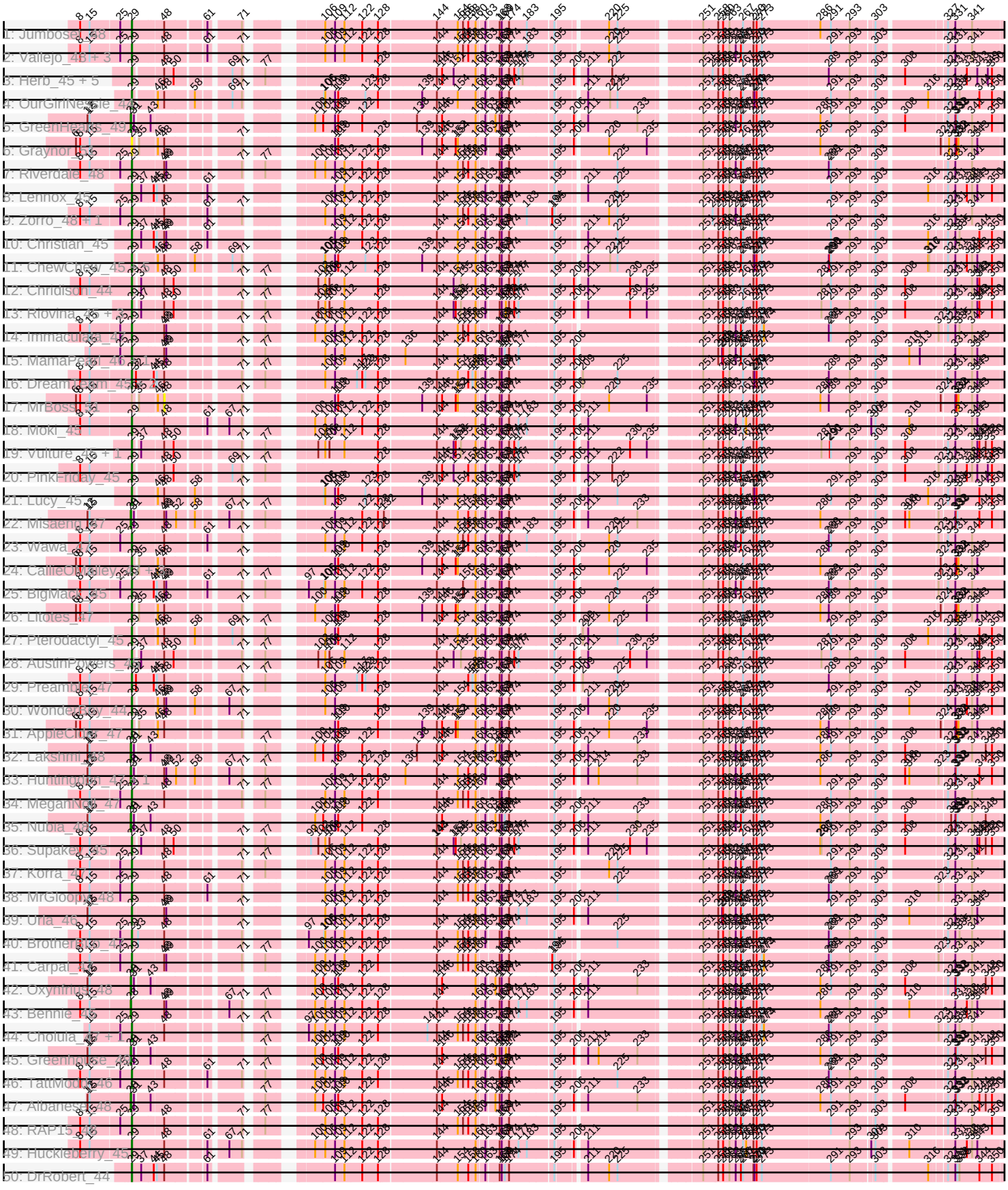
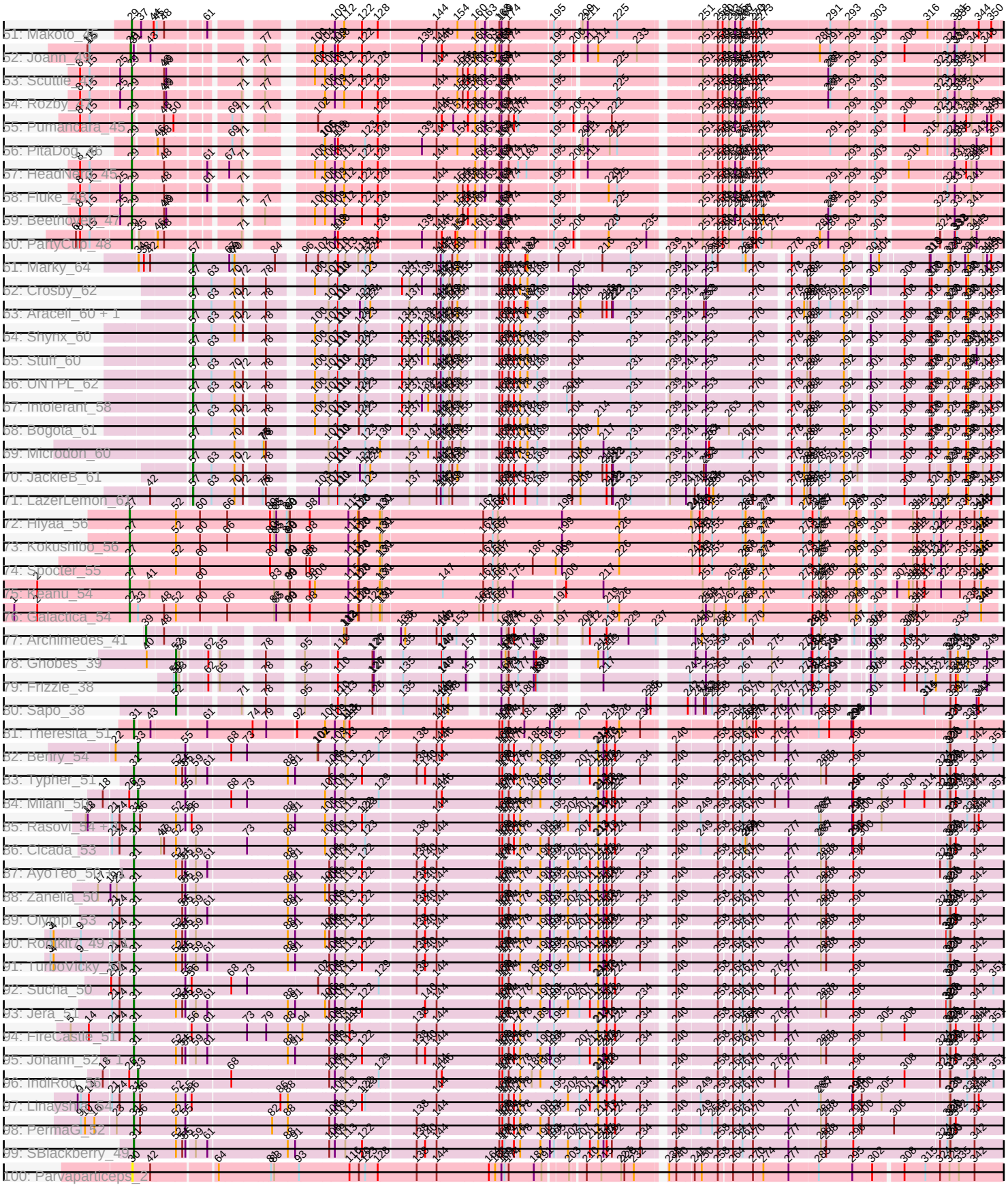
Pham 345497


1: Jumbosaur_48
2: Vallejo_48 + 3
3: Hero_45 + 5
4: OurGirlNeenie_42
5: GreenHeart5_49
6: Graynor_48
7: Riverdale_48
8: Lennox_45
9: Zorro_48 + 1
10: Christian_45
11: ChewChew7_45
12: Chrudson_44
13: Riovina_45 + 2
14: Immaculata_46
15: MamaPaul_46
16: Dreamtown_45 + 1
17: MrBossman
18: Moki_45
19: Vulture_48 + 1
20: PinkFriday_45
21: Lucy_45
22: Misaeng_47
23: Wawa_46
24: CallieOakley_45 + 1
25: BigMacy_45
26: Litotes_47
27: Pterodactyl_45
28: AustinPowers_45
29: Preamble_47
30: Wonder87_44
31: AppleCider_47
32: Lakshmi_46
33: Huntington_45 + 1
34: MeganNoe_47
35: Nubia_48
36: Supakev_45
37: Korra_47
38: MrGloopy_48
39: Orla_46
40: Brothers_42
41: Carpal_46
42: Oxynhum_48
43: Bennie_48
44: Cholula_47 + 1
45: Greenhouse_45
46: TattMoore_46
47: Albanese_48
48: RAP15_46
49: Huckleberry_45
50: DrRobert_44

Pham 345497



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 345497 Report

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

Pham number 345497 has 131 members, 4 are drafts.

Phages represented in each track:
- Track 1 : Jumboset_48
- Track 2 : Vallejo_48, Kalizoi_47, Savage2526_48, Glenn_48
- Track 3 : Herb_45, Temper16_45, Daiboju_45, Maria1952_44, KingBob_45, Sergei_45
- Track 4 : OurGirlNessie_44
- Track 5 : GreenHearts_49
- Track 6 : Graynor_51
- Track 7 : Riverdale_48
- Track 8 : Lennox_45
- Track 9 : Zorro_48, Dino_48
- Track 10 : Christian_45
- Track 11 : ChewChew_45, CristinaYang_45, LilStuart_45, Bodacious_45, Lasagna_44, Nancia_45
- Track 12 : Chridison_44
- Track 13 : Riovina_45, OMalley_45, Eunoia_45, Aledel_45
- Track 14 : Immaculata_47
- Track 15 : MamaPearl_46, EstebanJulior_46
- Track 16 : DreamTeam_45, Gisselle_45, Kittykat_48
- Track 17 : MrBoss_51
- Track 18 : Moki_45
- Track 19 : Vulture_45, HunterDalle_45
- Track 20 : PinkFriday_45
- Track 21 : Lucy_45
- Track 22 : Misaeng_47
- Track 23 : Wawa_47
- Track 24 : CallieOMalley_47, Wayne_47, Suppi_47, Canowicakte_47
- Track 25 : BigMack_45
- Track 26 : Litotes_47
- Track 27 : Pterodactyl_45
- Track 28 : AustinPowers_45
- Track 29 : Preamble_47
- Track 30 : WonderBoy_44
- Track 31 : AppleCider_47
- Track 32 : Lakshmi_48
- Track 33 : Huntingdon_47, RcigaStruga_47
- Track 34 : MeganNoll_47
- Track 35 : Nubia_48

- Track 36 : Supakev_45
- Track 37 : Korra_47
- Track 38 : MrGloopy_48
- Track 39 : Urla_46
- Track 40 : BrotherBLo_47
- Track 41 : Carpal_47
- Track 42 : Oxynfrius_48
- Track 43 : Bennie_45
- Track 44 : Cholula_47, Potatoes_47
- Track 45 : Greenhouse_49
- Track 46 : TattModd_46
- Track 47 : Albanese_48
- Track 48 : RAP15_48
- Track 49 : Huckleberry_45
- Track 50 : DrRobert_44
- Track 51 : Makoto_45
- Track 52 : Joann_49
- Track 53 : Scuttle_47
- Track 54 : Rozby_47
- Track 55 : Pumancara_45
- Track 56 : PitaDog_46
- Track 57 : HeadNerd_45
- Track 58 : Fluke_48
- Track 59 : Beethoven_47
- Track 60 : PartyCup_48
- Track 61 : Marky_64
- Track 62 : Crosby_62
- Track 63 : Araceli_60, Henoccus_61
- Track 64 : Shynx_60
- Track 65 : Stuff_60
- Track 66 : UNTPL_62
- Track 67 : Intolerant_58
- Track 68 : Bogota_61
- Track 69 : Microdon_60
- Track 70 : JackieB_61
- Track 71 : LazerLemon_61
- Track 72 : Hiyaa_56
- Track 73 : Kokushibo_56
- Track 74 : Spocter_55
- Track 75 : Keanu_54
- Track 76 : Galactica_54
- Track 77 : Archimedes_41
- Track 78 : Ghobes_39
- Track 79 : Frizzle_38
- Track 80 : Sapo_38
- Track 81 : Theresita_51
- Track 82 : Benry_54
- Track 83 : Typher_51
- Track 84 : Milani_50
- Track 85 : Rasovi_54, Htur_54
- Track 86 : Cicada_53
- Track 87 : AyoTeo_50, Labella_51
- Track 88 : Zanella_50

• Track 89 : Olympi_53
• Track 90 : Rootkit7_49, Alove_50
• Track 91 : TurboVicky_51
• Track 92 : Sucha_50
• Track 93 : Jera_51
• Track 94 : FireCastle_51
• Track 95 : Johann_52, Goodman_52
• Track 96 : IndiRoo_56
• Track 97 : Linayshia_54
• Track 98 : PermaG_52
• Track 99 : SBlackberry_49
• Track 100 : Parvaparticeps_2

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

The start number called the most often in the published annotations is 29, it was called in 73 of the 127 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aledel_45, AppleCider_47, AustinPowers_45, Beethoven_47, BigMack_45, Bodacious_45, BrotherBLo_47, CallieOMalley_47, Canowicakte_47, Carpal_47, ChewChew_45, Cholula_47, Chridison_44, Christian_45, CristinaYang_45, Daiboju_45, Dino_48, DrRobert_44, DreamTeam_45, EstebanJulior_46, Eunoia_45, Fluke_48, Gisselle_45, Glenn_48, Graynor_51, HeadNerd_45, Herb_45, Huckleberry_45, HunterDalle_45, Immaculata_47, Jumboset_48, Kalizoi_47, KingBob_45, Kittykat_48, Korra_47, Lasagna_44, Lennox_45, LilStuart_45, Litotes_47, Lucy_45, Makoto_45, MamaPearl_46, Maria1952_44, MeganNoll_47, Moki_45, MrGloopy_48, Nancia_45, OMalley_45, OurGirlNessie_44, PartyCup_48, PinkFriday_45, PitaDog_46, Potatoes_47, Preamble_47, Pterodactyl_45, Pumancara_45, RAP15_48, Riovina_45, Riverdale_48, Rozby_47, Savage2526_48, Scuttle_47, Sergei_45, Supakev_45, Suppi_47, TattModd_46, Temper16_45, Urla_46, Vallejo_48, Vulture_45, Wawa_47, Wayne_47, WonderBoy_44, Zorro_48,

Genes that have the "Most Annotated" start but do not call it:
• MrBoss_51,

Genes that do not have the "Most Annotated" start:
• Albanese_48, Alove_50, Araceli_60, Archimedes_41, AyoTeo_50, Bennie_45, Benry_54, Bogota_61, Cicada_53, Crosby_62, FireCastle_51, Frizzle_38, Galactica_54, Ghobes_39, Goodman_52, GreenHearts_49, Greenhouse_49, Henoccus_61, Hiyaa_56, Htur_54, Huntingdon_47, IndiRoo_56, Intolerant_58, JackieB_61, Jera_51, Joann_49, Johann_52, Keanu_54, Kokushibo_56, Labella_51, Lakshmi_48, LazerLemon_61, Linayshia_54, Marky_64, Microdon_60, Milani_50, Misaeng_47, Nubia_48, Olympi_53, Oxynfrius_48, Parvaparticeps_2, PermaG_52, Rasovi_54, RcigaStruga_47, Rootkit7_49, SBlackberry_49, Sapo_38, Shynx_60, Spocter_55, Stuff_60, Sucha_50, Theresita_51, TurboVicky_51, Typher_51, UNTPL_62, Zanella_50,

Summary by start number:

Start 27:
• Found in 5 of 131 (3.8%) of genes in pham
• Manual Annotations of this start: 5 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Galactica_54 (BQ), Hiyaa_56 (BQ), Keanu_54 (BQ), Kokushibo_56 (BQ), Spocter_55 (BQ),

Start 28:
• Found in 11 of 131 (8.4%) of genes in pham
• Manual Annotations of this start: 11 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Albanese_48 (AK), Bennie_45 (AK), GreenHearts_49 (AK), Greenhouse_49 (AK), Huntingdon_47 (AK), Joann_49 (AK), Lakshmi_48 (AK), Misaeng_47 (AK), Nubia_48 (AK), Oxynfrius_48 (AK), RcigaStruga_47 (AK),

Start 29:
• Found in 75 of 131 (57.3%) of genes in pham
• Manual Annotations of this start: 73 of 127
• Called 98.7% of time when present
• Phage (with cluster) where this start called: Aledel_45 (AK), AppleCider_47 (AK), AustinPowers_45 (AK), Beethoven_47 (AK), BigMack_45 (AK), Bodacious_45 (AK), BrotherBLo_47 (AK), CallieOMalley_47 (AK), Canowicakte_47 (AK), Carpal_47 (AK), ChewChew_45 (AK), Cholula_47 (AK), Chridison_44 (AK), Christian_45 (AK), CristinaYang_45 (AK), Daiboju_45 (AK), Dino_48 (AK), DrRobert_44 (AK), DreamTeam_45 (AK), EstebanJulior_46 (AK), Eunoia_45 (AK), Fluke_48 (AK), Gisselle_45 (AK), Glenn_48 (AK), Graynor_51 (AK), HeadNerd_45 (AK), Herb_45 (AK), Huckleberry_45 (AK), HunterDalle_45 (AK), Immaculata_47 (AK), Jumboset_48 (AK), Kalizoi_47 (AK), KingBob_45 (AK), Kittykat_48 (AK), Korra_47 (AK), Lasagna_44 (AK), Lennox_45 (AK), LilStuart_45 (AK), Litotes_47 (AK), Lucy_45 (AK), Makoto_45 (AK), MamaPearl_46 (AK), Maria1952_44 (AK), MeganNoll_47 (AK), Moki_45 (AK), MrGloopy_48 (AK), Nancia_45 (AK), OMalley_45 (AK), OurGirlNessie_44 (AK), PartyCup_48 (AK), PinkFriday_45 (AK), PitaDog_46 (AK), Potatoes_47 (AK), Preamble_47 (AK), Pterodactyl_45 (AK), Pumancara_45 (AK), RAP15_48 (AK), Riovina_45 (AK), Riverdale_48 (AK), Rozby_47 (AK), Savage2526_48 (AK), Scuttle_47 (AK), Sergei_45 (AK), Supakev_45 (AK), Suppi_47 (AK), TattModd_46 (AK), Temper16_45 (AK), Urla_46 (AK), Vallejo_48 (AK), Vulture_45 (AK), Wawa_47 (AK), Wayne_47 (AK), WonderBoy_44 (AK), Zorro_48 (AK),

Start 30:
• Found in 1 of 131 (0.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Parvaparticeps_2 (UNK),

Start 31:
• Found in 30 of 131 (22.9%) of genes in pham
• Manual Annotations of this start: 19 of 127
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Alove_50 (EJ), AyoTeo_50 (EJ), Cicada_53 (EJ), FireCastle_51 (EJ), Goodman_52 (EJ), Htur_54 (EJ), Jera_51 (EJ), Johann_52 (EJ), Labella_51 (EJ), Linayshia_54 (EJ), Olympi_53 (EJ), PermaG_52

(EJ), Rasovi_54 (EJ), Rootkit7_49 (EJ), SBlackberry_49 (EJ), Sucha_50 (EJ), Theresita_51 (EA7), TurboVicky_51 (EJ), Typher_51 (EJ), Zanella_50 (EJ),

Start 33:
• Found in 5 of 131 (3.8%) of genes in pham
• Manual Annotations of this start: 3 of 127
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Benry_54 (EJ), IndiRoo_56 (EJ), Milani_50 (EJ),

Start 39:
• Found in 1 of 131 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Archimedes_41 (DA),

Start 48:
• Found in 82 of 131 (62.6%) of genes in pham
• No Manual Annotations of this start.
• Called 1.2% of time when present
• Phage (with cluster) where this start called: MrBoss_51 (AK),

Start 52:
• Found in 25 of 131 (19.1%) of genes in pham
• Manual Annotations of this start: 3 of 127
• Called 12.0% of time when present
• Phage (with cluster) where this start called: Frizzle_38 (DA), Ghobes_39 (DA), Sapo_38 (DA),

Start 57:
• Found in 12 of 131 (9.2%) of genes in pham
• Manual Annotations of this start: 12 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Araceli_60 (BH), Bogota_61 (BH), Crosby_62 (BH), Henoccus_61 (BH), Intolerant_58 (BH), JackieB_61 (BH), LazerLemon_61 (BH), Marky_64 (BH), Microdon_60 (BH), Shynx_60 (BH), Stuff_60 (BH), UNTPL_62 (BH),

Summary by clusters:

There are 7 clusters represented in this pham: EJ, AK, BH, DA, BQ, UNK, EA7,

Info for manual annotations of cluster AK:
•Start number 28 was manually annotated 11 times for cluster AK.
•Start number 29 was manually annotated 73 times for cluster AK.

Info for manual annotations of cluster BH:
•Start number 57 was manually annotated 12 times for cluster BH.

Info for manual annotations of cluster BQ:
•Start number 27 was manually annotated 5 times for cluster BQ.

Info for manual annotations of cluster DA:

•Start number 39 was manually annotated 1 time for cluster DA.
•Start number 52 was manually annotated 3 times for cluster DA.

Info for manual annotations of cluster EA7:
•Start number 31 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:
•Start number 31 was manually annotated 18 times for cluster EJ.
•Start number 33 was manually annotated 3 times for cluster EJ.

Gene Information:

Gene: Albanese_48 Start: 34394, Stop: 36502, Start Num: 28
Candidate Starts for Albanese_48:
(12, 34280), (15, 34286), (Start: 28 @34394 has 11 MA's), (Start: 31 @34403 has 19 MA's), (43, 34442), (77, 34688), (100, 34769), (104, 34790), (109, 34820), (110, 34829), (122, 34895), (144, 35081), (146, 35093), (160, 35186), (163, 35207), (166, 35225), (168, 35237), (169, 35243), (174, 35264), (195, 35381), (206, 35423), (211, 35447), (233, 35588), (251, 35723), (258, 35765), (260, 35774), (263, 35789), (265, 35804), (266, 35819), (267, 35825), (270, 35855), (272, 35864), (273, 35879), (286, 36041), (291, 36071), (293, 36125), (303, 36182), (308, 36248), (327, 36350), (331, 36371), (332, 36374), (333, 36377), (341, 36419), (344, 36440), (348, 36458), (350, 36476),

Gene: Aledel_45 Start: 33793, Stop: 35892, Start Num: 29
Candidate Starts for Aledel_45:
(Start: 29 @33793 has 73 MA's), (37, 33808), (48, 33865), (50, 33892), (71, 34045), (77, 34078), (102, 34168), (106, 34186), (108, 34198), (112, 34237), (128, 34327), (144, 34471), (151, 34516), (152, 34522), (155, 34537), (160, 34576), (163, 34597), (168, 34627), (169, 34633), (172, 34645), (174, 34654), (176, 34669), (177, 34681), (195, 34771), (206, 34813), (211, 34837), (230, 34957), (235, 35005), (251, 35113), (258, 35155), (260, 35164), (263, 35179), (267, 35215), (270, 35245), (272, 35254), (273, 35269), (287, 35434), (291, 35461), (293, 35515), (303, 35572), (308, 35638), (327, 35740), (331, 35761), (341, 35809), (343, 35824), (344, 35830), (350, 35866),

Gene: Alove_50 Start: 35390, Stop: 37687, Start Num: 31
Candidate Starts for Alove_50:
(3, 35171), (4, 35180), (9, 35258), (21, 35339), (24, 35360), (Start: 31 @35390 has 19 MA's), (Start: 52 @35507 has 3 MA's), (54, 35525), (55, 35534), (59, 35552), (88, 35801), (91, 35822), (106, 35903), (108, 35915), (109, 35927), (113, 35957), (122, 35999), (138, 36140), (140, 36164), (144, 36194), (168, 36362), (170, 36371), (171, 36377), (174, 36389), (178, 36422), (190, 36476), (193, 36503), (195, 36515), (202, 36548), (207, 36572), (212, 36602), (214, 36626), (217, 36641), (218, 36650), (222, 36665), (234, 36746), (240, 36812), (258, 36908), (264, 36935), (267, 36962), (270, 36992), (277, 37094), (287, 37181), (288, 37196), (296, 37274), (326, 37526), (327, 37529), (329, 37535), (330, 37538), (342, 37607),

Gene: AppleCider_47 Start: 33821, Stop: 35920, Start Num: 29
Candidate Starts for AppleCider_47:
(6, 33674), (8, 33686), (15, 33713), (Start: 29 @33821 has 73 MA's), (35, 33830), (46, 33875), (48, 33893), (71, 34073), (109, 34238), (110, 34247), (128, 34355), (139, 34460), (144, 34499), (146, 34511), (152, 34550), (154, 34556), (160, 34604), (163, 34625), (168, 34655), (169, 34661), (174, 34682), (195, 34799), (206, 34841), (220, 34925), (235, 35033), (251, 35141), (258, 35183), (260, 35192), (263, 35207), (267, 35243), (270, 35273), (272, 35282), (273, 35297), (286, 35459), (289,

35483), (293, 35543), (303, 35594), (324, 35750), (331, 35783), (332, 35786), (334, 35792), (341, 35831), (343, 35846),

Gene: Araceli_60 Start: 43236, Stop: 45248, Start Num: 57
Candidate Starts for Araceli_60:
(Start: 57 @43236 has 12 MA's), (63, 43287), (70, 43353), (72, 43377), (78, 43419), (107, 43563), (110, 43590), (111, 43593), (121, 43641), (123, 43656), (124, 43671), (137, 43764), (144, 43842), (145, 43851), (147, 43857), (149, 43875), (150, 43884), (154, 43899), (168, 43968), (170, 43977), (174, 43995), (176, 44010), (182, 44043), (184, 44049), (189, 44073), (204, 44154), (208, 44178), (216, 44238), (218, 44250), (222, 44265), (223, 44268), (231, 44319), (239, 44415), (241, 44457), (252, 44496), (253, 44502), (270, 44628), (278, 44709), (280, 44745), (281, 44754), (282, 44763), (285, 44787), (291, 44820), (292, 44859), (299, 44883), (308, 44982), (318, 45054), (328, 45102), (330, 45108), (338, 45153), (340, 45159), (347, 45201), (350, 45225),

Gene: Archimedes_41 Start: 35374, Stop: 37368, Start Num: 39
Candidate Starts for Archimedes_41:
(Start: 39 @35374 has 1 MA's), (48, 35416), (112, 35773), (113, 35776), (114, 35779), (133, 35893), (136, 35905), (144, 35986), (146, 35998), (147, 36001), (153, 36040), (169, 36115), (173, 36130), (174, 36136), (176, 36151), (187, 36205), (197, 36253), (209, 36283), (212, 36304), (218, 36352), (229, 36415), (237, 36487), (247, 36562), (250, 36580), (258, 36625), (261, 36637), (270, 36718), (283, 36880), (284, 36883), (287, 36907), (297, 36988), (301, 37015), (303, 37021), (308, 37087), (309, 37096), (312, 37123), (333, 37225),

Gene: AustinPowers_45 Start: 33789, Stop: 35888, Start Num: 29
Candidate Starts for AustinPowers_45:
(Start: 29 @33789 has 73 MA's), (37, 33804), (48, 33861), (50, 33888), (71, 34041), (77, 34074), (102, 34164), (106, 34182), (108, 34194), (112, 34233), (128, 34323), (144, 34467), (151, 34512), (155, 34533), (160, 34572), (163, 34593), (168, 34623), (169, 34629), (174, 34650), (176, 34665), (177, 34677), (195, 34767), (206, 34809), (211, 34833), (230, 34953), (235, 35001), (251, 35109), (258, 35151), (260, 35160), (263, 35175), (267, 35211), (270, 35241), (272, 35250), (273, 35265), (287, 35430), (291, 35457), (293, 35511), (303, 35568), (308, 35634), (327, 35736), (331, 35757), (341, 35805), (343, 35820), (344, 35826), (350, 35862),

Gene: AyoTeo_50 Start: 35129, Stop: 37426, Start Num: 31
Candidate Starts for AyoTeo_50:
(Start: 31 @35129 has 19 MA's), (Start: 52 @35246 has 3 MA's), (54, 35264), (55, 35273), (59, 35291), (61, 35324), (88, 35540), (91, 35561), (108, 35654), (109, 35666), (113, 35696), (122, 35738), (138, 35879), (140, 35903), (144, 35933), (168, 36101), (170, 36110), (171, 36116), (178, 36161), (190, 36215), (193, 36242), (195, 36254), (202, 36287), (207, 36311), (212, 36341), (214, 36365), (217, 36380), (218, 36389), (222, 36404), (234, 36485), (240, 36551), (258, 36647), (264, 36674), (267, 36701), (270, 36731), (277, 36833), (287, 36920), (288, 36935), (296, 37013), (324, 37253), (327, 37268), (329, 37274), (330, 37277), (342, 37346),

Gene: Beethoven_47 Start: 33764, Stop: 35875, Start Num: 29
Candidate Starts for Beethoven_47:
(8, 33629), (15, 33656), (25, 33737), (Start: 29 @33764 has 73 MA's), (48, 33848), (49, 33854), (71, 34028), (77, 34061), (100, 34142), (106, 34169), (109, 34193), (112, 34220), (122, 34268), (128, 34310), (144, 34454), (154, 34511), (156, 34526), (158, 34538), (160, 34559), (168, 34610), (169, 34616), (174, 34637), (195, 34754), (225, 34904), (251, 35096), (258, 35138), (260, 35147), (263, 35162), (265, 35177), (266, 35192), (267, 35198), (270, 35228), (272, 35237), (273, 35252), (274, 35258), (289, 35438), (291, 35444), (293, 35498), (303, 35555), (323, 35705), (331, 35744), (341, 35792),

Gene: Bennie_45 Start: 32578, Stop: 34689, Start Num: 28
Candidate Starts for Bennie_45:
(8, 32446), (15, 32473), (Start: 28 @32578 has 11 MA's), (48, 32662), (49, 32668), (67, 32806), (71, 32842), (77, 32875), (100, 32956), (106, 32983), (109, 33007), (112, 33034), (122, 33082), (128, 33124), (144, 33268), (160, 33373), (163, 33394), (168, 33424), (169, 33430), (174, 33451), (177, 33478), (183, 33502), (195, 33568), (206, 33610), (211, 33634), (251, 33910), (258, 33952), (260, 33961), (263, 33976), (265, 33991), (266, 34006), (267, 34012), (270, 34042), (272, 34051), (273, 34066), (286, 34228), (293, 34312), (303, 34369), (310, 34447), (331, 34558), (338, 34591), (341, 34606), (343, 34621),

Gene: Benry_54 Start: 35000, Stop: 37285, Start Num: 33
Candidate Starts for Benry_54:
(22, 34946), (Start: 33 @35000 has 3 MA's), (55, 35132), (68, 35243), (73, 35288), (101, 35474), (102, 35477), (109, 35519), (113, 35549), (129, 35642), (138, 35738), (144, 35792), (146, 35804), (168, 35960), (170, 35969), (171, 35975), (174, 35987), (176, 36002), (185, 36050), (190, 36074), (195, 36113), (213, 36221), (214, 36224), (217, 36239), (218, 36248), (224, 36272), (240, 36410), (258, 36506), (264, 36533), (267, 36560), (270, 36590), (276, 36653), (277, 36692), (296, 36872), (327, 37127), (329, 37133), (330, 37136), (342, 37205), (351, 37259),

Gene: BigMack_45 Start: 32673, Stop: 34793, Start Num: 29
Candidate Starts for BigMack_45:
(8, 32538), (15, 32565), (25, 32646), (Start: 29 @32673 has 73 MA's), (44, 32733), (45, 32739), (48, 32760), (49, 32766), (61, 32862), (71, 32940), (77, 32973), (97, 33036), (105, 33078), (106, 33081), (109, 33105), (112, 33132), (122, 33180), (128, 33222), (144, 33366), (156, 33438), (160, 33471), (163, 33492), (168, 33522), (169, 33528), (174, 33549), (195, 33666), (206, 33708), (225, 33816), (251, 34008), (258, 34050), (260, 34059), (263, 34074), (265, 34089), (266, 34104), (267, 34110), (270, 34140), (272, 34149), (273, 34164), (289, 34350), (291, 34356), (293, 34410), (303, 34467), (323, 34617), (327, 34635), (331, 34656), (341, 34704),

Gene: Bodacious_45 Start: 32645, Stop: 34750, Start Num: 29
Candidate Starts for Bodacious_45:
(Start: 29 @32645 has 73 MA's), (46, 32699), (48, 32717), (58, 32792), (69, 32870), (71, 32897), (105, 33035), (106, 33038), (109, 33062), (110, 33071), (123, 33146), (128, 33179), (139, 33284), (144, 33323), (154, 33380), (160, 33428), (163, 33449), (168, 33479), (169, 33485), (174, 33506), (195, 33623), (211, 33689), (221, 33752), (225, 33773), (251, 33965), (258, 34007), (260, 34016), (263, 34031), (266, 34061), (267, 34067), (270, 34097), (271, 34100), (272, 34106), (273, 34121), (289, 34307), (290, 34310), (291, 34313), (293, 34367), (303, 34424), (316, 34556), (317, 34559), (327, 34592), (331, 34613), (338, 34646), (341, 34661), (343, 34676), (350, 34718),

Gene: Bogota_61 Start: 43550, Stop: 45562, Start Num: 57
Candidate Starts for Bogota_61:
(Start: 57 @43550 has 12 MA's), (63, 43601), (70, 43667), (72, 43691), (78, 43733), (100, 43838), (107, 43877), (110, 43904), (111, 43907), (120, 43952), (123, 43970), (134, 44060), (137, 44078), (144, 44156), (145, 44165), (147, 44171), (149, 44189), (150, 44198), (155, 44222), (168, 44282), (170, 44291), (174, 44309), (176, 44324), (178, 44342), (184, 44363), (189, 44387), (204, 44468), (214, 44540), (231, 44633), (239, 44729), (241, 44771), (253, 44816), (263, 44876), (270, 44942), (278, 45023), (281, 45068), (282, 45077), (292, 45173), (301, 45215), (308, 45296), (318, 45368), (320, 45374), (328, 45416), (338, 45467), (340, 45473), (347, 45515), (350, 45539),

Gene: BrotherBLo_47 Start: 33795, Stop: 35906, Start Num: 29
Candidate Starts for BrotherBLo_47:
(8, 33660), (15, 33687), (25, 33768), (Start: 29 @33795 has 73 MA's), (Start: 33 @33813 has 3 MA's), (48, 33879), (71, 34059), (97, 34155), (105, 34197), (106, 34200), (109, 34224), (112, 34251), (122,

34299), (128, 34341), (144, 34485), (154, 34542), (156, 34557), (158, 34569), (160, 34590), (163, 34611), (168, 34641), (169, 34647), (174, 34668), (195, 34785), (225, 34935), (251, 35127), (258, 35169), (260, 35178), (263, 35193), (265, 35208), (266, 35223), (267, 35229), (270, 35259), (272, 35268), (273, 35283), (289, 35469), (291, 35475), (293, 35529), (303, 35586), (327, 35754), (331, 35775), (335, 35787), (341, 35823),

Gene: CallieOMalley_47 Start: 33821, Stop: 35914, Start Num: 29
Candidate Starts for CallieOMalley_47:
(6, 33674), (8, 33686), (15, 33713), (Start: 29 @33821 has 73 MA's), (35, 33830), (46, 33875), (48, 33893), (71, 34073), (109, 34238), (110, 34247), (128, 34355), (139, 34460), (144, 34499), (146, 34511), (152, 34550), (154, 34556), (160, 34604), (163, 34625), (168, 34655), (169, 34661), (174, 34682), (195, 34799), (206, 34841), (220, 34925), (235, 35033), (251, 35141), (258, 35183), (260, 35192), (263, 35207), (267, 35243), (270, 35273), (272, 35282), (273, 35297), (286, 35459), (293, 35543), (303, 35594), (324, 35750), (331, 35783), (332, 35786), (334, 35792), (341, 35831), (343, 35846),

Gene: Canowicakte_47 Start: 33856, Stop: 35955, Start Num: 29
Candidate Starts for Canowicakte_47:
(6, 33709), (8, 33721), (15, 33748), (Start: 29 @33856 has 73 MA's), (35, 33865), (46, 33910), (48, 33928), (71, 34108), (109, 34273), (110, 34282), (128, 34390), (139, 34495), (144, 34534), (146, 34546), (152, 34585), (154, 34591), (160, 34639), (163, 34660), (168, 34690), (169, 34696), (174, 34717), (195, 34834), (206, 34876), (220, 34960), (235, 35068), (251, 35176), (258, 35218), (260, 35227), (263, 35242), (267, 35278), (270, 35308), (272, 35317), (273, 35332), (286, 35494), (293, 35578), (303, 35629), (324, 35785), (331, 35818), (332, 35821), (334, 35827), (341, 35866), (343, 35881),

Gene: Carpal_47 Start: 33777, Stop: 35888, Start Num: 29
Candidate Starts for Carpal_47:
(8, 33642), (15, 33669), (25, 33750), (Start: 29 @33777 has 73 MA's), (48, 33861), (49, 33867), (71, 34041), (77, 34074), (100, 34155), (106, 34182), (109, 34206), (112, 34233), (122, 34281), (128, 34323), (144, 34467), (154, 34524), (156, 34539), (158, 34551), (160, 34572), (168, 34623), (169, 34629), (174, 34650), (194, 34761), (195, 34767), (251, 35109), (258, 35151), (260, 35160), (263, 35175), (265, 35190), (266, 35205), (267, 35211), (270, 35241), (272, 35250), (273, 35265), (274, 35271), (289, 35451), (291, 35457), (293, 35511), (303, 35568), (323, 35718), (331, 35757), (341, 35805),

Gene: ChewChew_45 Start: 32776, Stop: 34881, Start Num: 29
Candidate Starts for ChewChew_45:
(Start: 29 @32776 has 73 MA's), (46, 32830), (48, 32848), (58, 32923), (69, 33001), (71, 33028), (105, 33166), (106, 33169), (109, 33193), (110, 33202), (123, 33277), (128, 33310), (139, 33415), (144, 33454), (154, 33511), (160, 33559), (163, 33580), (168, 33610), (169, 33616), (174, 33637), (195, 33754), (211, 33820), (221, 33883), (225, 33904), (251, 34096), (258, 34138), (260, 34147), (263, 34162), (266, 34192), (267, 34198), (270, 34228), (271, 34231), (272, 34237), (273, 34252), (289, 34438), (290, 34441), (291, 34444), (293, 34498), (303, 34555), (316, 34687), (317, 34690), (327, 34723), (331, 34744), (338, 34777), (341, 34792), (343, 34807), (350, 34849),

Gene: Cholula_47 Start: 33822, Stop: 35933, Start Num: 29
Candidate Starts for Cholula_47:
(15, 33714), (25, 33795), (Start: 29 @33822 has 73 MA's), (48, 33906), (71, 34086), (77, 34119), (97, 34182), (100, 34200), (106, 34227), (109, 34251), (112, 34278), (122, 34326), (128, 34368), (141, 34488), (144, 34512), (154, 34569), (156, 34584), (158, 34596), (160, 34617), (163, 34638), (168, 34668), (169, 34674), (174, 34695), (195, 34812), (251, 35154), (258, 35196), (260, 35205), (263, 35220), (265, 35235), (266, 35250), (267, 35256), (270, 35286), (272, 35295), (273, 35310), (274,

35316), (289, 35496), (291, 35502), (293, 35556), (303, 35613), (323, 35763), (327, 35781), (331, 35802), (335, 35814), (341, 35850),

Gene: Chridison_44 Start: 33723, Stop: 35822, Start Num: 29
Candidate Starts for Chridison_44:
(8, 33585), (15, 33612), (Start: 29 @33723 has 73 MA's), (37, 33738), (48, 33795), (50, 33822), (71, 33975), (77, 34008), (102, 34098), (106, 34116), (108, 34128), (112, 34167), (128, 34257), (144, 34401), (151, 34446), (155, 34467), (160, 34506), (163, 34527), (168, 34557), (169, 34563), (174, 34584), (176, 34599), (177, 34611), (195, 34701), (206, 34743), (211, 34767), (230, 34887), (235, 34935), (251, 35043), (258, 35085), (260, 35094), (263, 35109), (267, 35145), (270, 35175), (272, 35184), (273, 35199), (287, 35364), (291, 35391), (293, 35445), (303, 35502), (308, 35568), (327, 35670), (331, 35691), (341, 35739), (343, 35754), (344, 35760), (350, 35796),

Gene: Christian_45 Start: 32634, Stop: 34748, Start Num: 29
Candidate Starts for Christian_45:
(Start: 29 @32634 has 73 MA's), (37, 32661), (44, 32694), (45, 32700), (48, 32721), (49, 32727), (61, 32823), (109, 33066), (112, 33093), (122, 33141), (128, 33183), (144, 33327), (154, 33384), (160, 33432), (163, 33453), (168, 33483), (169, 33489), (174, 33510), (195, 33627), (211, 33693), (225, 33777), (251, 33969), (258, 34011), (260, 34020), (263, 34035), (266, 34065), (267, 34071), (270, 34101), (272, 34110), (273, 34125), (291, 34317), (293, 34371), (303, 34428), (316, 34560), (327, 34596), (331, 34617), (335, 34629), (344, 34686), (350, 34722),

Gene: Cicada_53 Start: 35628, Stop: 37922, Start Num: 31
Candidate Starts for Cicada_53:
(21, 35574), (24, 35595), (Start: 31 @35628 has 19 MA's), (47, 35700), (48, 35709), (Start: 52 @35742 has 3 MA's), (59, 35787), (73, 35925), (88, 36036), (106, 36138), (109, 36162), (113, 36192), (123, 36243), (138, 36375), (144, 36429), (168, 36597), (170, 36606), (171, 36612), (174, 36624), (176, 36639), (178, 36657), (190, 36711), (192, 36735), (195, 36750), (207, 36807), (213, 36858), (214, 36861), (218, 36885), (224, 36909), (240, 37047), (249, 37098), (258, 37143), (264, 37170), (267, 37197), (268, 37206), (269, 37209), (270, 37227), (277, 37329), (285, 37410), (287, 37416), (295, 37506), (296, 37509), (300, 37533), (327, 37764), (329, 37770), (330, 37773), (332, 37788), (342, 37842),

Gene: CristinaYang_45 Start: 32772, Stop: 34877, Start Num: 29
Candidate Starts for CristinaYang_45:
(Start: 29 @32772 has 73 MA's), (46, 32826), (48, 32844), (58, 32919), (69, 32997), (71, 33024), (105, 33162), (106, 33165), (109, 33189), (110, 33198), (123, 33273), (128, 33306), (139, 33411), (144, 33450), (154, 33507), (160, 33555), (163, 33576), (168, 33606), (169, 33612), (174, 33633), (195, 33750), (211, 33816), (221, 33879), (225, 33900), (251, 34092), (258, 34134), (260, 34143), (263, 34158), (266, 34188), (267, 34194), (270, 34224), (271, 34227), (272, 34233), (273, 34248), (289, 34434), (290, 34437), (291, 34440), (293, 34494), (303, 34551), (316, 34683), (317, 34686), (327, 34719), (331, 34740), (338, 34773), (341, 34788), (343, 34803), (350, 34845),

Gene: Crosby_62 Start: 43605, Stop: 45617, Start Num: 57
Candidate Starts for Crosby_62:
(Start: 57 @43605 has 12 MA's), (63, 43656), (70, 43722), (72, 43746), (78, 43788), (100, 43893), (107, 43932), (110, 43959), (111, 43962), (123, 44025), (134, 44115), (137, 44133), (139, 44169), (144, 44211), (145, 44220), (147, 44226), (149, 44244), (150, 44253), (155, 44277), (168, 44337), (170, 44346), (174, 44364), (176, 44379), (178, 44397), (184, 44418), (189, 44442), (205, 44526), (231, 44688), (239, 44784), (241, 44826), (253, 44871), (270, 44997), (278, 45078), (281, 45123), (282, 45132), (292, 45228), (301, 45270), (308, 45351), (318, 45423), (320, 45429), (328, 45471), (338, 45522), (340, 45528), (347, 45570), (350, 45594),

Gene: Daiboju_45 Start: 33788, Stop: 35887, Start Num: 29
Candidate Starts for Daiboju_45:
(Start: 29 @33788 has 73 MA's), (48, 33860), (50, 33887), (69, 34013), (71, 34040), (77, 34073), (128, 34322), (144, 34466), (146, 34478), (151, 34511), (160, 34571), (163, 34592), (168, 34622), (169, 34628), (174, 34649), (176, 34664), (177, 34676), (179, 34688), (195, 34766), (206, 34808), (211, 34832), (222, 34901), (251, 35108), (255, 35135), (258, 35150), (260, 35159), (263, 35174), (267, 35210), (270, 35240), (272, 35249), (273, 35264), (289, 35450), (293, 35510), (303, 35567), (308, 35633), (327, 35735), (331, 35756), (338, 35789), (343, 35819), (349, 35849), (350, 35861),

Gene: Dino_48 Start: 33923, Stop: 36034, Start Num: 29
Candidate Starts for Dino_48:
(8, 33788), (15, 33815), (25, 33896), (Start: 29 @33923 has 73 MA's), (48, 34007), (61, 34109), (71, 34187), (106, 34328), (109, 34352), (112, 34379), (122, 34427), (128, 34469), (144, 34613), (154, 34670), (156, 34685), (158, 34697), (160, 34718), (163, 34739), (168, 34769), (169, 34775), (174, 34796), (183, 34847), (194, 34907), (195, 34913), (220, 35039), (225, 35063), (251, 35255), (255, 35282), (258, 35297), (260, 35306), (263, 35321), (265, 35336), (266, 35351), (267, 35357), (270, 35387), (272, 35396), (273, 35411), (291, 35603), (293, 35657), (303, 35714), (327, 35882), (331, 35903), (341, 35951),

Gene: DrRobert_44 Start: 32414, Stop: 34528, Start Num: 29
Candidate Starts for DrRobert_44:
(Start: 29 @32414 has 73 MA's), (37, 32441), (44, 32474), (45, 32480), (48, 32501), (61, 32603), (109, 32846), (112, 32873), (122, 32921), (128, 32963), (144, 33107), (154, 33164), (158, 33191), (160, 33212), (163, 33233), (168, 33263), (169, 33269), (171, 33278), (174, 33290), (195, 33407), (211, 33473), (220, 33533), (225, 33557), (251, 33749), (258, 33791), (260, 33800), (263, 33815), (265, 33830), (266, 33845), (267, 33851), (270, 33881), (271, 33884), (272, 33890), (273, 33905), (291, 34097), (293, 34151), (303, 34208), (316, 34340), (327, 34376), (331, 34397), (333, 34403), (335, 34409), (344, 34466), (350, 34502),

Gene: DreamTeam_45 Start: 32739, Stop: 34853, Start Num: 29
Candidate Starts for DreamTeam_45:
(8, 32604), (15, 32631), (Start: 29 @32739 has 73 MA's), (32, 32751), (44, 32799), (45, 32805), (48, 32826), (71, 33006), (77, 33039), (106, 33147), (109, 33171), (117, 33231), (122, 33246), (123, 33255), (128, 33288), (144, 33432), (154, 33489), (158, 33516), (159, 33528), (160, 33537), (163, 33558), (168, 33588), (169, 33594), (174, 33615), (195, 33732), (206, 33774), (209, 33783), (225, 33882), (251, 34074), (260, 34125), (263, 34140), (267, 34176), (270, 34206), (271, 34209), (272, 34215), (273, 34230), (289, 34416), (293, 34476), (303, 34533), (327, 34701), (331, 34722), (341, 34770), (343, 34785),

Gene: EstebanJulior_46 Start: 33791, Stop: 35905, Start Num: 29
Candidate Starts for EstebanJulior_46:
(15, 33680), (25, 33764), (Start: 29 @33791 has 73 MA's), (48, 33878), (49, 33884), (71, 34058), (77, 34091), (106, 34199), (109, 34223), (112, 34250), (122, 34298), (128, 34340), (136, 34397), (144, 34484), (154, 34541), (160, 34589), (163, 34610), (168, 34640), (169, 34646), (171, 34655), (174, 34667), (177, 34694), (195, 34784), (206, 34826), (251, 35126), (258, 35168), (259, 35174), (260, 35177), (263, 35192), (265, 35207), (266, 35222), (267, 35228), (270, 35258), (272, 35267), (273, 35282), (293, 35528), (303, 35585), (310, 35663), (313, 35693), (331, 35774), (341, 35822), (343, 35837),

Gene: Eunoia_45 Start: 33793, Stop: 35892, Start Num: 29
Candidate Starts for Eunoia_45:
(Start: 29 @33793 has 73 MA's), (37, 33808), (48, 33865), (50, 33892), (71, 34045), (77, 34078), (102, 34168), (106, 34186), (108, 34198), (112, 34237), (128, 34327), (144, 34471), (151, 34516), (152,

34522), (155, 34537), (160, 34576), (163, 34597), (168, 34627), (169, 34633), (172, 34645), (174, 34654), (176, 34669), (177, 34681), (195, 34771), (206, 34813), (211, 34837), (230, 34957), (235, 35005), (251, 35113), (258, 35155), (260, 35164), (263, 35179), (267, 35215), (270, 35245), (272, 35254), (273, 35269), (287, 35434), (291, 35461), (293, 35515), (303, 35572), (308, 35638), (327, 35740), (331, 35761), (341, 35809), (343, 35824), (344, 35830), (350, 35866),

Gene: FireCastle_51 Start: 36042, Stop: 38324, Start Num: 31
Candidate Starts for FireCastle_51:
(5, 35883), (14, 35934), (21, 35991), (24, 36012), (Start: 31 @36042 has 19 MA's), (56, 36177), (61, 36222), (73, 36327), (79, 36378), (88, 36438), (94, 36480), (108, 36552), (109, 36564), (113, 36594), (116, 36606), (138, 36777), (144, 36831), (168, 36999), (170, 37008), (171, 37014), (176, 37041), (178, 37059), (189, 37104), (195, 37152), (213, 37260), (214, 37263), (218, 37287), (224, 37311), (234, 37383), (240, 37449), (258, 37545), (264, 37572), (267, 37599), (269, 37611), (270, 37629), (276, 37692), (277, 37731), (296, 37911), (305, 37992), (308, 38058), (327, 38166), (329, 38172), (330, 38175), (332, 38190), (342, 38244), (344, 38256), (351, 38298),

Gene: Fluke_48 Start: 34039, Stop: 36150, Start Num: 29
Candidate Starts for Fluke_48:
(8, 33904), (15, 33931), (25, 34012), (Start: 29 @34039 has 73 MA's), (48, 34123), (61, 34225), (71, 34303), (106, 34444), (109, 34468), (112, 34495), (122, 34543), (128, 34585), (144, 34729), (154, 34786), (156, 34801), (158, 34813), (160, 34834), (163, 34855), (168, 34885), (169, 34891), (174, 34912), (195, 35029), (220, 35155), (225, 35179), (251, 35371), (258, 35413), (260, 35422), (263, 35437), (265, 35452), (266, 35467), (267, 35473), (270, 35503), (272, 35512), (273, 35527), (291, 35719), (293, 35773), (303, 35830), (327, 35998), (331, 36019), (341, 36067),

Gene: Frizzle_38 Start: 34306, Stop: 36231, Start Num: 52
Candidate Starts for Frizzle_38:
(51, 34300), (Start: 52 @34306 has 3 MA's), (53, 34315), (62, 34369), (65, 34381), (78, 34471), (95, 34540), (110, 34621), (126, 34711), (127, 34714), (135, 34765), (146, 34864), (147, 34867), (157, 34930), (169, 34981), (173, 34996), (174, 35002), (177, 35029), (187, 35071), (188, 35077), (189, 35080), (217, 35209), (243, 35419), (253, 35458), (258, 35491), (267, 35554), (275, 35638), (279, 35728), (283, 35746), (284, 35749), (285, 35767), (290, 35797), (291, 35800), (301, 35881), (303, 35887), (308, 35953), (312, 35989), (315, 36013), (322, 36034), (330, 36073), (332, 36088), (334, 36094), (339, 36121), (349, 36178),

Gene: Galactica_54 Start: 40966, Stop: 43338, Start Num: 27
Candidate Starts for Galactica_54:
(1, 40636), (2, 40702), (Start: 27 @40966 has 5 MA's), (Start: 33 @40990 has 3 MA's), (48, 41065), (Start: 52 @41098 has 3 MA's), (60, 41167), (66, 41245), (83, 41380), (85, 41386), (89, 41422), (90, 41425), (98, 41476), (115, 41587), (118, 41614), (120, 41617), (125, 41653), (130, 41677), (131, 41683), (161, 41953), (162, 41965), (165, 41992), (167, 42007), (197, 42163), (219, 42301), (226, 42334), (251, 42568), (253, 42577), (257, 42601), (262, 42634), (267, 42682), (268, 42691), (274, 42742), (284, 42877), (287, 42901), (288, 42916), (293, 42982), (298, 43003), (303, 43027), (311, 43117), (312, 43129), (339, 43258), (345, 43291), (346, 43294),

Gene: Ghobes_39 Start: 34306, Stop: 36231, Start Num: 52
Candidate Starts for Ghobes_39:
(40, 34231), (Start: 52 @34306 has 3 MA's), (53, 34315), (62, 34369), (65, 34381), (78, 34471), (95, 34540), (110, 34621), (126, 34711), (127, 34714), (135, 34765), (146, 34864), (147, 34867), (157, 34930), (169, 34981), (172, 34993), (173, 34996), (174, 35002), (177, 35029), (187, 35071), (188, 35077), (214, 35194), (217, 35209), (219, 35221), (247, 35428), (253, 35458), (258, 35491), (267, 35554), (275, 35638), (279, 35728), (283, 35746), (284, 35749), (285, 35767), (290, 35797), (291, 35800), (301, 35881), (303, 35887), (308, 35953), (312, 35989), (327, 36064), (329, 36070), (330,

36073), (334, 36094), (339, 36121), (340, 36124), (349, 36178),

Gene: Gisselle_45 Start: 32739, Stop: 34853, Start Num: 29
Candidate Starts for Gisselle_45:
(8, 32604), (15, 32631), (Start: 29 @32739 has 73 MA's), (32, 32751), (44, 32799), (45, 32805), (48, 32826), (71, 33006), (77, 33039), (106, 33147), (109, 33171), (117, 33231), (122, 33246), (123, 33255), (128, 33288), (144, 33432), (154, 33489), (158, 33516), (159, 33528), (160, 33537), (163, 33558), (168, 33588), (169, 33594), (174, 33615), (195, 33732), (206, 33774), (209, 33783), (225, 33882), (251, 34074), (260, 34125), (263, 34140), (267, 34176), (270, 34206), (271, 34209), (272, 34215), (273, 34230), (289, 34416), (293, 34476), (303, 34533), (327, 34701), (331, 34722), (341, 34770), (343, 34785),

Gene: Glenn_48 Start: 34030, Stop: 36141, Start Num: 29
Candidate Starts for Glenn_48:
(8, 33895), (15, 33922), (25, 34003), (Start: 29 @34030 has 73 MA's), (48, 34114), (61, 34216), (71, 34294), (106, 34435), (109, 34459), (112, 34486), (122, 34534), (128, 34576), (144, 34720), (154, 34777), (156, 34792), (158, 34804), (160, 34825), (163, 34846), (168, 34876), (169, 34882), (174, 34903), (183, 34954), (195, 35020), (220, 35146), (225, 35170), (251, 35362), (258, 35404), (260, 35413), (263, 35428), (265, 35443), (266, 35458), (267, 35464), (270, 35494), (272, 35503), (273, 35518), (291, 35710), (293, 35764), (303, 35821), (327, 35989), (331, 36010), (341, 36058),

Gene: Goodman_52 Start: 35612, Stop: 37909, Start Num: 31
Candidate Starts for Goodman_52:
(Start: 31 @35612 has 19 MA's), (Start: 52 @35729 has 3 MA's), (54, 35747), (55, 35756), (59, 35774), (61, 35807), (88, 36023), (91, 36044), (108, 36137), (109, 36149), (113, 36179), (122, 36221), (138, 36362), (140, 36386), (144, 36416), (168, 36584), (170, 36593), (171, 36599), (174, 36611), (176, 36626), (178, 36644), (190, 36698), (193, 36725), (195, 36737), (207, 36794), (212, 36824), (214, 36848), (217, 36863), (218, 36872), (222, 36887), (234, 36968), (240, 37034), (258, 37130), (264, 37157), (267, 37184), (270, 37214), (277, 37316), (287, 37403), (288, 37418), (296, 37496), (324, 37736), (327, 37751), (329, 37757), (330, 37760), (332, 37775), (342, 37829),

Gene: Graynor_51 Start: 33841, Stop: 35934, Start Num: 29
Candidate Starts for Graynor_51:
(6, 33694), (8, 33706), (15, 33733), (Start: 29 @33841 has 73 MA's), (35, 33850), (46, 33895), (48, 33913), (71, 34093), (109, 34258), (110, 34267), (128, 34375), (139, 34480), (144, 34519), (146, 34531), (152, 34570), (154, 34576), (160, 34624), (163, 34645), (168, 34675), (169, 34681), (174, 34702), (195, 34819), (206, 34861), (220, 34945), (235, 35053), (251, 35161), (258, 35203), (260, 35212), (263, 35227), (267, 35263), (270, 35293), (272, 35302), (273, 35317), (286, 35479), (293, 35563), (303, 35614), (324, 35770), (328, 35785), (331, 35803), (332, 35806), (334, 35812), (341, 35851), (343, 35866),

Gene: GreenHearts_49 Start: 34687, Stop: 36795, Start Num: 28
Candidate Starts for GreenHearts_49:
(12, 34573), (15, 34579), (Start: 28 @34687 has 11 MA's), (Start: 31 @34696 has 19 MA's), (43, 34735), (100, 35062), (104, 35083), (109, 35113), (110, 35122), (122, 35188), (138, 35320), (144, 35374), (146, 35386), (160, 35479), (163, 35500), (166, 35518), (168, 35530), (169, 35536), (174, 35557), (195, 35674), (206, 35716), (211, 35740), (233, 35881), (251, 36016), (258, 36058), (260, 36067), (263, 36082), (265, 36097), (266, 36112), (267, 36118), (270, 36148), (272, 36157), (273, 36172), (286, 36334), (291, 36364), (293, 36418), (303, 36475), (308, 36541), (327, 36643), (331, 36664), (332, 36667), (333, 36670), (341, 36712), (350, 36769),

Gene: Greenhouse_49 Start: 34404, Stop: 36512, Start Num: 28
Candidate Starts for Greenhouse_49:

(12, 34290), (15, 34296), (Start: 28 @34404 has 11 MA's), (Start: 31 @34413 has 19 MA's), (43, 34452), (77, 34698), (100, 34779), (104, 34800), (109, 34830), (110, 34839), (122, 34905), (144, 35091), (146, 35103), (160, 35196), (163, 35217), (166, 35235), (168, 35247), (169, 35253), (172, 35265), (174, 35274), (195, 35391), (206, 35433), (211, 35457), (214, 35487), (233, 35598), (251, 35733), (258, 35775), (260, 35784), (263, 35799), (265, 35814), (266, 35829), (267, 35835), (270, 35865), (272, 35874), (273, 35889), (286, 36051), (291, 36081), (293, 36135), (303, 36192), (327, 36360), (331, 36381), (332, 36384), (333, 36387), (341, 36429), (348, 36468), (350, 36486),

Gene: HeadNerd_45 Start: 32580, Stop: 34688, Start Num: 29
Candidate Starts for HeadNerd_45:
(8, 32445), (15, 32472), (Start: 29 @32580 has 73 MA's), (48, 32661), (61, 32763), (67, 32805), (71, 32841), (100, 32955), (106, 32982), (109, 33006), (112, 33033), (122, 33081), (128, 33123), (144, 33267), (160, 33372), (163, 33393), (168, 33423), (169, 33429), (174, 33450), (177, 33477), (183, 33501), (195, 33567), (206, 33609), (211, 33633), (251, 33909), (258, 33951), (260, 33960), (263, 33975), (265, 33990), (266, 34005), (267, 34011), (270, 34041), (272, 34050), (273, 34065), (293, 34311), (303, 34368), (310, 34446), (331, 34557), (338, 34590), (341, 34605), (343, 34620),

Gene: Henoccus_61 Start: 43248, Stop: 45260, Start Num: 57
Candidate Starts for Henoccus_61:
(Start: 57 @43248 has 12 MA's), (63, 43299), (70, 43365), (72, 43389), (78, 43431), (107, 43575), (110, 43602), (111, 43605), (121, 43653), (123, 43668), (124, 43683), (137, 43776), (144, 43854), (145, 43863), (147, 43869), (149, 43887), (150, 43896), (154, 43911), (168, 43980), (170, 43989), (174, 44007), (176, 44022), (182, 44055), (184, 44061), (189, 44085), (204, 44166), (208, 44190), (216, 44250), (218, 44262), (222, 44277), (223, 44280), (231, 44331), (239, 44427), (241, 44469), (252, 44508), (253, 44514), (270, 44640), (278, 44721), (280, 44757), (281, 44766), (282, 44775), (285, 44799), (291, 44832), (292, 44871), (299, 44895), (308, 44994), (318, 45066), (328, 45114), (330, 45120), (338, 45165), (340, 45171), (347, 45213), (350, 45237),

Gene: Herb_45 Start: 33787, Stop: 35886, Start Num: 29
Candidate Starts for Herb_45:
(Start: 29 @33787 has 73 MA's), (48, 33859), (50, 33886), (69, 34012), (71, 34039), (77, 34072), (128, 34321), (144, 34465), (146, 34477), (151, 34510), (160, 34570), (163, 34591), (168, 34621), (169, 34627), (174, 34648), (176, 34663), (177, 34675), (179, 34687), (195, 34765), (206, 34807), (211, 34831), (222, 34900), (251, 35107), (255, 35134), (258, 35149), (260, 35158), (263, 35173), (267, 35209), (270, 35239), (272, 35248), (273, 35263), (289, 35449), (293, 35509), (303, 35566), (308, 35632), (327, 35734), (331, 35755), (338, 35788), (343, 35818), (349, 35848), (350, 35860),

Gene: Hiyaa_56 Start: 42523, Stop: 44913, Start Num: 27
Candidate Starts for Hiyaa_56:
(Start: 27 @42523 has 5 MA's), (Start: 52 @42655 has 3 MA's), (60, 42724), (66, 42802), (80, 42925), (83, 42937), (85, 42943), (87, 42973), (89, 42979), (90, 42982), (98, 43033), (115, 43144), (118, 43171), (120, 43174), (130, 43234), (131, 43240), (162, 43522), (165, 43549), (167, 43564), (199, 43747), (226, 43909), (244, 44110), (245, 44113), (248, 44134), (251, 44143), (255, 44170), (267, 44257), (268, 44266), (273, 44311), (274, 44317), (279, 44431), (284, 44452), (285, 44470), (287, 44476), (293, 44557), (298, 44578), (303, 44602), (311, 44692), (312, 44704), (321, 44749), (325, 44764), (336, 44812), (342, 44854), (345, 44866), (346, 44869),

Gene: Htur_54 Start: 36277, Stop: 38571, Start Num: 31
Candidate Starts for Htur_54:
(11, 36160), (13, 36166), (21, 36226), (24, 36247), (Start: 31 @36277 has 19 MA's), (36, 36292), (Start: 52 @36391 has 3 MA's), (55, 36418), (56, 36424), (88, 36685), (91, 36706), (106, 36787), (109, 36811), (113, 36841), (122, 36883), (123, 36892), (144, 37078), (168, 37246), (170, 37255), (171, 37261), (174, 37273), (176, 37288), (178, 37306), (195, 37399), (202, 37432), (207, 37456), (212,

37486), (213, 37507), (214, 37510), (218, 37534), (224, 37558), (234, 37630), (240, 37696), (249, 37747), (258, 37792), (264, 37819), (267, 37846), (270, 37876), (285, 38059), (287, 38065), (295, 38155), (296, 38158), (300, 38182), (305, 38239), (329, 38419), (330, 38422), (339, 38470), (342, 38491), (344, 38503),

Gene: Huckleberry_45 Start: 32564, Stop: 34672, Start Num: 29
Candidate Starts for Huckleberry_45:
(8, 32429), (15, 32456), (Start: 29 @32564 has 73 MA's), (48, 32645), (61, 32747), (67, 32789), (71, 32825), (100, 32939), (106, 32966), (109, 32990), (112, 33017), (122, 33065), (128, 33107), (144, 33251), (160, 33356), (163, 33377), (168, 33407), (169, 33413), (174, 33434), (177, 33461), (183, 33485), (195, 33551), (206, 33593), (211, 33617), (251, 33893), (258, 33935), (260, 33944), (263, 33959), (265, 33974), (267, 33995), (268, 34004), (270, 34025), (272, 34034), (273, 34049), (293, 34295), (301, 34346), (303, 34352), (310, 34430), (331, 34541), (338, 34574), (341, 34589), (343, 34604),

Gene: HunterDalle_45 Start: 33721, Stop: 35820, Start Num: 29
Candidate Starts for HunterDalle_45:
(Start: 29 @33721 has 73 MA's), (37, 33736), (48, 33793), (50, 33820), (71, 33973), (77, 34006), (102, 34096), (106, 34114), (108, 34126), (112, 34165), (128, 34255), (144, 34399), (151, 34444), (152, 34450), (155, 34465), (160, 34504), (163, 34525), (168, 34555), (169, 34561), (174, 34582), (176, 34597), (177, 34609), (195, 34699), (206, 34741), (211, 34765), (230, 34885), (235, 34933), (251, 35041), (258, 35083), (260, 35092), (263, 35107), (267, 35143), (270, 35173), (272, 35182), (273, 35197), (287, 35362), (290, 35386), (291, 35389), (293, 35443), (303, 35500), (308, 35566), (327, 35668), (331, 35689), (341, 35737), (343, 35752), (344, 35758), (348, 35776), (350, 35794),

Gene: Huntingdon_47 Start: 34218, Stop: 36323, Start Num: 28
Candidate Starts for Huntingdon_47:
(12, 34104), (15, 34110), (Start: 28 @34218 has 11 MA's), (Start: 31 @34227 has 19 MA's), (48, 34296), (49, 34302), (Start: 52 @34329 has 3 MA's), (58, 34371), (67, 34440), (71, 34476), (77, 34509), (109, 34641), (122, 34716), (128, 34758), (136, 34815), (144, 34902), (154, 34959), (158, 34986), (160, 35007), (163, 35028), (168, 35058), (169, 35064), (174, 35085), (195, 35202), (206, 35244), (211, 35268), (214, 35298), (233, 35409), (251, 35544), (258, 35586), (260, 35595), (263, 35610), (265, 35625), (266, 35640), (267, 35646), (270, 35676), (272, 35685), (273, 35700), (286, 35862), (293, 35946), (303, 36003), (308, 36069), (310, 36081), (323, 36153), (331, 36192), (332, 36195), (333, 36198), (344, 36261), (350, 36297),

Gene: Immaculata_47 Start: 33822, Stop: 35933, Start Num: 29
Candidate Starts for Immaculata_47:
(8, 33687), (15, 33714), (25, 33795), (Start: 29 @33822 has 73 MA's), (48, 33906), (49, 33912), (71, 34086), (77, 34119), (100, 34200), (106, 34227), (109, 34251), (112, 34278), (122, 34326), (128, 34368), (144, 34512), (154, 34569), (156, 34584), (158, 34596), (160, 34617), (168, 34668), (169, 34674), (174, 34695), (195, 34812), (251, 35154), (258, 35196), (260, 35205), (263, 35220), (265, 35235), (266, 35250), (267, 35256), (270, 35286), (272, 35295), (273, 35310), (274, 35316), (289, 35496), (291, 35502), (293, 35556), (303, 35613), (323, 35763), (327, 35781), (331, 35802), (335, 35814), (341, 35850),

Gene: IndiRoo_56 Start: 35406, Stop: 37691, Start Num: 33
Candidate Starts for IndiRoo_56:
(18, 35328), (26, 35388), (Start: 33 @35406 has 3 MA's), (68, 35649), (108, 35913), (109, 35925), (113, 35955), (129, 36048), (144, 36198), (146, 36210), (168, 36366), (170, 36375), (171, 36381), (174, 36393), (178, 36426), (185, 36456), (190, 36480), (195, 36519), (213, 36627), (214, 36630), (217, 36645), (218, 36654), (240, 36816), (258, 36912), (264, 36939), (267, 36966), (270, 36996), (276, 37059), (277, 37098), (296, 37278), (308, 37425), (324, 37518), (329, 37539), (330, 37542),

(339, 37590), (342, 37611), (351, 37665),

Gene: Intolerant_58 Start: 43254, Stop: 45266, Start Num: 57
Candidate Starts for Intolerant_58:
(Start: 57 @43254 has 12 MA's), (63, 43305), (70, 43371), (72, 43395), (78, 43437), (100, 43542), (107, 43581), (110, 43608), (111, 43611), (120, 43656), (123, 43674), (134, 43764), (137, 43782), (139, 43818), (142, 43836), (144, 43860), (145, 43869), (147, 43875), (149, 43893), (150, 43902), (155, 43926), (168, 43986), (170, 43995), (174, 44013), (176, 44028), (178, 44046), (189, 44091), (201, 44157), (204, 44172), (231, 44337), (239, 44433), (241, 44475), (253, 44520), (270, 44646), (278, 44727), (281, 44772), (282, 44781), (292, 44877), (301, 44919), (308, 45000), (318, 45072), (320, 45078), (328, 45120), (338, 45171), (340, 45177), (347, 45219), (350, 45243),

Gene: JackieB_61 Start: 43080, Stop: 45092, Start Num: 57
Candidate Starts for JackieB_61:
(Start: 57 @43080 has 12 MA's), (63, 43131), (70, 43197), (72, 43221), (78, 43263), (107, 43407), (110, 43434), (111, 43437), (121, 43485), (123, 43500), (124, 43515), (137, 43608), (144, 43686), (145, 43695), (147, 43701), (149, 43719), (150, 43728), (154, 43743), (168, 43812), (170, 43821), (174, 43839), (176, 43854), (182, 43887), (189, 43917), (204, 43998), (208, 44022), (216, 44082), (218, 44094), (222, 44109), (223, 44112), (231, 44163), (239, 44259), (241, 44301), (252, 44340), (253, 44346), (270, 44472), (278, 44553), (280, 44589), (281, 44598), (282, 44607), (285, 44631), (291, 44664), (292, 44703), (299, 44727), (308, 44826), (318, 44898), (328, 44946), (330, 44952), (338, 44997), (340, 45003), (347, 45045), (350, 45069),

Gene: Jera_51 Start: 34302, Stop: 36599, Start Num: 31
Candidate Starts for Jera_51:
(21, 34251), (24, 34272), (Start: 31 @34302 has 19 MA's), (Start: 52 @34419 has 3 MA's), (54, 34437), (55, 34446), (59, 34464), (61, 34497), (88, 34713), (91, 34734), (106, 34815), (108, 34827), (109, 34839), (113, 34869), (122, 34911), (140, 35076), (144, 35106), (168, 35274), (170, 35283), (171, 35289), (174, 35301), (178, 35334), (190, 35388), (193, 35415), (195, 35427), (202, 35460), (207, 35484), (212, 35514), (214, 35538), (217, 35553), (218, 35562), (222, 35577), (234, 35658), (240, 35724), (258, 35820), (264, 35847), (267, 35874), (270, 35904), (277, 36006), (287, 36093), (288, 36108), (296, 36186), (326, 36438), (327, 36441), (329, 36447), (330, 36450), (342, 36519),

Gene: Joann_49 Start: 34479, Stop: 36587, Start Num: 28
Candidate Starts for Joann_49:
(12, 34365), (15, 34371), (Start: 28 @34479 has 11 MA's), (Start: 31 @34488 has 19 MA's), (43, 34527), (77, 34773), (100, 34854), (104, 34875), (109, 34905), (110, 34914), (122, 34980), (139, 35127), (144, 35166), (146, 35178), (160, 35271), (163, 35292), (166, 35310), (168, 35322), (169, 35328), (174, 35349), (195, 35466), (206, 35508), (211, 35532), (214, 35562), (233, 35673), (251, 35808), (258, 35850), (260, 35859), (263, 35874), (265, 35889), (266, 35904), (267, 35910), (270, 35940), (272, 35949), (273, 35964), (286, 36126), (291, 36156), (293, 36210), (303, 36267), (308, 36333), (327, 36435), (331, 36456), (333, 36462), (341, 36504), (348, 36543),

Gene: Johann_52 Start: 35612, Stop: 37909, Start Num: 31
Candidate Starts for Johann_52:
(Start: 31 @35612 has 19 MA's), (Start: 52 @35729 has 3 MA's), (54, 35747), (55, 35756), (59, 35774), (61, 35807), (88, 36023), (91, 36044), (108, 36137), (109, 36149), (113, 36179), (122, 36221), (138, 36362), (140, 36386), (144, 36416), (168, 36584), (170, 36593), (171, 36599), (174, 36611), (176, 36626), (178, 36644), (190, 36698), (193, 36725), (195, 36737), (207, 36794), (212, 36824), (214, 36848), (217, 36863), (218, 36872), (222, 36887), (234, 36968), (240, 37034), (258, 37130), (264, 37157), (267, 37184), (270, 37214), (277, 37316), (287, 37403), (288, 37418), (296, 37496), (324, 37736), (327, 37751), (329, 37757), (330, 37760), (332, 37775), (342, 37829),

Gene: Jumboset_48 Start: 33935, Stop: 36046, Start Num: 29
Candidate Starts for Jumboset_48:
(8, 33800), (15, 33827), (25, 33908), (Start: 29 @33935 has 73 MA's), (48, 34019), (61, 34121), (71, 34199), (106, 34340), (109, 34364), (112, 34391), (122, 34439), (128, 34481), (144, 34625), (154, 34682), (156, 34697), (158, 34709), (160, 34730), (163, 34751), (168, 34781), (169, 34787), (174, 34808), (183, 34859), (195, 34925), (220, 35051), (225, 35075), (251, 35267), (258, 35309), (260, 35318), (263, 35333), (267, 35369), (270, 35399), (272, 35408), (273, 35423), (286, 35585), (291, 35615), (293, 35669), (303, 35726), (327, 35894), (331, 35915), (341, 35963),

Gene: Kalizoi_47 Start: 33763, Stop: 35874, Start Num: 29
Candidate Starts for Kalizoi_47:
(8, 33628), (15, 33655), (25, 33736), (Start: 29 @33763 has 73 MA's), (48, 33847), (61, 33949), (71, 34027), (106, 34168), (109, 34192), (112, 34219), (122, 34267), (128, 34309), (144, 34453), (154, 34510), (156, 34525), (158, 34537), (160, 34558), (163, 34579), (168, 34609), (169, 34615), (174, 34636), (183, 34687), (195, 34753), (220, 34879), (225, 34903), (251, 35095), (258, 35137), (260, 35146), (263, 35161), (265, 35176), (266, 35191), (267, 35197), (270, 35227), (272, 35236), (273, 35251), (291, 35443), (293, 35497), (303, 35554), (327, 35722), (331, 35743), (341, 35791),

Gene: Keanu_54 Start: 41994, Stop: 44366, Start Num: 27
Candidate Starts for Keanu_54:
(2, 41730), (Start: 27 @41994 has 5 MA's), (41, 42051), (60, 42195), (83, 42408), (89, 42450), (90, 42453), (98, 42504), (100, 42519), (115, 42615), (118, 42642), (120, 42645), (130, 42705), (131, 42711), (147, 42879), (162, 42993), (165, 43020), (167, 43035), (175, 43077), (200, 43212), (217, 43317), (251, 43596), (263, 43671), (267, 43710), (268, 43719), (274, 43770), (279, 43884), (284, 43905), (285, 43923), (287, 43929), (288, 43944), (293, 44010), (298, 44031), (303, 44055), (307, 44100), (310, 44133), (311, 44145), (312, 44157), (314, 44178), (325, 44217), (336, 44265), (342, 44307), (345, 44319), (346, 44322),

Gene: KingBob_45 Start: 33788, Stop: 35887, Start Num: 29
Candidate Starts for KingBob_45:
(Start: 29 @33788 has 73 MA's), (48, 33860), (50, 33887), (69, 34013), (71, 34040), (77, 34073), (128, 34322), (144, 34466), (146, 34478), (151, 34511), (160, 34571), (163, 34592), (168, 34622), (169, 34628), (174, 34649), (176, 34664), (177, 34676), (179, 34688), (195, 34766), (206, 34808), (211, 34832), (222, 34901), (251, 35108), (255, 35135), (258, 35150), (260, 35159), (263, 35174), (267, 35210), (270, 35240), (272, 35249), (273, 35264), (289, 35450), (293, 35510), (303, 35567), (308, 35633), (327, 35735), (331, 35756), (338, 35789), (343, 35819), (349, 35849), (350, 35861),

Gene: Kittykat_48 Start: 33034, Stop: 35148, Start Num: 29
Candidate Starts for Kittykat_48:
(8, 32899), (15, 32926), (Start: 29 @33034 has 73 MA's), (32, 33046), (44, 33094), (45, 33100), (48, 33121), (71, 33301), (77, 33334), (106, 33442), (109, 33466), (117, 33526), (122, 33541), (123, 33550), (128, 33583), (144, 33727), (154, 33784), (158, 33811), (159, 33823), (160, 33832), (163, 33853), (168, 33883), (169, 33889), (174, 33910), (195, 34027), (206, 34069), (209, 34078), (225, 34177), (251, 34369), (260, 34420), (263, 34435), (267, 34471), (270, 34501), (271, 34504), (272, 34510), (273, 34525), (289, 34711), (293, 34771), (303, 34828), (327, 34996), (331, 35017), (341, 35065), (343, 35080),

Gene: Kokushibo_56 Start: 42580, Stop: 44970, Start Num: 27
Candidate Starts for Kokushibo_56:
(Start: 27 @42580 has 5 MA's), (Start: 52 @42712 has 3 MA's), (60, 42781), (66, 42859), (80, 42982), (83, 42994), (85, 43000), (87, 43030), (89, 43036), (90, 43039), (98, 43090), (115, 43201), (118, 43228), (120, 43231), (130, 43291), (131, 43297), (162, 43579), (165, 43606), (167, 43621), (199, 43804), (226, 43966), (245, 44170), (248, 44191), (251, 44200), (255, 44227), (267, 44314), (268,

44323), (273, 44368), (274, 44374), (279, 44488), (284, 44509), (285, 44527), (287, 44533), (293, 44614), (298, 44635), (303, 44659), (311, 44749), (312, 44761), (321, 44806), (325, 44821), (336, 44869), (342, 44911), (345, 44923), (346, 44926),

Gene: Korra_47 Start: 33774, Stop: 35885, Start Num: 29
Candidate Starts for Korra_47:
(8, 33639), (15, 33666), (25, 33747), (Start: 29 @33774 has 73 MA's), (48, 33858), (71, 34038), (77, 34071), (106, 34179), (109, 34203), (112, 34230), (122, 34278), (128, 34320), (144, 34464), (154, 34521), (156, 34536), (158, 34548), (160, 34569), (163, 34590), (168, 34620), (169, 34626), (174, 34647), (195, 34764), (220, 34890), (225, 34914), (251, 35106), (258, 35148), (260, 35157), (263, 35172), (265, 35187), (266, 35202), (267, 35208), (270, 35238), (272, 35247), (273, 35262), (291, 35454), (293, 35508), (303, 35565), (327, 35733), (331, 35754), (341, 35802),

Gene: Labella_51 Start: 35125, Stop: 37422, Start Num: 31
Candidate Starts for Labella_51:
(Start: 31 @35125 has 19 MA's), (Start: 52 @35242 has 3 MA's), (54, 35260), (55, 35269), (59, 35287), (61, 35320), (88, 35536), (91, 35557), (108, 35650), (109, 35662), (113, 35692), (122, 35734), (138, 35875), (140, 35899), (144, 35929), (168, 36097), (170, 36106), (171, 36112), (178, 36157), (190, 36211), (193, 36238), (195, 36250), (202, 36283), (207, 36307), (212, 36337), (214, 36361), (217, 36376), (218, 36385), (222, 36400), (234, 36481), (240, 36547), (258, 36643), (264, 36670), (267, 36697), (270, 36727), (277, 36829), (287, 36916), (288, 36931), (296, 37009), (324, 37249), (327, 37264), (329, 37270), (330, 37273), (342, 37342),

Gene: Lakshmi_48 Start: 34368, Stop: 36476, Start Num: 28
Candidate Starts for Lakshmi_48:
(12, 34254), (15, 34260), (Start: 28 @34368 has 11 MA's), (Start: 31 @34377 has 19 MA's), (43, 34416), (77, 34662), (100, 34743), (104, 34764), (109, 34794), (110, 34803), (122, 34869), (138, 35001), (144, 35055), (146, 35067), (160, 35160), (163, 35181), (166, 35199), (168, 35211), (169, 35217), (174, 35238), (195, 35355), (206, 35397), (211, 35421), (233, 35562), (251, 35697), (258, 35739), (260, 35748), (263, 35763), (265, 35778), (266, 35793), (267, 35799), (270, 35829), (272, 35838), (273, 35853), (286, 36015), (291, 36045), (293, 36099), (303, 36156), (308, 36222), (327, 36324), (331, 36345), (332, 36348), (333, 36351), (341, 36393), (348, 36432), (350, 36450),

Gene: Lasagna_44 Start: 32411, Stop: 34510, Start Num: 29
Candidate Starts for Lasagna_44:
(Start: 29 @32411 has 73 MA's), (46, 32465), (48, 32483), (58, 32558), (69, 32636), (71, 32663), (105, 32801), (106, 32804), (109, 32828), (110, 32837), (123, 32912), (128, 32945), (139, 33050), (144, 33089), (154, 33146), (160, 33194), (163, 33215), (168, 33245), (169, 33251), (174, 33272), (195, 33389), (211, 33455), (221, 33518), (225, 33539), (251, 33731), (258, 33773), (260, 33782), (263, 33797), (266, 33827), (267, 33833), (270, 33863), (271, 33866), (272, 33872), (273, 33887), (289, 34073), (290, 34076), (291, 34079), (293, 34133), (303, 34190), (316, 34322), (317, 34325), (327, 34358), (331, 34379), (338, 34412), (341, 34427), (343, 34442), (350, 34484),

Gene: LazerLemon_61 Start: 43776, Stop: 45788, Start Num: 57
Candidate Starts for LazerLemon_61:
(42, 43671), (Start: 57 @43776 has 12 MA's), (63, 43827), (70, 43893), (72, 43917), (75, 43950), (78, 43959), (103, 44076), (107, 44103), (110, 44130), (111, 44133), (123, 44196), (137, 44304), (144, 44382), (145, 44391), (147, 44397), (149, 44415), (150, 44424), (168, 44508), (170, 44517), (174, 44535), (176, 44550), (182, 44583), (189, 44613), (204, 44694), (208, 44718), (218, 44790), (222, 44805), (223, 44808), (231, 44859), (239, 44955), (241, 44997), (246, 45015), (253, 45042), (254, 45051), (256, 45063), (267, 45138), (270, 45168), (278, 45249), (280, 45285), (281, 45294), (282, 45303), (285, 45327), (292, 45399), (308, 45522), (320, 45600), (328, 45642), (338, 45693), (340, 45699), (347, 45741), (350, 45765),

Gene: Lennox_45 Start: 32620, Stop: 34734, Start Num: 29
Candidate Starts for Lennox_45:
(Start: 29 @32620 has 73 MA's), (37, 32647), (44, 32680), (45, 32686), (48, 32707), (61, 32809), (109, 33052), (112, 33079), (122, 33127), (128, 33169), (144, 33313), (154, 33370), (160, 33418), (163, 33439), (168, 33469), (169, 33475), (174, 33496), (195, 33613), (211, 33679), (225, 33763), (251, 33955), (258, 33997), (260, 34006), (263, 34021), (266, 34051), (267, 34057), (270, 34087), (272, 34096), (273, 34111), (291, 34303), (293, 34357), (303, 34414), (316, 34546), (327, 34582), (331, 34603), (338, 34636), (341, 34651), (343, 34666), (350, 34708),

Gene: LilStuart_45 Start: 32760, Stop: 34859, Start Num: 29
Candidate Starts for LilStuart_45:
(Start: 29 @32760 has 73 MA's), (46, 32814), (48, 32832), (58, 32907), (69, 32985), (71, 33012), (105, 33150), (106, 33153), (109, 33177), (110, 33186), (123, 33261), (128, 33294), (139, 33399), (144, 33438), (154, 33495), (160, 33543), (163, 33564), (168, 33594), (169, 33600), (174, 33621), (195, 33738), (211, 33804), (221, 33867), (225, 33888), (251, 34080), (258, 34122), (260, 34131), (263, 34146), (266, 34176), (267, 34182), (270, 34212), (271, 34215), (272, 34221), (273, 34236), (289, 34422), (290, 34425), (291, 34428), (293, 34482), (303, 34539), (316, 34671), (317, 34674), (327, 34707), (331, 34728), (338, 34761), (341, 34776), (343, 34791), (350, 34833),

Gene: Linayshia_54 Start: 36244, Stop: 38538, Start Num: 31
Candidate Starts for Linayshia_54:
(7, 36106), (9, 36115), (14, 36136), (21, 36193), (24, 36214), (Start: 31 @36244 has 19 MA's), (36, 36259), (Start: 52 @36358 has 3 MA's), (55, 36385), (56, 36391), (86, 36631), (88, 36652), (109, 36778), (113, 36808), (122, 36850), (123, 36859), (144, 37045), (168, 37213), (170, 37222), (171, 37228), (174, 37240), (176, 37255), (178, 37273), (195, 37366), (202, 37399), (207, 37423), (212, 37453), (213, 37474), (214, 37477), (218, 37501), (224, 37525), (234, 37597), (240, 37663), (249, 37714), (258, 37759), (264, 37786), (267, 37813), (270, 37843), (285, 38026), (287, 38032), (295, 38122), (296, 38125), (300, 38149), (305, 38206), (329, 38386), (330, 38389), (339, 38437), (342, 38458), (344, 38470),

Gene: Litotes_47 Start: 33809, Stop: 35902, Start Num: 29
Candidate Starts for Litotes_47:
(6, 33662), (8, 33674), (15, 33701), (Start: 29 @33809 has 73 MA's), (35, 33818), (46, 33863), (48, 33881), (71, 34061), (100, 34175), (109, 34226), (110, 34235), (128, 34343), (139, 34448), (144, 34487), (146, 34499), (152, 34538), (154, 34544), (160, 34592), (163, 34613), (168, 34643), (169, 34649), (174, 34670), (195, 34787), (206, 34829), (220, 34913), (235, 35021), (251, 35129), (258, 35171), (260, 35180), (263, 35195), (267, 35231), (270, 35261), (272, 35270), (273, 35285), (286, 35447), (289, 35471), (293, 35531), (303, 35582), (324, 35738), (331, 35771), (332, 35774), (334, 35780), (341, 35819), (343, 35834),

Gene: Lucy_45 Start: 32758, Stop: 34857, Start Num: 29
Candidate Starts for Lucy_45:
(Start: 29 @32758 has 73 MA's), (46, 32812), (48, 32830), (58, 32905), (71, 33010), (105, 33148), (106, 33151), (109, 33175), (110, 33184), (123, 33259), (128, 33292), (139, 33397), (144, 33436), (154, 33493), (160, 33541), (163, 33562), (168, 33592), (169, 33598), (174, 33619), (195, 33736), (211, 33802), (225, 33886), (251, 34078), (258, 34120), (260, 34129), (263, 34144), (266, 34174), (267, 34180), (270, 34210), (271, 34213), (272, 34219), (273, 34234), (291, 34426), (293, 34480), (303, 34537), (316, 34669), (327, 34705), (331, 34726), (335, 34738), (344, 34795), (350, 34831),

Gene: Makoto_45 Start: 32631, Stop: 34745, Start Num: 29
Candidate Starts for Makoto_45:

(Start: 29 @32631 has 73 MA's), (37, 32658), (44, 32691), (45, 32697), (48, 32718), (61, 32820), (109, 33063), (112, 33090), (122, 33138), (128, 33180), (144, 33324), (154, 33381), (160, 33429), (163, 33450), (168, 33480), (169, 33486), (174, 33507), (195, 33624), (209, 33675), (211, 33690), (225, 33774), (251, 33966), (258, 34008), (260, 34017), (263, 34032), (265, 34047), (266, 34062), (267, 34068), (270, 34098), (272, 34107), (273, 34122), (291, 34314), (293, 34368), (303, 34425), (316, 34557), (331, 34614), (335, 34626), (344, 34683), (350, 34719),

Gene: MamaPearl_46 Start: 33791, Stop: 35905, Start Num: 29
Candidate Starts for MamaPearl_46:
(15, 33680), (25, 33764), (Start: 29 @33791 has 73 MA's), (48, 33878), (49, 33884), (71, 34058), (77, 34091), (106, 34199), (109, 34223), (112, 34250), (122, 34298), (128, 34340), (136, 34397), (144, 34484), (154, 34541), (160, 34589), (163, 34610), (168, 34640), (169, 34646), (171, 34655), (174, 34667), (177, 34694), (195, 34784), (206, 34826), (251, 35126), (258, 35168), (259, 35174), (260, 35177), (263, 35192), (265, 35207), (266, 35222), (267, 35228), (270, 35258), (272, 35267), (273, 35282), (293, 35528), (303, 35585), (310, 35663), (313, 35693), (331, 35774), (341, 35822), (343, 35837),

Gene: Maria1952_44 Start: 33787, Stop: 35886, Start Num: 29
Candidate Starts for Maria1952_44:
(Start: 29 @33787 has 73 MA's), (48, 33859), (50, 33886), (69, 34012), (71, 34039), (77, 34072), (128, 34321), (144, 34465), (146, 34477), (151, 34510), (160, 34570), (163, 34591), (168, 34621), (169, 34627), (174, 34648), (176, 34663), (177, 34675), (179, 34687), (195, 34765), (206, 34807), (211, 34831), (222, 34900), (251, 35107), (255, 35134), (258, 35149), (260, 35158), (263, 35173), (267, 35209), (270, 35239), (272, 35248), (273, 35263), (289, 35449), (293, 35509), (303, 35566), (308, 35632), (327, 35734), (331, 35755), (338, 35788), (343, 35818), (349, 35848), (350, 35860),

Gene: Marky_64 Start: 44188, Stop: 46197, Start Num: 57
Candidate Starts for Marky_64:
(34, 44050), (38, 44065), (42, 44083), (Start: 57 @44188 has 12 MA's), (67, 44290), (69, 44299), (70, 44305), (84, 44410), (96, 44467), (102, 44500), (107, 44530), (110, 44557), (113, 44578), (119, 44605), (123, 44623), (124, 44638), (144, 44809), (145, 44818), (147, 44824), (150, 44851), (154, 44866), (168, 44935), (170, 44944), (174, 44962), (182, 45010), (184, 45016), (198, 45082), (216, 45190), (231, 45271), (239, 45367), (241, 45409), (253, 45454), (255, 45472), (258, 45487), (267, 45550), (268, 45559), (270, 45580), (278, 45661), (282, 45715), (292, 45811), (301, 45853), (304, 45871), (318, 45997), (319, 46000), (328, 46045), (330, 46051), (337, 46093), (340, 46102), (347, 46144), (349, 46156), (350, 46168),

Gene: MeganNoll_47 Start: 33995, Stop: 36112, Start Num: 29
Candidate Starts for MeganNoll_47:
(8, 33860), (15, 33887), (25, 33968), (Start: 29 @33995 has 73 MA's), (48, 34079), (71, 34259), (77, 34292), (106, 34400), (109, 34424), (112, 34451), (122, 34499), (128, 34541), (144, 34685), (154, 34742), (156, 34757), (158, 34769), (160, 34790), (168, 34841), (169, 34847), (174, 34868), (195, 34985), (251, 35327), (258, 35369), (260, 35378), (263, 35393), (265, 35408), (266, 35423), (267, 35429), (270, 35459), (272, 35468), (273, 35483), (291, 35675), (293, 35729), (303, 35786), (327, 35954), (331, 35975), (341, 36023),

Gene: Microdon_60 Start: 43323, Stop: 45344, Start Num: 57
Candidate Starts for Microdon_60:
(Start: 57 @43323 has 12 MA's), (70, 43440), (75, 43497), (76, 43500), (78, 43506), (107, 43650), (110, 43677), (111, 43680), (123, 43752), (130, 43794), (137, 43860), (142, 43914), (144, 43938), (145, 43947), (147, 43953), (149, 43971), (150, 43980), (155, 44004), (168, 44064), (170, 44073), (174, 44091), (176, 44106), (178, 44124), (184, 44145), (189, 44169), (204, 44250), (208, 44274), (217, 44337), (231, 44415), (239, 44511), (241, 44553), (253, 44598), (254, 44607), (267, 44694),

(270, 44724), (278, 44805), (281, 44850), (282, 44859), (292, 44955), (301, 44997), (308, 45078), (318, 45150), (320, 45156), (328, 45198), (338, 45249), (340, 45255), (347, 45297), (350, 45321),

Gene: Milani_50 Start: 35225, Stop: 37510, Start Num: 33
Candidate Starts for Milani_50:
(18, 35147), (26, 35207), (Start: 33 @35225 has 3 MA's), (55, 35357), (68, 35468), (73, 35513), (106, 35720), (109, 35744), (113, 35774), (129, 35867), (144, 36017), (146, 36029), (168, 36185), (170, 36194), (171, 36200), (174, 36212), (178, 36245), (185, 36275), (190, 36299), (195, 36338), (213, 36446), (214, 36449), (217, 36464), (218, 36473), (222, 36488), (224, 36497), (240, 36635), (258, 36731), (264, 36758), (267, 36785), (270, 36815), (276, 36878), (277, 36917), (295, 37094), (296, 37097), (305, 37178), (308, 37244), (314, 37301), (324, 37337), (327, 37352), (329, 37358), (330, 37361), (332, 37376), (339, 37409), (342, 37430), (351, 37484),

Gene: Misaeng_47 Start: 34348, Stop: 36453, Start Num: 28
Candidate Starts for Misaeng_47:
(12, 34234), (15, 34240), (Start: 28 @34348 has 11 MA's), (Start: 31 @34357 has 19 MA's), (48, 34426), (49, 34432), (Start: 52 @34459 has 3 MA's), (58, 34501), (67, 34570), (71, 34606), (77, 34639), (109, 34771), (122, 34846), (128, 34888), (132, 34900), (144, 35032), (154, 35089), (158, 35116), (160, 35137), (163, 35158), (168, 35188), (169, 35194), (174, 35215), (195, 35332), (206, 35374), (211, 35398), (233, 35539), (251, 35674), (258, 35716), (260, 35725), (263, 35740), (265, 35755), (266, 35770), (267, 35776), (270, 35806), (272, 35815), (273, 35830), (286, 35992), (293, 36076), (303, 36133), (308, 36199), (310, 36211), (323, 36283), (331, 36322), (332, 36325), (333, 36328), (344, 36391), (350, 36427),

Gene: Moki_45 Start: 32728, Stop: 34836, Start Num: 29
Candidate Starts for Moki_45:
(8, 32593), (15, 32620), (Start: 29 @32728 has 73 MA's), (48, 32809), (61, 32911), (67, 32953), (71, 32989), (100, 33103), (106, 33130), (109, 33154), (112, 33181), (122, 33229), (128, 33271), (144, 33415), (160, 33520), (163, 33541), (168, 33571), (169, 33577), (174, 33598), (177, 33625), (183, 33649), (195, 33715), (206, 33757), (211, 33781), (251, 34057), (258, 34099), (260, 34108), (263, 34123), (265, 34138), (267, 34159), (268, 34168), (270, 34189), (272, 34198), (273, 34213), (293, 34459), (301, 34510), (303, 34516), (310, 34594), (331, 34705), (341, 34753), (343, 34768),

Gene: MrBoss_51 Start: 33878, Stop: 35899, Start Num: 48
Candidate Starts for MrBoss_51:
(6, 33659), (8, 33671), (15, 33698), (Start: 29 @33806 has 73 MA's), (35, 33815), (46, 33860), (48, 33878), (71, 34058), (109, 34223), (110, 34232), (128, 34340), (139, 34445), (144, 34484), (146, 34496), (152, 34535), (154, 34541), (160, 34589), (163, 34610), (168, 34640), (169, 34646), (174, 34667), (195, 34784), (206, 34826), (220, 34910), (235, 35018), (251, 35126), (258, 35168), (260, 35177), (263, 35192), (267, 35228), (270, 35258), (272, 35267), (273, 35282), (286, 35444), (289, 35468), (293, 35528), (303, 35579), (324, 35735), (331, 35768), (332, 35771), (334, 35777), (341, 35816), (343, 35831),

Gene: MrGloopy_48 Start: 33924, Stop: 36035, Start Num: 29
Candidate Starts for MrGloopy_48:
(8, 33789), (15, 33816), (25, 33897), (Start: 29 @33924 has 73 MA's), (48, 34008), (61, 34110), (71, 34188), (106, 34329), (109, 34353), (112, 34380), (122, 34428), (128, 34470), (144, 34614), (154, 34671), (156, 34686), (158, 34698), (160, 34719), (163, 34740), (168, 34770), (169, 34776), (174, 34797), (195, 34914), (225, 35064), (251, 35256), (258, 35298), (260, 35307), (263, 35322), (265, 35337), (266, 35352), (267, 35358), (270, 35388), (272, 35397), (273, 35412), (289, 35598), (291, 35604), (293, 35658), (303, 35715), (323, 35865), (331, 35904), (341, 35952),

Gene: Nancia_45 Start: 32645, Stop: 34750, Start Num: 29

Candidate Starts for Nancia_45:
(Start: 29 @32645 has 73 MA's), (46, 32699), (48, 32717), (58, 32792), (69, 32870), (71, 32897), (105, 33035), (106, 33038), (109, 33062), (110, 33071), (123, 33146), (128, 33179), (139, 33284), (144, 33323), (154, 33380), (160, 33428), (163, 33449), (168, 33479), (169, 33485), (174, 33506), (195, 33623), (211, 33689), (221, 33752), (225, 33773), (251, 33965), (258, 34007), (260, 34016), (263, 34031), (266, 34061), (267, 34067), (270, 34097), (271, 34100), (272, 34106), (273, 34121), (289, 34307), (290, 34310), (291, 34313), (293, 34367), (303, 34424), (316, 34556), (317, 34559), (327, 34592), (331, 34613), (338, 34646), (341, 34661), (343, 34676), (350, 34718),

Gene: Nubia_48 Start: 34312, Stop: 36420, Start Num: 28
Candidate Starts for Nubia_48:
(12, 34198), (15, 34204), (Start: 28 @34312 has 11 MA's), (Start: 31 @34321 has 19 MA's), (43, 34360), (100, 34687), (104, 34708), (109, 34738), (110, 34747), (122, 34813), (144, 34999), (146, 35011), (160, 35104), (163, 35125), (166, 35143), (168, 35155), (169, 35161), (171, 35170), (174, 35182), (195, 35299), (206, 35341), (211, 35365), (233, 35506), (251, 35641), (258, 35683), (260, 35692), (263, 35707), (265, 35722), (266, 35737), (267, 35743), (270, 35773), (272, 35782), (273, 35797), (286, 35959), (291, 35989), (293, 36043), (303, 36100), (308, 36166), (330, 36277), (331, 36289), (332, 36292), (333, 36295), (341, 36337), (348, 36376),

Gene: OMalley_45 Start: 33793, Stop: 35892, Start Num: 29
Candidate Starts for OMalley_45:
(Start: 29 @33793 has 73 MA's), (37, 33808), (48, 33865), (50, 33892), (71, 34045), (77, 34078), (102, 34168), (106, 34186), (108, 34198), (112, 34237), (128, 34327), (144, 34471), (151, 34516), (152, 34522), (155, 34537), (160, 34576), (163, 34597), (168, 34627), (169, 34633), (172, 34645), (174, 34654), (176, 34669), (177, 34681), (195, 34771), (206, 34813), (211, 34837), (230, 34957), (235, 35005), (251, 35113), (258, 35155), (260, 35164), (263, 35179), (267, 35215), (270, 35245), (272, 35254), (273, 35269), (287, 35434), (291, 35461), (293, 35515), (303, 35572), (308, 35638), (327, 35740), (331, 35761), (341, 35809), (343, 35824), (344, 35830), (350, 35866),

Gene: Olympi_53 Start: 35335, Stop: 37632, Start Num: 31
Candidate Starts for Olympi_53:
(21, 35284), (24, 35305), (Start: 31 @35335 has 19 MA's), (54, 35470), (55, 35479), (59, 35497), (61, 35530), (88, 35746), (91, 35767), (108, 35860), (109, 35872), (113, 35902), (122, 35944), (138, 36085), (140, 36109), (144, 36139), (168, 36307), (170, 36316), (171, 36322), (174, 36334), (178, 36367), (190, 36421), (193, 36448), (195, 36460), (202, 36493), (207, 36517), (212, 36547), (214, 36571), (217, 36586), (218, 36595), (222, 36610), (234, 36691), (240, 36757), (258, 36853), (264, 36880), (267, 36907), (270, 36937), (277, 37039), (287, 37126), (288, 37141), (296, 37219), (324, 37459), (327, 37474), (329, 37480), (330, 37483), (332, 37498), (342, 37552),

Gene: OurGirlNessie_44 Start: 32374, Stop: 34473, Start Num: 29
Candidate Starts for OurGirlNessie_44:
(Start: 29 @32374 has 73 MA's), (46, 32428), (48, 32446), (58, 32521), (69, 32599), (71, 32626), (105, 32764), (106, 32767), (109, 32791), (110, 32800), (123, 32875), (128, 32908), (139, 33013), (144, 33052), (154, 33109), (160, 33157), (163, 33178), (168, 33208), (169, 33214), (174, 33235), (195, 33352), (211, 33418), (221, 33481), (225, 33502), (251, 33694), (258, 33736), (260, 33745), (263, 33760), (266, 33790), (267, 33796), (270, 33826), (271, 33829), (272, 33835), (273, 33850), (291, 34042), (293, 34096), (303, 34153), (316, 34285), (327, 34321), (331, 34342), (335, 34354), (344, 34411), (350, 34447),

Gene: Oxynfrius_48 Start: 34334, Stop: 36442, Start Num: 28
Candidate Starts for Oxynfrius_48:
(12, 34220), (15, 34226), (Start: 28 @34334 has 11 MA's), (Start: 31 @34343 has 19 MA's), (43, 34382), (100, 34709), (104, 34730), (109, 34760), (110, 34769), (122, 34835), (144, 35021), (146,

35033), (160, 35126), (163, 35147), (166, 35165), (168, 35177), (169, 35183), (174, 35204), (195, 35321), (206, 35363), (211, 35387), (233, 35528), (251, 35663), (258, 35705), (260, 35714), (263, 35729), (265, 35744), (266, 35759), (267, 35765), (270, 35795), (272, 35804), (273, 35819), (286, 35981), (291, 36011), (293, 36065), (303, 36122), (308, 36188), (327, 36290), (331, 36311), (332, 36314), (333, 36317), (341, 36359), (348, 36398), (350, 36416),

Gene: PartyCup_48 Start: 34035, Stop: 36128, Start Num: 29
Candidate Starts for PartyCup_48:
(6, 33888), (8, 33900), (15, 33927), (Start: 29 @34035 has 73 MA's), (35, 34044), (46, 34089), (48, 34107), (71, 34287), (109, 34452), (110, 34461), (128, 34569), (139, 34674), (144, 34713), (146, 34725), (152, 34764), (154, 34770), (160, 34818), (163, 34839), (168, 34869), (169, 34875), (174, 34896), (195, 35013), (206, 35055), (220, 35139), (235, 35247), (251, 35355), (258, 35397), (260, 35406), (263, 35421), (267, 35457), (270, 35487), (272, 35496), (273, 35511), (275, 35541), (286, 35673), (289, 35697), (293, 35757), (303, 35808), (324, 35964), (331, 35997), (332, 36000), (333, 36003), (341, 36045), (343, 36060),

Gene: Parvaparticeps_2 Start: 679, Stop: 2964, Start Num: 30
Candidate Starts for Parvaparticeps_2:
(30, 679), (42, 727), (64, 895), (81, 1033), (83, 1042), (93, 1111), (116, 1252), (120, 1276), (123, 1294), (128, 1327), (138, 1438), (144, 1492), (164, 1636), (166, 1654), (169, 1672), (171, 1681), (174, 1693), (187, 1762), (191, 1783), (203, 1843), (210, 1876), (215, 1918), (227, 1975), (228, 1984), (232, 2011), (238, 2077), (240, 2095), (246, 2137), (250, 2152), (258, 2197), (264, 2224), (270, 2281), (274, 2311), (277, 2383), (285, 2464), (295, 2557), (302, 2611), (308, 2683), (315, 2743), (324, 2785), (329, 2812), (335, 2839), (342, 2884),

Gene: PermaG_52 Start: 35552, Stop: 37846, Start Num: 31
Candidate Starts for PermaG_52:
(9, 35420), (10, 35432), (16, 35459), (23, 35513), (Start: 31 @35552 has 19 MA's), (36, 35567), (Start: 52 @35666 has 3 MA's), (55, 35693), (82, 35915), (88, 35960), (108, 36074), (109, 36086), (113, 36116), (138, 36299), (144, 36353), (168, 36521), (170, 36530), (171, 36536), (174, 36548), (176, 36563), (178, 36581), (190, 36635), (192, 36659), (195, 36674), (207, 36731), (214, 36785), (218, 36809), (224, 36833), (234, 36905), (240, 36971), (249, 37022), (255, 37052), (258, 37067), (264, 37094), (267, 37121), (270, 37151), (277, 37253), (287, 37340), (288, 37355), (296, 37433), (300, 37457), (306, 37550), (327, 37688), (329, 37694), (330, 37697), (332, 37712), (342, 37766),

Gene: PinkFriday_45 Start: 32897, Stop: 34996, Start Num: 29
Candidate Starts for PinkFriday_45:
(8, 32762), (15, 32789), (Start: 29 @32897 has 73 MA's), (48, 32969), (50, 32996), (69, 33122), (71, 33149), (77, 33182), (128, 33431), (144, 33575), (146, 33587), (151, 33620), (158, 33659), (160, 33680), (163, 33701), (168, 33731), (169, 33737), (174, 33758), (176, 33773), (177, 33785), (195, 33875), (206, 33917), (211, 33941), (222, 34010), (251, 34217), (258, 34259), (260, 34268), (263, 34283), (265, 34298), (266, 34313), (267, 34319), (270, 34349), (272, 34358), (273, 34373), (293, 34619), (303, 34676), (308, 34742), (323, 34826), (327, 34844), (331, 34865), (338, 34898), (341, 34913), (343, 34928), (349, 34958), (350, 34970),

Gene: PitaDog_46 Start: 32770, Stop: 34869, Start Num: 29
Candidate Starts for PitaDog_46:
(Start: 29 @32770 has 73 MA's), (46, 32824), (48, 32842), (69, 32995), (71, 33022), (105, 33160), (106, 33163), (109, 33187), (110, 33196), (123, 33271), (128, 33304), (139, 33409), (144, 33448), (154, 33505), (160, 33553), (163, 33574), (168, 33604), (169, 33610), (174, 33631), (195, 33748), (209, 33799), (211, 33814), (221, 33877), (225, 33898), (251, 34090), (258, 34132), (260, 34141), (263, 34156), (266, 34186), (267, 34192), (270, 34222), (272, 34231), (273, 34246), (291, 34438), (293, 34492), (303, 34549), (316, 34681), (327, 34717), (331, 34738), (335, 34750), (343, 34801),

(350, 34843),

Gene: Potatoes_47 Start: 33822, Stop: 35933, Start Num: 29
Candidate Starts for Potatoes_47:
(15, 33714), (25, 33795), (Start: 29 @33822 has 73 MA's), (48, 33906), (71, 34086), (77, 34119), (97, 34182), (100, 34200), (106, 34227), (109, 34251), (112, 34278), (122, 34326), (128, 34368), (141, 34488), (144, 34512), (154, 34569), (156, 34584), (158, 34596), (160, 34617), (163, 34638), (168, 34668), (169, 34674), (174, 34695), (195, 34812), (251, 35154), (258, 35196), (260, 35205), (263, 35220), (265, 35235), (266, 35250), (267, 35256), (270, 35286), (272, 35295), (273, 35310), (274, 35316), (289, 35496), (291, 35502), (293, 35556), (303, 35613), (323, 35763), (327, 35781), (331, 35802), (335, 35814), (341, 35850),

Gene: Preamble_47 Start: 32899, Stop: 35013, Start Num: 29
Candidate Starts for Preamble_47:
(8, 32764), (15, 32791), (Start: 29 @32899 has 73 MA's), (32, 32911), (44, 32959), (45, 32965), (48, 32986), (71, 33166), (77, 33199), (106, 33307), (109, 33331), (117, 33391), (122, 33406), (123, 33415), (128, 33448), (144, 33592), (158, 33676), (159, 33688), (160, 33697), (163, 33718), (168, 33748), (169, 33754), (174, 33775), (195, 33892), (206, 33934), (209, 33943), (225, 34042), (251, 34234), (260, 34285), (263, 34300), (267, 34336), (270, 34366), (272, 34375), (273, 34390), (289, 34576), (293, 34636), (303, 34693), (327, 34861), (331, 34882), (341, 34930), (343, 34945), (350, 34987),

Gene: Pterodactyl_45 Start: 32612, Stop: 34711, Start Num: 29
Candidate Starts for Pterodactyl_45:
(Start: 29 @32612 has 73 MA's), (46, 32666), (48, 32684), (58, 32759), (69, 32837), (71, 32864), (77, 32897), (106, 33005), (109, 33029), (110, 33038), (128, 33146), (144, 33290), (154, 33347), (160, 33395), (163, 33416), (168, 33446), (169, 33452), (174, 33473), (195, 33590), (209, 33641), (211, 33656), (225, 33740), (251, 33932), (258, 33974), (260, 33983), (263, 33998), (266, 34028), (267, 34034), (270, 34064), (272, 34073), (273, 34088), (291, 34280), (293, 34334), (303, 34391), (316, 34523), (327, 34559), (331, 34580), (335, 34592), (344, 34649), (350, 34685),

Gene: Pumancara_45 Start: 32810, Stop: 34909, Start Num: 29
Candidate Starts for Pumancara_45:
(8, 32675), (15, 32702), (Start: 29 @32810 has 73 MA's), (48, 32882), (50, 32909), (69, 33035), (71, 33062), (77, 33095), (102, 33185), (128, 33344), (144, 33488), (146, 33500), (151, 33533), (158, 33572), (160, 33593), (163, 33614), (168, 33644), (169, 33650), (174, 33671), (176, 33686), (177, 33698), (195, 33788), (206, 33830), (211, 33854), (222, 33923), (251, 34130), (258, 34172), (260, 34181), (263, 34196), (265, 34211), (266, 34226), (267, 34232), (270, 34262), (272, 34271), (273, 34286), (293, 34532), (303, 34589), (308, 34655), (323, 34739), (327, 34757), (331, 34778), (338, 34811), (341, 34826), (349, 34871), (350, 34883),

Gene: RAP15_48 Start: 33996, Stop: 36113, Start Num: 29
Candidate Starts for RAP15_48:
(8, 33861), (15, 33888), (25, 33969), (Start: 29 @33996 has 73 MA's), (48, 34080), (71, 34260), (77, 34293), (106, 34401), (109, 34425), (112, 34452), (122, 34500), (128, 34542), (144, 34686), (154, 34743), (156, 34758), (158, 34770), (160, 34791), (168, 34842), (169, 34848), (174, 34869), (195, 34986), (251, 35328), (258, 35370), (260, 35379), (263, 35394), (265, 35409), (266, 35424), (267, 35430), (270, 35460), (272, 35469), (273, 35484), (291, 35676), (293, 35730), (303, 35787), (327, 35955), (331, 35976), (341, 36024), (350, 36081),

Gene: Rasovi_54 Start: 36277, Stop: 38571, Start Num: 31
Candidate Starts for Rasovi_54:

(11, 36160), (13, 36166), (21, 36226), (24, 36247), (Start: 31 @36277 has 19 MA's), (36, 36292), (Start: 52 @36391 has 3 MA's), (55, 36418), (56, 36424), (88, 36685), (91, 36706), (106, 36787), (109, 36811), (113, 36841), (122, 36883), (123, 36892), (144, 37078), (168, 37246), (170, 37255), (171, 37261), (174, 37273), (176, 37288), (178, 37306), (195, 37399), (202, 37432), (207, 37456), (212, 37486), (213, 37507), (214, 37510), (218, 37534), (224, 37558), (234, 37630), (240, 37696), (249, 37747), (258, 37792), (264, 37819), (267, 37846), (270, 37876), (285, 38059), (287, 38065), (295, 38155), (296, 38158), (300, 38182), (305, 38239), (329, 38419), (330, 38422), (339, 38470), (342, 38491), (344, 38503),

Gene: RcigaStruga_47 Start: 34218, Stop: 36323, Start Num: 28
Candidate Starts for RcigaStruga_47:
(12, 34104), (15, 34110), (Start: 28 @34218 has 11 MA's), (Start: 31 @34227 has 19 MA's), (48, 34296), (49, 34302), (Start: 52 @34329 has 3 MA's), (58, 34371), (67, 34440), (71, 34476), (77, 34509), (109, 34641), (122, 34716), (128, 34758), (136, 34815), (144, 34902), (154, 34959), (158, 34986), (160, 35007), (163, 35028), (168, 35058), (169, 35064), (174, 35085), (195, 35202), (206, 35244), (211, 35268), (214, 35298), (233, 35409), (251, 35544), (258, 35586), (260, 35595), (263, 35610), (265, 35625), (266, 35640), (267, 35646), (270, 35676), (272, 35685), (273, 35700), (286, 35862), (293, 35946), (303, 36003), (308, 36069), (310, 36081), (323, 36153), (331, 36192), (332, 36195), (333, 36198), (344, 36261), (350, 36297),

Gene: Riovina_45 Start: 33793, Stop: 35892, Start Num: 29
Candidate Starts for Riovina_45:
(Start: 29 @33793 has 73 MA's), (37, 33808), (48, 33865), (50, 33892), (71, 34045), (77, 34078), (102, 34168), (106, 34186), (108, 34198), (112, 34237), (128, 34327), (144, 34471), (151, 34516), (152, 34522), (155, 34537), (160, 34576), (163, 34597), (168, 34627), (169, 34633), (172, 34645), (174, 34654), (176, 34669), (177, 34681), (195, 34771), (206, 34813), (211, 34837), (230, 34957), (235, 35005), (251, 35113), (258, 35155), (260, 35164), (263, 35179), (267, 35215), (270, 35245), (272, 35254), (273, 35269), (287, 35434), (291, 35461), (293, 35515), (303, 35572), (308, 35638), (327, 35740), (331, 35761), (341, 35809), (343, 35824), (344, 35830), (350, 35866),

Gene: Riverdale_48 Start: 33961, Stop: 36072, Start Num: 29
Candidate Starts for Riverdale_48:
(8, 33826), (15, 33853), (25, 33934), (Start: 29 @33961 has 73 MA's), (48, 34045), (49, 34051), (71, 34225), (77, 34258), (100, 34339), (106, 34366), (109, 34390), (112, 34417), (122, 34465), (128, 34507), (144, 34651), (154, 34708), (156, 34723), (158, 34735), (160, 34756), (168, 34807), (169, 34813), (174, 34834), (195, 34951), (225, 35101), (251, 35293), (258, 35335), (260, 35344), (263, 35359), (265, 35374), (266, 35389), (267, 35395), (270, 35425), (272, 35434), (273, 35449), (289, 35635), (291, 35641), (293, 35695), (303, 35752), (327, 35920), (331, 35941), (341, 35989),

Gene: Rootkit7_49 Start: 35390, Stop: 37687, Start Num: 31
Candidate Starts for Rootkit7_49:
(3, 35171), (4, 35180), (9, 35258), (21, 35339), (24, 35360), (Start: 31 @35390 has 19 MA's), (Start: 52 @35507 has 3 MA's), (54, 35525), (55, 35534), (59, 35552), (88, 35801), (91, 35822), (106, 35903), (108, 35915), (109, 35927), (113, 35957), (122, 35999), (138, 36140), (140, 36164), (144, 36194), (168, 36362), (170, 36371), (171, 36377), (174, 36389), (178, 36422), (190, 36476), (193, 36503), (195, 36515), (202, 36548), (207, 36572), (212, 36602), (214, 36626), (217, 36641), (218, 36650), (222, 36665), (234, 36746), (240, 36812), (258, 36908), (264, 36935), (267, 36962), (270, 36992), (277, 37094), (287, 37181), (288, 37196), (296, 37274), (326, 37526), (327, 37529), (329, 37535), (330, 37538), (342, 37607),

Gene: Rozby_47 Start: 33751, Stop: 35862, Start Num: 29
Candidate Starts for Rozby_47:

(8, 33616), (15, 33643), (25, 33724), (Start: 29 @33751 has 73 MA's), (48, 33835), (49, 33841), (71, 34015), (77, 34048), (106, 34156), (109, 34180), (112, 34207), (122, 34255), (128, 34297), (144, 34441), (154, 34498), (156, 34513), (158, 34525), (160, 34546), (163, 34567), (168, 34597), (169, 34603), (174, 34624), (195, 34741), (225, 34891), (251, 35083), (258, 35125), (260, 35134), (263, 35149), (265, 35164), (266, 35179), (267, 35185), (270, 35215), (272, 35224), (273, 35239), (289, 35425), (291, 35431), (293, 35485), (303, 35542), (323, 35692), (327, 35710), (331, 35731), (335, 35743), (341, 35779),

Gene: SBlackberry_49 Start: 35349, Stop: 37646, Start Num: 31
Candidate Starts for SBlackberry_49:
(Start: 31 @35349 has 19 MA's), (Start: 52 @35466 has 3 MA's), (54, 35484), (55, 35493), (59, 35511), (61, 35544), (88, 35760), (91, 35781), (108, 35874), (109, 35886), (113, 35916), (122, 35958), (138, 36099), (140, 36123), (144, 36153), (168, 36321), (170, 36330), (171, 36336), (176, 36363), (178, 36381), (190, 36435), (193, 36462), (195, 36474), (202, 36507), (207, 36531), (212, 36561), (214, 36585), (217, 36600), (218, 36609), (222, 36624), (234, 36705), (240, 36771), (258, 36867), (264, 36894), (267, 36921), (270, 36951), (277, 37053), (287, 37140), (288, 37155), (296, 37233), (324, 37473), (327, 37488), (329, 37494), (330, 37497), (342, 37566),

Gene: Sapo_38 Start: 34342, Stop: 36285, Start Num: 52
Candidate Starts for Sapo_38:
(Start: 52 @34342 has 3 MA's), (71, 34486), (78, 34519), (95, 34588), (110, 34669), (113, 34690), (126, 34759), (135, 34813), (144, 34900), (146, 34912), (147, 34915), (148, 34930), (169, 35029), (174, 35050), (180, 35089), (235, 35380), (236, 35392), (242, 35461), (247, 35476), (252, 35500), (253, 35506), (255, 35524), (258, 35539), (267, 35602), (270, 35632), (276, 35695), (277, 35734), (279, 35776), (283, 35794), (290, 35845), (301, 35929), (314, 36058), (315, 36061), (330, 36121), (332, 36136), (343, 36196), (344, 36202),

Gene: Savage2526_48 Start: 33989, Stop: 36100, Start Num: 29
Candidate Starts for Savage2526_48:
(8, 33854), (15, 33881), (25, 33962), (Start: 29 @33989 has 73 MA's), (48, 34073), (61, 34175), (71, 34253), (106, 34394), (109, 34418), (112, 34445), (122, 34493), (128, 34535), (144, 34679), (154, 34736), (156, 34751), (158, 34763), (160, 34784), (163, 34805), (168, 34835), (169, 34841), (174, 34862), (183, 34913), (195, 34979), (220, 35105), (225, 35129), (251, 35321), (258, 35363), (260, 35372), (263, 35387), (265, 35402), (266, 35417), (267, 35423), (270, 35453), (272, 35462), (273, 35477), (291, 35669), (293, 35723), (303, 35780), (327, 35948), (331, 35969), (341, 36017),

Gene: Scuttle_47 Start: 33950, Stop: 36061, Start Num: 29
Candidate Starts for Scuttle_47:
(8, 33815), (15, 33842), (25, 33923), (Start: 29 @33950 has 73 MA's), (48, 34034), (49, 34040), (71, 34214), (77, 34247), (100, 34328), (106, 34355), (109, 34379), (112, 34406), (122, 34454), (128, 34496), (144, 34640), (154, 34697), (156, 34712), (158, 34724), (160, 34745), (163, 34766), (168, 34796), (169, 34802), (174, 34823), (195, 34940), (225, 35090), (251, 35282), (258, 35324), (260, 35333), (263, 35348), (265, 35363), (266, 35378), (267, 35384), (270, 35414), (272, 35423), (273, 35438), (289, 35624), (291, 35630), (293, 35684), (303, 35741), (323, 35891), (327, 35909), (331, 35930), (335, 35942), (341, 35978),

Gene: Sergei_45 Start: 33788, Stop: 35887, Start Num: 29
Candidate Starts for Sergei_45:
(Start: 29 @33788 has 73 MA's), (48, 33860), (50, 33887), (69, 34013), (71, 34040), (77, 34073), (128, 34322), (144, 34466), (146, 34478), (151, 34511), (160, 34571), (163, 34592), (168, 34622), (169, 34628), (174, 34649), (176, 34664), (177, 34676), (179, 34688), (195, 34766), (206, 34808), (211, 34832), (222, 34901), (251, 35108), (255, 35135), (258, 35150), (260, 35159), (263, 35174), (267, 35210), (270, 35240), (272, 35249), (273, 35264), (289, 35450), (293, 35510), (303, 35567), (308,

35633), (327, 35735), (331, 35756), (338, 35789), (343, 35819), (349, 35849), (350, 35861),

Gene: Shynx_60 Start: 43481, Stop: 45493, Start Num: 57
Candidate Starts for Shynx_60:
(Start: 57 @43481 has 12 MA's), (63, 43532), (70, 43598), (72, 43622), (78, 43664), (100, 43769), (107, 43808), (110, 43835), (111, 43838), (120, 43883), (123, 43901), (134, 43991), (137, 44009), (139, 44045), (142, 44063), (144, 44087), (145, 44096), (147, 44102), (149, 44120), (150, 44129), (155, 44153), (168, 44213), (170, 44222), (174, 44240), (176, 44255), (178, 44273), (189, 44318), (204, 44399), (231, 44564), (239, 44660), (241, 44702), (253, 44747), (270, 44873), (278, 44954), (281, 44999), (282, 45008), (292, 45104), (301, 45146), (308, 45227), (318, 45299), (320, 45305), (328, 45347), (338, 45398), (340, 45404), (347, 45446), (350, 45470),

Gene: Spocter_55 Start: 42564, Stop: 44954, Start Num: 27
Candidate Starts for Spocter_55:
(Start: 27 @42564 has 5 MA's), (Start: 52 @42696 has 3 MA's), (60, 42765), (80, 42966), (89, 43020), (90, 43023), (96, 43065), (98, 43074), (115, 43185), (118, 43212), (120, 43215), (130, 43275), (131, 43281), (162, 43563), (165, 43590), (167, 43605), (186, 43704), (196, 43770), (199, 43788), (226, 43950), (245, 44154), (248, 44175), (251, 44184), (255, 44211), (267, 44298), (268, 44307), (273, 44352), (274, 44358), (279, 44472), (284, 44493), (285, 44511), (287, 44517), (293, 44598), (298, 44619), (303, 44643), (311, 44733), (312, 44745), (314, 44766), (321, 44790), (325, 44805), (336, 44853), (342, 44895), (345, 44907), (346, 44910),

Gene: Stuff_60 Start: 43554, Stop: 45566, Start Num: 57
Candidate Starts for Stuff_60:
(Start: 57 @43554 has 12 MA's), (63, 43605), (78, 43737), (100, 43842), (107, 43881), (110, 43908), (111, 43911), (120, 43956), (123, 43974), (134, 44064), (137, 44082), (139, 44118), (142, 44136), (144, 44160), (145, 44169), (147, 44175), (149, 44193), (150, 44202), (155, 44226), (168, 44286), (170, 44295), (174, 44313), (176, 44328), (178, 44346), (184, 44367), (189, 44391), (204, 44472), (231, 44637), (239, 44733), (241, 44775), (253, 44820), (270, 44946), (278, 45027), (281, 45072), (282, 45081), (292, 45177), (301, 45219), (308, 45300), (318, 45372), (320, 45378), (328, 45420), (338, 45471), (340, 45477), (343, 45501), (347, 45519), (350, 45543),

Gene: Sucha_50 Start: 34417, Stop: 36708, Start Num: 31
Candidate Starts for Sucha_50:
(20, 34366), (24, 34387), (Start: 31 @34417 has 19 MA's), (55, 34555), (56, 34561), (68, 34666), (73, 34711), (102, 34900), (108, 34930), (109, 34942), (113, 34972), (129, 35065), (138, 35161), (144, 35215), (168, 35383), (170, 35392), (171, 35398), (174, 35410), (185, 35473), (190, 35497), (195, 35536), (213, 35644), (214, 35647), (217, 35662), (218, 35671), (224, 35695), (240, 35833), (258, 35929), (264, 35956), (267, 35983), (270, 36013), (276, 36076), (277, 36115), (296, 36295), (327, 36550), (329, 36556), (330, 36559), (342, 36628), (351, 36682),

Gene: Supakev_45 Start: 33793, Stop: 35892, Start Num: 29
Candidate Starts for Supakev_45:
(8, 33655), (15, 33682), (Start: 29 @33793 has 73 MA's), (37, 33808), (48, 33865), (50, 33892), (71, 34045), (77, 34078), (99, 34147), (102, 34168), (106, 34186), (108, 34198), (112, 34237), (128, 34327), (143, 34468), (144, 34471), (151, 34516), (152, 34522), (155, 34537), (160, 34576), (163, 34597), (168, 34627), (169, 34633), (174, 34654), (176, 34669), (177, 34681), (195, 34771), (206, 34813), (211, 34837), (230, 34957), (235, 35005), (251, 35113), (258, 35155), (260, 35164), (263, 35179), (267, 35215), (270, 35245), (272, 35254), (273, 35269), (286, 35431), (287, 35434), (291, 35461), (293, 35515), (303, 35572), (308, 35638), (327, 35740), (331, 35761), (341, 35809), (343, 35824), (344, 35830), (348, 35848), (350, 35866),

Gene: Suppi_47 Start: 33856, Stop: 35955, Start Num: 29

Candidate Starts for Suppi_47:
(6, 33709), (8, 33721), (15, 33748), (Start: 29 @33856 has 73 MA's), (35, 33865), (46, 33910), (48, 33928), (71, 34108), (109, 34273), (110, 34282), (128, 34390), (139, 34495), (144, 34534), (146, 34546), (152, 34585), (154, 34591), (160, 34639), (163, 34660), (168, 34690), (169, 34696), (174, 34717), (195, 34834), (206, 34876), (220, 34960), (235, 35068), (251, 35176), (258, 35218), (260, 35227), (263, 35242), (267, 35278), (270, 35308), (272, 35317), (273, 35332), (286, 35494), (293, 35578), (303, 35629), (324, 35785), (331, 35818), (332, 35821), (334, 35827), (341, 35866), (343, 35881),

Gene: TattModd_46 Start: 33610, Stop: 35721, Start Num: 29
Candidate Starts for TattModd_46:
(8, 33475), (15, 33502), (25, 33583), (Start: 29 @33610 has 73 MA's), (48, 33694), (61, 33796), (71, 33874), (77, 33907), (100, 33988), (106, 34015), (109, 34039), (112, 34066), (122, 34114), (128, 34156), (144, 34300), (154, 34357), (156, 34372), (158, 34384), (160, 34405), (163, 34426), (168, 34456), (169, 34462), (174, 34483), (195, 34600), (225, 34750), (251, 34942), (258, 34984), (260, 34993), (263, 35008), (265, 35023), (266, 35038), (267, 35044), (270, 35074), (272, 35083), (273, 35098), (289, 35284), (291, 35290), (293, 35344), (303, 35401), (327, 35569), (331, 35590), (341, 35638),

Gene: Temper16_45 Start: 33788, Stop: 35887, Start Num: 29
Candidate Starts for Temper16_45:
(Start: 29 @33788 has 73 MA's), (48, 33860), (50, 33887), (69, 34013), (71, 34040), (77, 34073), (128, 34322), (144, 34466), (146, 34478), (151, 34511), (160, 34571), (163, 34592), (168, 34622), (169, 34628), (174, 34649), (176, 34664), (177, 34676), (179, 34688), (195, 34766), (206, 34808), (211, 34832), (222, 34901), (251, 35108), (255, 35135), (258, 35150), (260, 35159), (263, 35174), (267, 35210), (270, 35240), (272, 35249), (273, 35264), (289, 35450), (293, 35510), (303, 35567), (308, 35633), (327, 35735), (331, 35756), (338, 35789), (343, 35819), (349, 35849), (350, 35861),

Gene: Theresita_51 Start: 34320, Stop: 36620, Start Num: 31
Candidate Starts for Theresita_51:
(Start: 31 @34320 has 19 MA's), (43, 34359), (61, 34503), (74, 34632), (79, 34668), (92, 34746), (106, 34824), (109, 34848), (112, 34875), (113, 34878), (116, 34890), (144, 35118), (146, 35130), (168, 35289), (170, 35298), (171, 35304), (174, 35316), (181, 35361), (193, 35427), (195, 35439), (207, 35505), (218, 35583), (226, 35619), (234, 35679), (258, 35844), (264, 35871), (267, 35898), (269, 35910), (270, 35928), (272, 35937), (276, 35991), (277, 36030), (285, 36111), (290, 36141), (294, 36204), (295, 36207), (296, 36210), (329, 36468), (330, 36471), (339, 36519), (342, 36540),

Gene: TurboVicky_51 Start: 35567, Stop: 37864, Start Num: 31
Candidate Starts for TurboVicky_51:
(3, 35348), (4, 35357), (9, 35435), (21, 35516), (24, 35537), (Start: 31 @35567 has 19 MA's), (Start: 52 @35684 has 3 MA's), (54, 35702), (55, 35711), (59, 35729), (61, 35762), (88, 35978), (91, 35999), (108, 36092), (109, 36104), (113, 36134), (122, 36176), (138, 36317), (140, 36341), (144, 36371), (168, 36539), (170, 36548), (171, 36554), (174, 36566), (178, 36599), (190, 36653), (193, 36680), (195, 36692), (202, 36725), (207, 36749), (212, 36779), (214, 36803), (217, 36818), (218, 36827), (222, 36842), (234, 36923), (240, 36989), (258, 37085), (264, 37112), (267, 37139), (270, 37169), (277, 37271), (287, 37358), (288, 37373), (296, 37451), (327, 37706), (329, 37712), (330, 37715), (342, 37784),

Gene: Typher_51 Start: 35125, Stop: 37422, Start Num: 31
Candidate Starts for Typher_51:
(Start: 31 @35125 has 19 MA's), (Start: 52 @35242 has 3 MA's), (54, 35260), (55, 35269), (59, 35287), (61, 35320), (88, 35536), (91, 35557), (108, 35650), (109, 35662), (113, 35692), (122, 35734), (138, 35875), (140, 35899), (144, 35929), (168, 36097), (170, 36106), (171, 36112), (176, 36139), (178,

36157), (190, 36211), (193, 36238), (195, 36250), (207, 36307), (212, 36337), (214, 36361), (217, 36376), (218, 36385), (222, 36400), (234, 36481), (240, 36547), (258, 36643), (264, 36670), (267, 36697), (270, 36727), (277, 36829), (287, 36916), (288, 36931), (296, 37009), (324, 37249), (327, 37264), (329, 37270), (330, 37273), (332, 37288), (342, 37342),

Gene: UNTPL_62 Start: 43585, Stop: 45597, Start Num: 57
Candidate Starts for UNTPL_62:
(Start: 57 @43585 has 12 MA's), (63, 43636), (70, 43702), (72, 43726), (78, 43768), (100, 43873), (107, 43912), (110, 43939), (111, 43942), (120, 43987), (123, 44005), (134, 44095), (137, 44113), (144, 44191), (145, 44200), (147, 44206), (149, 44224), (150, 44233), (155, 44257), (168, 44317), (170, 44326), (174, 44344), (176, 44359), (178, 44377), (184, 44398), (189, 44422), (204, 44503), (231, 44668), (239, 44764), (241, 44806), (253, 44851), (270, 44977), (278, 45058), (281, 45103), (282, 45112), (292, 45208), (301, 45250), (308, 45331), (318, 45403), (320, 45409), (328, 45451), (338, 45502), (340, 45508), (347, 45550), (350, 45574),

Gene: Urla_46 Start: 33785, Stop: 35893, Start Num: 29
Candidate Starts for Urla_46:
(12, 33668), (15, 33674), (Start: 29 @33785 has 73 MA's), (48, 33866), (49, 33872), (71, 34046), (106, 34187), (109, 34211), (112, 34238), (122, 34286), (128, 34328), (144, 34472), (160, 34577), (163, 34598), (168, 34628), (169, 34634), (174, 34655), (177, 34682), (183, 34706), (195, 34772), (206, 34814), (211, 34838), (251, 35114), (258, 35156), (259, 35162), (260, 35165), (263, 35180), (265, 35195), (266, 35210), (267, 35216), (270, 35246), (272, 35255), (273, 35270), (291, 35462), (293, 35516), (303, 35573), (310, 35651), (331, 35762), (341, 35810), (343, 35825),

Gene: Vallejo_48 Start: 33964, Stop: 36075, Start Num: 29
Candidate Starts for Vallejo_48:
(8, 33829), (15, 33856), (25, 33937), (Start: 29 @33964 has 73 MA's), (48, 34048), (61, 34150), (71, 34228), (106, 34369), (109, 34393), (112, 34420), (122, 34468), (128, 34510), (144, 34654), (154, 34711), (156, 34726), (158, 34738), (160, 34759), (163, 34780), (168, 34810), (169, 34816), (174, 34837), (183, 34888), (195, 34954), (220, 35080), (225, 35104), (251, 35296), (258, 35338), (260, 35347), (263, 35362), (265, 35377), (266, 35392), (267, 35398), (270, 35428), (272, 35437), (273, 35452), (291, 35644), (293, 35698), (303, 35755), (327, 35923), (331, 35944), (341, 35992),

Gene: Vulture_45 Start: 33721, Stop: 35820, Start Num: 29
Candidate Starts for Vulture_45:
(Start: 29 @33721 has 73 MA's), (37, 33736), (48, 33793), (50, 33820), (71, 33973), (77, 34006), (102, 34096), (106, 34114), (108, 34126), (112, 34165), (128, 34255), (144, 34399), (151, 34444), (152, 34450), (155, 34465), (160, 34504), (163, 34525), (168, 34555), (169, 34561), (174, 34582), (176, 34597), (177, 34609), (195, 34699), (206, 34741), (211, 34765), (230, 34885), (235, 34933), (251, 35041), (258, 35083), (260, 35092), (263, 35107), (267, 35143), (270, 35173), (272, 35182), (273, 35197), (287, 35362), (290, 35386), (291, 35389), (293, 35443), (303, 35500), (308, 35566), (327, 35668), (331, 35689), (341, 35737), (343, 35752), (344, 35758), (348, 35776), (350, 35794),

Gene: Wawa_47 Start: 33797, Stop: 35914, Start Num: 29
Candidate Starts for Wawa_47:
(8, 33662), (15, 33689), (25, 33770), (Start: 29 @33797 has 73 MA's), (48, 33881), (61, 33983), (71, 34061), (106, 34202), (109, 34226), (112, 34253), (122, 34301), (128, 34343), (144, 34487), (154, 34544), (156, 34559), (158, 34571), (160, 34592), (163, 34613), (168, 34643), (169, 34649), (174, 34670), (183, 34721), (195, 34787), (220, 34913), (225, 34937), (251, 35129), (258, 35171), (260, 35180), (263, 35195), (265, 35210), (266, 35225), (267, 35231), (270, 35261), (272, 35270), (273, 35285), (289, 35471), (291, 35477), (293, 35531), (303, 35588), (323, 35738), (327, 35756), (331, 35777), (341, 35825),

Gene: Wayne_47 Start: 33902, Stop: 35995, Start Num: 29
Candidate Starts for Wayne_47:
(6, 33755), (8, 33767), (15, 33794), (Start: 29 @33902 has 73 MA's), (35, 33911), (46, 33956), (48, 33974), (71, 34154), (109, 34319), (110, 34328), (128, 34436), (139, 34541), (144, 34580), (146, 34592), (152, 34631), (154, 34637), (160, 34685), (163, 34706), (168, 34736), (169, 34742), (174, 34763), (195, 34880), (206, 34922), (220, 35006), (235, 35114), (251, 35222), (258, 35264), (260, 35273), (263, 35288), (267, 35324), (270, 35354), (272, 35363), (273, 35378), (286, 35540), (293, 35624), (303, 35675), (324, 35831), (331, 35864), (332, 35867), (334, 35873), (341, 35912), (343, 35927),

Gene: WonderBoy_44 Start: 32596, Stop: 34695, Start Num: 29
Candidate Starts for WonderBoy_44:
(8, 32461), (15, 32488), (Start: 29 @32596 has 73 MA's), (46, 32650), (48, 32668), (49, 32674), (58, 32743), (67, 32812), (71, 32848), (106, 32989), (109, 33013), (128, 33130), (144, 33274), (154, 33331), (160, 33379), (163, 33400), (168, 33430), (169, 33436), (174, 33457), (195, 33574), (211, 33640), (220, 33700), (225, 33724), (251, 33916), (258, 33958), (260, 33967), (263, 33982), (266, 34012), (267, 34018), (270, 34048), (272, 34057), (273, 34072), (291, 34264), (293, 34318), (303, 34375), (310, 34453), (327, 34543), (331, 34564), (338, 34597), (341, 34612), (343, 34627), (350, 34669),

Gene: Zanella_50 Start: 35370, Stop: 37667, Start Num: 31
Candidate Starts for Zanella_50:
(17, 35277), (19, 35313), (23, 35331), (Start: 31 @35370 has 19 MA's), (54, 35505), (55, 35514), (59, 35532), (88, 35781), (91, 35802), (106, 35883), (108, 35895), (109, 35907), (113, 35937), (122, 35979), (138, 36120), (140, 36144), (144, 36174), (168, 36342), (170, 36351), (171, 36357), (174, 36369), (178, 36402), (190, 36456), (193, 36483), (195, 36495), (202, 36528), (207, 36552), (212, 36582), (214, 36606), (217, 36621), (218, 36630), (222, 36645), (234, 36726), (240, 36792), (258, 36888), (264, 36915), (267, 36942), (270, 36972), (277, 37074), (287, 37161), (288, 37176), (296, 37254), (327, 37509), (329, 37515), (330, 37518), (342, 37587),

Gene: Zorro_48 Start: 33923, Stop: 36034, Start Num: 29
Candidate Starts for Zorro_48:
(8, 33788), (15, 33815), (25, 33896), (Start: 29 @33923 has 73 MA's), (48, 34007), (61, 34109), (71, 34187), (106, 34328), (109, 34352), (112, 34379), (122, 34427), (128, 34469), (144, 34613), (154, 34670), (156, 34685), (158, 34697), (160, 34718), (163, 34739), (168, 34769), (169, 34775), (174, 34796), (183, 34847), (194, 34907), (195, 34913), (220, 35039), (225, 35063), (251, 35255), (255, 35282), (258, 35297), (260, 35306), (263, 35321), (265, 35336), (266, 35351), (267, 35357), (270, 35387), (272, 35396), (273, 35411), (291, 35603), (293, 35657), (303, 35714), (327, 35882), (331, 35903), (341, 35951),