658), (18, 10664), (19, 10670), (25, 10703), (34, 10799), (43, 10952), (48, 10991), (55, 11051), (56, 11078), (65, 11162), (74, 11240), (78, 11255), (80, 11276), (81, 11282), (89, 11336), (95, 11378), (99, 11399), (109, 11459), (111, 11477), (116, 11522), (118, 11528), (121, 11540), (145, 11636), (146, 11645), (147, 11648), (153, 11681), (155, 11702), (162, 11768), (181, 12071), (182, 12074), (184, 12098), (186, 12122), (191, 12233), (196, 12293), (205, 12377), (211, 12443), (213, 12455), (215, 12470), (220, 12518), (223, 12527), (224, 12530), (227, 12590), (228, 12605), (236, 12689), (240, 12737), (248, 12890), (249, 12905), (251, 12920), (255, 13007), (259, 13049),

Gene: SunnyD_15 Start: 9869, Stop: 12856, Start Num: 3

Candidate Starts for SunnyD_15:

(Start: 3 @9869 has 3 MA's), (8, 10031), (9, 10037), (11, 10064), (14, 10094), (36, 10400), (37, 10418), (42, 10484), (52, 10568), (66, 10739), (68, 10769), (93, 10943), (101, 10991), (108, 11030), (127, 11159), (137, 11228), (138, 11231), (140, 11276), (148, 11369), (157, 11435), (164, 11516), (173, 11573), (176, 11603), (183, 11783), (185, 11801), (191, 11933), (200, 12041), (201, 12053), (206, 12095), (209, 12119), (215, 12179), (217, 12212), (227, 12308), (228, 12323), (233, 12362), (240, 12464), (242, 12491), (246, 12590), (248, 12617), (254, 12686), (257, 12764),

Gene: Swervy_16 Start: 10338, Stop: 13100, Start Num: 7

Candidate Starts for Swervy_16:

(Start: 7 @10338 has 64 MA's), (17, 10491), (18, 10497), (24, 10527), (25, 10536), (29, 10560), (34, 10632), (48, 10824), (59, 10923), (65, 10995), (74, 11073), (76, 11082), (77, 11085), (82, 11130), (84, 11139), (97, 11223), (99, 11232), (100, 11238), (102, 11250), (103, 11262), (105, 11274), (116, 11355), (130, 11442), (132, 11469), (135, 11478), (142, 11577), (147, 11616), (159, 11712), (162, 11736), (166, 11790), (174, 11847), (178, 11925), (181, 12039), (184, 12066), (191, 12201), (196, 12261), (205, 12339), (208, 12360), (212, 12408), (225, 12501), (227, 12546), (228, 12561), (233, 12600), (237, 12669), (238, 12687), (239, 12690), (240, 12702), (242, 12729), (248, 12855), (249, 12870), (251, 12885),

Gene: Teagster_15 Start: 9869, Stop: 12856, Start Num: 3

Candidate Starts for Teagster_15:

(Start: 3 @9869 has 3 MA's), (8, 10031), (9, 10037), (11, 10064), (14, 10094), (15, 10133), (30, 10256), (32, 10316), (36, 10400), (37, 10418), (42, 10484), (54, 10592), (68, 10769), (93, 10943), (101, 10991), (107, 11027), (127, 11159), (129, 11177), (137, 11228), (138, 11231), (148, 11369), (157, 11435), (164, 11516), (173, 11573), (183, 11783), (185, 11801), (191, 11933), (200, 12041), (201, 12053), (206, 12095), (209, 12119), (215, 12179), (217, 12212), (227, 12308), (228, 12323), (232, 12356), (233, 12362), (240, 12464), (241, 12482), (242, 12491), (246, 12590), (248, 12617), (257, 12764),

Gene: TukTuk_16 Start: 10396, Stop: 13158, Start Num: 7

Candidate Starts for TukTuk_16:

(Start: 7 @10396 has 64 MA's), (17, 10549), (18, 10555), (24, 10585), (25, 10594), (29, 10618), (34, 10690), (48, 10882), (59, 10981), (65, 11053), (74, 11131), (76, 11140), (77, 11143), (82, 11188), (84, 11197), (97, 11281), (99, 11290), (100, 11296), (102, 11308), (103, 11320), (105, 11332), (116,

11413), (130, 11500), (132, 11527), (135, 11536), (142, 11635), (147, 11674), (159, 11770), (162, 11794), (166, 11848), (174, 11905), (178, 11983), (181, 12097), (184, 12124), (191, 12259), (196, 12319), (205, 12397), (225, 12559), (227, 12604), (228, 12619), (233, 12658), (237, 12727), (238, 12745), (239, 12748), (240, 12760), (242, 12787), (248, 12913), (251, 12943),

Gene: WalkingDead_16 Start: 10494, Stop: 13124, Start Num: 7

Candidate Starts for WalkingDead_16:

(Start: 7 @10494 has 64 MA's), (13, 10554), (17, 10647), (24, 10683), (25, 10692), (34, 10788), (43, 10941), (48, 10980), (65, 11151), (68, 11187), (73, 11220), (77, 11241), (79, 11253), (81, 11271), (84, 11295), (92, 11346), (96, 11373), (97, 11379), (99, 11388), (102, 11406), (111, 11466), (116, 11511), (142, 11598), (145, 11625), (146, 11634), (156, 11700), (162, 11757), (172, 11859), (181, 12060), (182, 12063), (184, 12087), (186, 12111), (188, 12135), (191, 12222), (196, 12282), (205, 12366), (211, 12432), (213, 12444), (215, 12459), (220, 12507), (223, 12516), (224, 12519), (227, 12579), (228, 12594), (236, 12678), (240, 12726), (248, 12879), (249, 12894), (251, 12909), (255, 12996), (259, 13038),