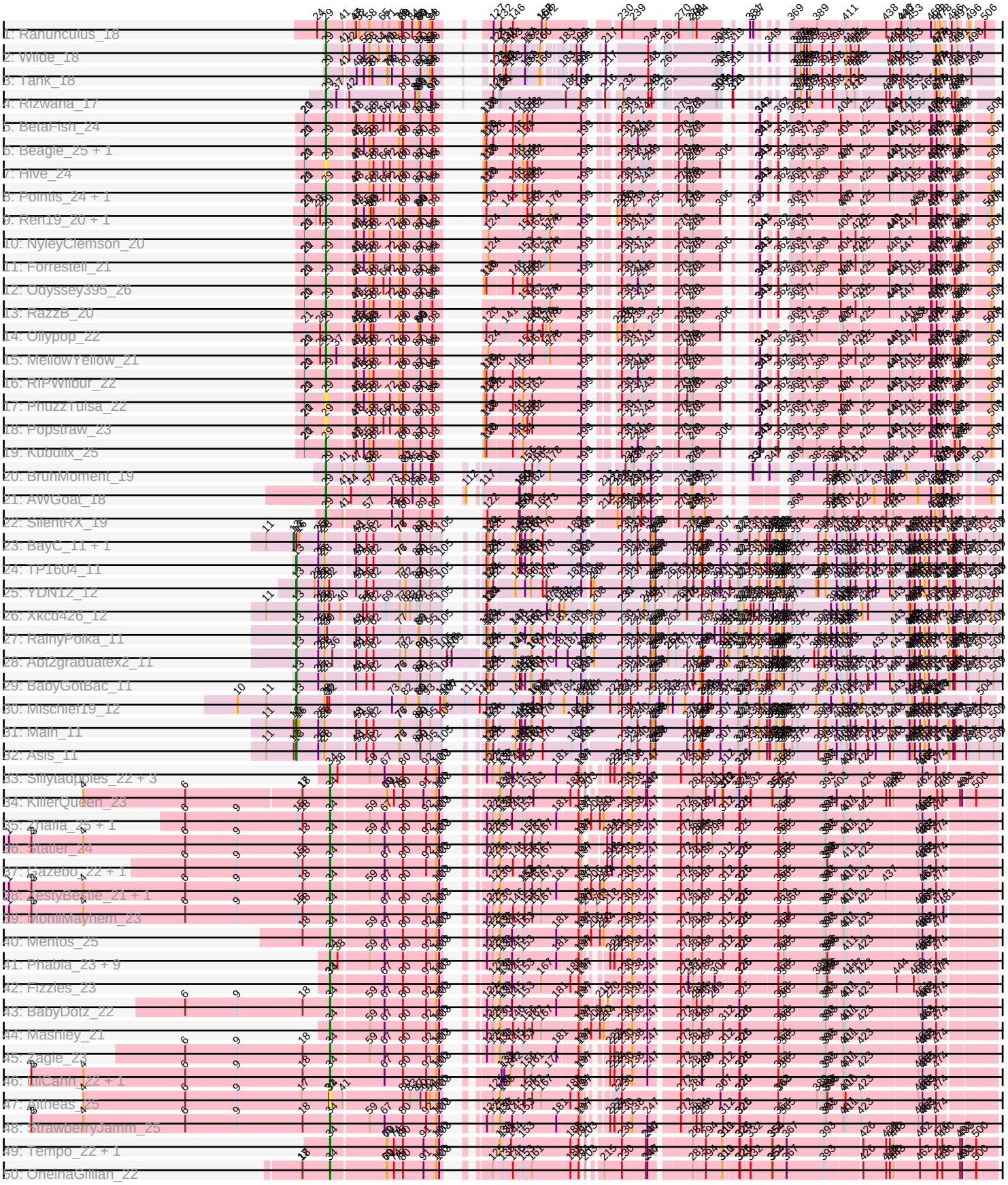
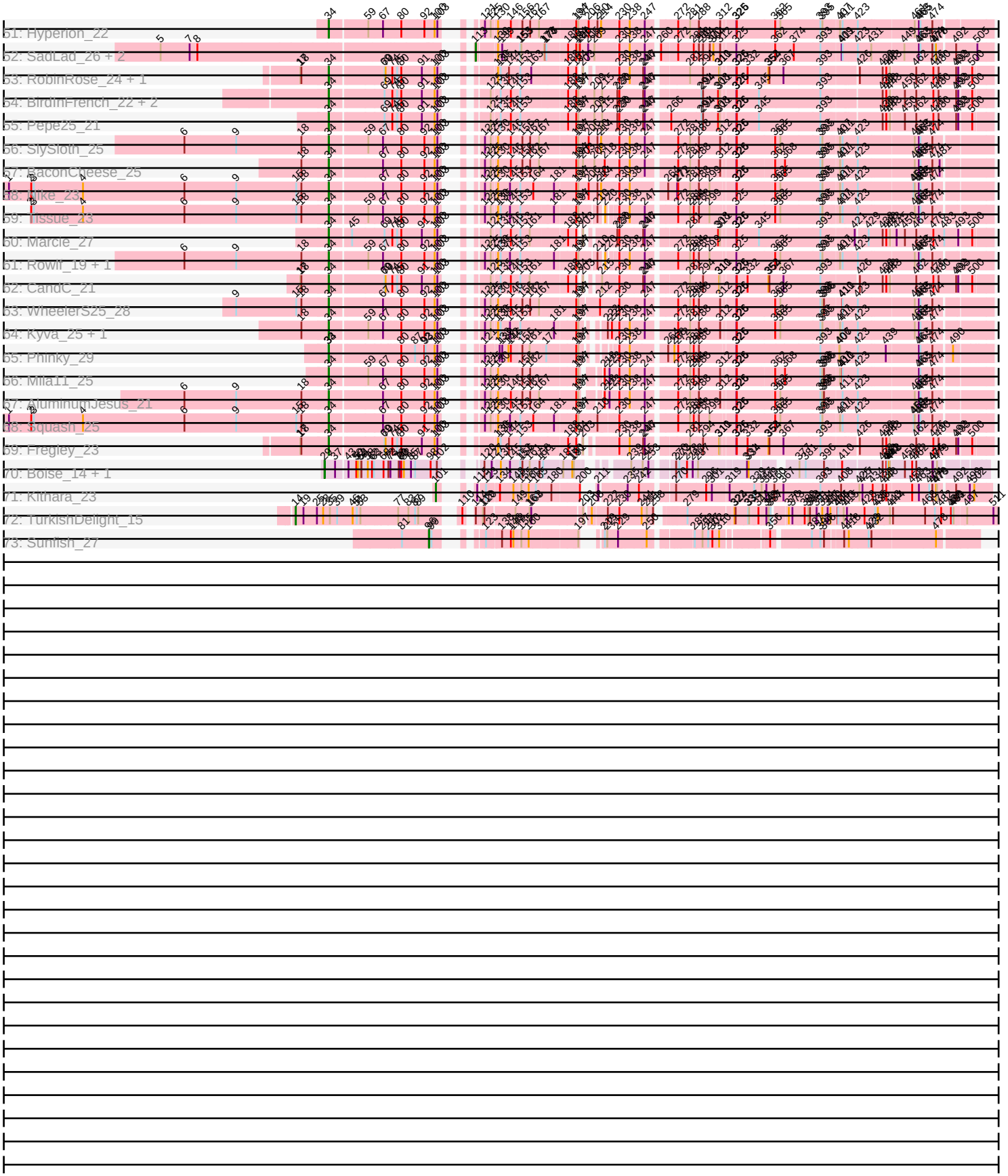
Pham 347450



Pham 347450


51: Hyperion_22
52: SadLad_26 + 2
53: RobinRose_24 + 1
54: BirdinFrench_22 + 2
55: Pepe25_21
56: SlySloth_25
57: BaconCheese_25
58: Mike_23
59: Tissue_23
60: Marcie_27
61: Rowil_19 + 1
62: CandC_21
63: WheelerS25_28
64: Kyva_25 + 1
65: Phinky_29
66: Mila11_25
67: AluminumJesus_21
68: Squash_25
69: Fregley_23
70: Boise_14 + 1
71: Kithara_23
72: TurkishDelight_15
73: Sunfish_27

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 347450 Report

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

Pham number 347450 has 102 members, 9 are drafts.

Phages represented in each track:
- Track 1 : Ranunculus_18
- Track 2 : Wilde_18
- Track 3 : Tank_18
- Track 4 : Rizwana_17
- Track 5 : BetaFish_24
- Track 6 : Beagle_25, Pureglobe5_26
- Track 7 : Hive_24
- Track 8 : Pointis_24, DogYard_24
- Track 9 : Ren19_20, Nikan_20
- Track 10 : NyleyClemson_20
- Track 11 : Forrestell_21
- Track 12 : Odyssey395_26
- Track 13 : RazzB_20
- Track 14 : Ollypop_22
- Track 15 : MellowYellow_21
- Track 16 : RIPWilbur_22
- Track 17 : PhuzzTulsa_22
- Track 18 : Popstraw_23
- Track 19 : Kubulix_25
- Track 20 : BruhMoment_19
- Track 21 : AWGoat_18
- Track 22 : SilentRX_19
- Track 23 : BayC_11, Salete_11
- Track 24 : TP1604_11
- Track 25 : YDN12_12
- Track 26 : Xkcd426_12
- Track 27 : RainyPolka_11
- Track 28 : Abt2graduatex2_11
- Track 29 : BabyGotBac_11
- Track 30 : Mischief19_12
- Track 31 : Maih_11
- Track 32 : Asis_11
- Track 33 : Sillytadpoles_22, Viceroy_22, Quammi_21, Rudy_21
- Track 34 : KillerQueen_23
- Track 35 : Zhafia_25, Namago_23
- Track 36 : Statler_24
- Track 37 : Gazebo_22, Blab_21

• Track 38 : ZestyBestie_21, FrankDeliGuy_20
• Track 39 : MorillMayhem_23
• Track 40 : Mentos_25
• Track 41 : Phabia_23, Llemily_22, Casend_24, Wheelie_22, Jehoshaphat_25, Teehee_24, DonaldDuck_22, Judebell_25, Lonelysoil_22, Wayne3_24
• Track 42 : Fizzles_23
• Track 43 : BabyDotz_22
• Track 44 : Mashley_21
• Track 45 : Zagie_23
• Track 46 : LilCahh_22, EverythinBagel_22
• Track 47 : Altheas_25
• Track 48 : StrawberryJamm_25
• Track 49 : Tempo_22, Kelcole_21
• Track 50 : OneinaGillian_22
• Track 51 : Hyperion_22
• Track 52 : SadLad_26, RubyRalph_25, Fransoyer_25
• Track 53 : RobinRose_24, Romm_24
• Track 54 : BirdInFrench_22, Spiderpig_22, Wilca_22
• Track 55 : Pepe25_21
• Track 56 : SlySloth_25
• Track 57 : BaconCheese_25
• Track 58 : Nike_23
• Track 59 : Tissue_23
• Track 60 : Marcie_27
• Track 61 : Rowlf_19, SallyK_24
• Track 62 : CandC_21
• Track 63 : WheelerS25_28
• Track 64 : Kyva_25, Grassboy_24
• Track 65 : Phinky_29
• Track 66 : Mila11_25
• Track 67 : AluminumJesus_21
• Track 68 : Squash_25
• Track 69 : Fregley_23
• Track 70 : Boise_14, RomansRevenge_14
• Track 71 : Kithara_23
• Track 72 : TurkishDelight_15
• Track 73 : Sunfish_27

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

The start number called the most often in the published annotations is 34, it was called in 53 of the 93 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Altheas_25, AluminumJesus_21, BabyDotz_22, BaconCheese_25, BirdInFrench_22, Blab_21, CandC_21, Casend_24, DonaldDuck_22, EverythinBagel_22, Fizzles_23, FrankDeliGuy_20, Fregley_23, Gazebo_22, Grassboy_24, Hyperion_22, Jehoshaphat_25, Judebell_25, Kelcole_21, KillerQueen_23, Kyva_25, LilCahh_22, Llemily_22, Lonelysoil_22, Marcie_27, Mashley_21, Mentos_25, Mila11_25, MorillMayhem_23, Namago_23, Nike_23,

OneinaGillian_22, Pepe25_21, Phabia_23, Phinky_29, Quammi_21, RobinRose_24, Romm_24, Rowlf_19, Rudy_21, SallyK_24, Sillytadpoles_22, SlySloth_25, Spiderpig_22, Squash_25, Statler_24, StrawberryJamm_25, Teehee_24, Tempo_22, Tissue_23, Viceroy_22, Wayne3_24, WheelerS25_28, Wheelie_22, Wilca_22, Zagie_23, ZestyBestie_21, Zhafia_25,

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

Genes that do not have the "Most Annotated" start:
• AWGoat_18, Abt2graduatex2_11, Asis_11, BabyGotBac_11, BayC_11, Beagle_25, BetaFish_24, Boise_14, BruhMoment_19, DogYard_24, Forrestell_21, Fransoyer_25, Hive_24, Kithara_23, Kubulix_25, Maih_11, MellowYellow_21, Mischief19_12, Nikan_20, NyleyClemson_20, Odyssey395_26, Ollypop_22, PhuzzTulsa_22, Pointis_24, Popstraw_23, Pureglobe5_26, RIPWilbur_22, RainyPolka_11, Ranunculus_18, RazzB_20, Ren19_20, Rizwana_17, RomansRevenge_14, RubyRalph_25, SadLad_26, Salete_11, SilentRX_19, Sunfish_27, TP1604_11, Tank_18, TurkishDelight_15, Wilde_18, Xkcd426_12, YDN12_12,

Summary by start number:

Start 12:
• Found in 4 of 102 (3.9%) of genes in pham
• Manual Annotations of this start: 2 of 93
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BayC_11 (BG), Salete_11 (BG),

Start 13:
• Found in 11 of 102 (10.8%) of genes in pham
• Manual Annotations of this start: 9 of 93
• Called 81.8% of time when present
• Phage (with cluster) where this start called: Abt2graduatex2_11 (BG), Asis_11 (BG), BabyGotBac_11 (BG), Maih_11 (BG), Mischief19_12 (BG), RainyPolka_11 (BG), TP1604_11 (BG), Xkcd426_12 (BG), YDN12_12 (BG),

Start 14:
• Found in 1 of 102 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 93
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TurkishDelight_15 (singleton),

Start 29:
• Found in 27 of 102 (26.5%) of genes in pham
• Manual Annotations of this start: 23 of 93
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AWGoat_18 (AP4), Beagle_25 (AP2), BetaFish_24 (AP2), Boise_14 (FT), BruhMoment_19 (AP3), DogYard_24 (AP2), Forrestell_21 (AP2), Hive_24 (AP2), Kubulix_25 (AP2), MellowYellow_21 (AP2), Nikan_20 (AP2), NyleyClemson_20 (AP2), Odyssey395_26 (AP2), Ollypop_22 (AP2), PhuzzTulsa_22 (AP2), Pointis_24 (AP2), Popstraw_23 (AP2), Pureglobe5_26 (AP2), RIPWilbur_22 (AP2), Ranunculus_18 (AP), RazzB_20 (AP2), Ren19_20 (AP2), Rizwana_17 (AP1), RomansRevenge_14 (FT), SilentRX_19 (AP4), Tank_18 (AP1), Wilde_18 (AP1),

Start 34:
• Found in 58 of 102 (56.9%) of genes in pham
• Manual Annotations of this start: 53 of 93
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altheas_25 (EG), AluminumJesus_21 (EG), BabyDotz_22 (EG), BaconCheese_25 (EG), BirdInFrench_22 (EG), Blab_21 (EG), CandC_21 (EG), Casend_24 (EG), DonaldDuck_22 (EG), EverythinBagel_22 (EG), Fizzles_23 (EG), FrankDeliGuy_20 (EG), Fregley_23 (EG), Gazebo_22 (EG), Grassboy_24 (EG), Hyperion_22 (EG), Jehoshaphat_25 (EG), Judebell_25 (EG), Kelcole_21 (EG), KillerQueen_23 (EG), Kyva_25 (EG), LilCahh_22 (EG), Llemily_22 (EG), Lonelysoil_22 (EG), Marcie_27 (EG), Mashley_21 (EG), Mentos_25 (EG), Mila11_25 (EG), MorillMayhem_23 (EG), Namago_23 (EG), Nike_23 (EG), OneinaGillian_22 (EG), Pepe25_21 (EG), Phabia_23 (EG), Phinky_29 (EG), Quammi_21 (EG), RobinRose_24 (EG), Romm_24 (EG), Rowlf_19 (EG), Rudy_21 (EG), SallyK_24 (EG), Sillytadpoles_22 (EG), SlySloth_25 (EG), Spiderpig_22 (EG), Squash_25 (EG), Statler_24 (EG), StrawberryJamm_25 (EG), Teehee_24 (EG), Tempo_22 (EG), Tissue_23 (EG), Viceroy_22 (EG), Wayne3_24 (EG), WheelerS25_28 (EG), Wheelie_22 (EG), Wilca_22 (EG), Zagie_23 (EG), ZestyBestie_21 (EG), Zhafia_25 (EG),

Start 96:
• Found in 1 of 102 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 93
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sunfish_27 (singleton),

Start 101:
• Found in 1 of 102 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 93
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kithara_23 (singleton),

Start 113:
• Found in 3 of 102 (2.9%) of genes in pham
• Manual Annotations of this start: 3 of 93
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fransoyer_25 (EG), RubyRalph_25 (EG), SadLad_26 (EG),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, BG, FT, AP2, AP3, EG, AP1, AP4, AP,

Info for manual annotations of cluster AP:
•Start number 29 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:
•Start number 29 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:
•Start number 29 was manually annotated 15 times for cluster AP2.

Info for manual annotations of cluster AP3:
•Start number 29 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:
•Start number 29 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster BG:
•Start number 12 was manually annotated 2 times for cluster BG.
•Start number 13 was manually annotated 9 times for cluster BG.

Info for manual annotations of cluster EG:
•Start number 34 was manually annotated 53 times for cluster EG.
•Start number 113 was manually annotated 3 times for cluster EG.

Info for manual annotations of cluster FT:
•Start number 29 was manually annotated 1 time for cluster FT.

Gene Information:

Gene: AWGoat_18 Start: 10621, Stop: 13443, Start Num: 29
Candidate Starts for AWGoat_18:
(Start: 29 @10621 has 23 MA's), (41, 10717), (44, 10738), (57, 10831), (73, 10966), (80, 11023), (85, 11074), (89, 11113), (98, 11185), (112, 11251), (117, 11272), (150, 11443), (151, 11449), (153, 11452), (162, 11506), (199, 11740), (213, 11794), (222, 11836), (226, 11866), (230, 11887), (237, 11923), (239, 11938), (242, 11977), (253, 12031), (270, 12124), (279, 12181), (280, 12190), (281, 12196), (292, 12244), (369, 12475), (396, 12676), (399, 12706), (401, 12712), (407, 12736), (422, 12814), (430, 12886), (438, 12943), (440, 12964), (443, 12985), (460, 13114), (469, 13186), (472, 13210), (478, 13234), (479, 13240), (481, 13255), (486, 13276), (508, 13426),

Gene: Abt2graduatex2_11 Start: 9829, Stop: 13581, Start Num: 13
Candidate Starts for Abt2graduatex2_11:
(Start: 13 @9829 has 9 MA's), (25, 9955), (27, 9973), (28, 9991), (36, 10036), (48, 10144), (51, 10156), (56, 10204), (62, 10243), (77, 10384), (82, 10417), (89, 10492), (90, 10495), (95, 10552), (105, 10600), (108, 10633), (109, 10660), (120, 10837), (124, 10849), (126, 10876), (147, 10972), (148, 10984), (160, 11068), (161, 11074), (170, 11137), (181, 11203), (187, 11260), (199, 11320), (201, 11329), (203, 11344), (208, 11371), (230, 11524), (237, 11572), (240, 11608), (252, 11683), (256, 11698), (257, 11710), (258, 11713), (262, 11761), (263, 11764), (267, 11806), (276, 11869), (286, 11932), (289, 11944), (290, 11947), (307, 12049), (314, 12070), (316, 12088), (317, 12094), (323, 12145), (327, 12157), (328, 12178), (335, 12226), (340, 12265), (350, 12328), (351, 12331), (354, 12343), (358, 12358), (361, 12367), (363, 12379), (364, 12391), (366, 12403), (375, 12481), (386, 12574), (390, 12598), (394, 12640), (397, 12670), (403, 12703), (405, 12730), (413, 12763), (415, 12781), (433, 12916), (443, 13015), (449, 13087), (451, 13096), (453, 13105), (454, 13111), (457, 13126), (462, 13156), (466, 13183), (468, 13207), (473, 13246), (484, 13315), (487, 13339), (488, 13348), (490, 13360), (494, 13402), (495, 13417), (503, 13465), (509, 13546),

Gene: Altheas_25 Start: 10980, Stop: 14174, Start Num: 34
Candidate Starts for Altheas_25:
(4, 9573), (6, 10161), (9, 10452), (17, 10824), (31, 10977), (Start: 34 @10980 has 53 MA's), (41, 11052), (80, 11361), (83, 11397), (87, 11436), (90, 11454), (92, 11487), (94, 11508), (100, 11544), (103, 11559), (125, 11676), (130, 11706), (135, 11721), (156, 11823), (162, 11865), (167, 11910),

(188, 12051), (194, 12090), (197, 12102), (225, 12186), (230, 12219), (272, 12501), (281, 12570), (307, 12726), (325, 12801), (326, 12804), (362, 13014), (363, 13020), (389, 13230), (393, 13269), (395, 13281), (396, 13290), (407, 13359), (410, 13371), (423, 13458), (461, 13767), (463, 13791), (465, 13800), (474, 13866),

Gene: AluminumJesus_21 Start: 10324, Stop: 13551, Start Num: 34
Candidate Starts for AluminumJesus_21:
(6, 9502), (9, 9793), (18, 10171), (Start: 34 @10324 has 53 MA's), (67, 10606), (80, 10705), (92, 10831), (100, 10888), (103, 10903), (121, 10984), (125, 11017), (130, 11047), (146, 11119), (156, 11164), (162, 11206), (167, 11251), (194, 11431), (197, 11443), (218, 11515), (223, 11539), (230, 11581), (238, 11632), (247, 11713), (272, 11863), (281, 11932), (288, 11980), (312, 12103), (325, 12163), (326, 12166), (362, 12385), (365, 12412), (393, 12640), (395, 12652), (396, 12661), (411, 12751), (423, 12835), (461, 13144), (463, 13168), (465, 13177), (474, 13243),

Gene: Asis_11 Start: 9886, Stop: 13464, Start Num: 13
Candidate Starts for Asis_11:
(11, 9712), (Start: 12 @9871 has 2 MA's), (Start: 13 @9886 has 9 MA's), (25, 10012), (27, 10030), (28, 10048), (48, 10201), (51, 10213), (56, 10261), (62, 10300), (76, 10438), (77, 10441), (87, 10534), (89, 10549), (90, 10552), (95, 10609), (105, 10657), (120, 10708), (124, 10720), (126, 10747), (148, 10855), (151, 10876), (152, 10885), (157, 10906), (160, 10939), (161, 10945), (170, 11008), (189, 11152), (199, 11191), (201, 11200), (230, 11395), (237, 11443), (240, 11479), (252, 11554), (256, 11569), (257, 11581), (258, 11584), (276, 11743), (282, 11773), (286, 11806), (289, 11818), (290, 11821), (307, 11923), (323, 12025), (327, 12037), (330, 12091), (340, 12145), (348, 12190), (349, 12205), (350, 12208), (358, 12238), (359, 12241), (363, 12250), (364, 12262), (366, 12274), (371, 12322), (375, 12352), (390, 12469), (394, 12511), (403, 12574), (405, 12601), (413, 12634), (415, 12652), (420, 12682), (428, 12745), (433, 12787), (440, 12865), (443, 12886), (449, 12958), (451, 12967), (454, 12982), (457, 12997), (462, 13027), (466, 13054), (468, 13078), (476, 13126), (477, 13132), (484, 13186), (485, 13192), (487, 13210), (488, 13219), (494, 13273), (495, 13288), (503, 13348), (509, 13429),

Gene: BabyDotz_22 Start: 10589, Stop: 13792, Start Num: 34
Candidate Starts for BabyDotz_22:
(6, 9767), (9, 10058), (18, 10436), (Start: 34 @10589 has 53 MA's), (59, 10790), (67, 10871), (80, 10970), (92, 11096), (100, 11153), (103, 11168), (121, 11249), (125, 11282), (130, 11312), (135, 11327), (145, 11378), (153, 11411), (181, 11579), (194, 11687), (197, 11699), (210, 11771), (220, 11795), (230, 11837), (238, 11888), (247, 11969), (272, 12119), (281, 12188), (284, 12209), (288, 12236), (299, 12293), (325, 12410), (362, 12632), (365, 12659), (393, 12887), (395, 12899), (407, 12977), (411, 12992), (423, 13076), (461, 13385), (463, 13409), (465, 13418), (474, 13484),

Gene: BabyGotBac_11 Start: 9886, Stop: 13464, Start Num: 13
Candidate Starts for BabyGotBac_11:
(Start: 13 @9886 has 9 MA's), (25, 10012), (27, 10030), (28, 10048), (48, 10201), (51, 10213), (56, 10261), (62, 10300), (76, 10438), (77, 10441), (87, 10534), (89, 10549), (90, 10552), (95, 10609), (105, 10657), (120, 10708), (124, 10720), (126, 10747), (148, 10855), (151, 10876), (152, 10885), (157, 10906), (160, 10939), (161, 10945), (170, 11008), (189, 11152), (199, 11191), (201, 11200), (230, 11395), (237, 11443), (240, 11479), (252, 11554), (256, 11569), (257, 11581), (258, 11584), (276, 11743), (282, 11773), (286, 11806), (289, 11818), (290, 11821), (307, 11923), (323, 12025), (327, 12037), (330, 12091), (340, 12145), (348, 12190), (349, 12205), (350, 12208), (358, 12238), (359, 12241), (363, 12250), (364, 12262), (366, 12274), (371, 12322), (375, 12352), (390, 12469), (394, 12511), (403, 12574), (405, 12601), (413, 12634), (415, 12652), (420, 12682), (428, 12745), (433, 12787), (440, 12865), (443, 12886), (449, 12958), (451, 12967), (454, 12982), (457, 12997), (462, 13027), (466, 13054), (468, 13078), (476, 13126), (477, 13132), (484, 13186), (485, 13192), (487, 13210), (488, 13219), (494, 13273), (495, 13288), (503, 13348), (509, 13429),

Gene: BaconCheese_25 Start: 11742, Stop: 15041, Start Num: 34
Candidate Starts for BaconCheese_25:
(18, 11589), (Start: 34 @11742 has 53 MA's), (67, 12024), (80, 12123), (92, 12249), (100, 12306), (103, 12321), (121, 12402), (125, 12435), (130, 12465), (146, 12537), (156, 12582), (162, 12624), (167, 12669), (194, 12849), (197, 12861), (203, 12888), (209, 12948), (218, 13008), (230, 13092), (238, 13143), (247, 13224), (272, 13374), (281, 13443), (288, 13491), (312, 13614), (325, 13674), (326, 13677), (362, 13881), (368, 13935), (393, 14136), (395, 14148), (407, 14226), (411, 14241), (423, 14325), (461, 14634), (463, 14658), (465, 14667), (474, 14733), (481, 14772),

Gene: BayC_11 Start: 9871, Stop: 13464, Start Num: 12
Candidate Starts for BayC_11:
(11, 9712), (Start: 12 @9871 has 2 MA's), (Start: 13 @9886 has 9 MA's), (16, 9901), (25, 10012), (27, 10030), (28, 10048), (48, 10201), (51, 10213), (56, 10261), (62, 10300), (76, 10438), (77, 10441), (87, 10534), (89, 10549), (90, 10552), (95, 10609), (105, 10657), (120, 10708), (124, 10720), (126, 10747), (148, 10855), (151, 10876), (152, 10885), (157, 10906), (160, 10939), (161, 10945), (170, 11008), (189, 11152), (199, 11191), (201, 11200), (230, 11395), (237, 11443), (240, 11479), (252, 11554), (256, 11569), (257, 11581), (258, 11584), (276, 11743), (282, 11773), (286, 11806), (289, 11818), (290, 11821), (307, 11923), (323, 12025), (327, 12037), (330, 12091), (340, 12145), (348, 12190), (349, 12205), (350, 12208), (358, 12238), (359, 12241), (363, 12250), (364, 12262), (366, 12274), (371, 12322), (375, 12352), (390, 12469), (394, 12511), (403, 12574), (405, 12601), (413, 12634), (415, 12652), (420, 12682), (428, 12745), (433, 12787), (440, 12865), (443, 12886), (449, 12958), (451, 12967), (454, 12982), (457, 12997), (462, 13027), (466, 13054), (468, 13078), (476, 13126), (477, 13132), (484, 13186), (487, 13210), (488, 13219), (494, 13273), (495, 13288), (503, 13348), (509, 13429),

Gene: Beagle_25 Start: 11274, Stop: 13937, Start Num: 29
Candidate Starts for Beagle_25:
(20, 11160), (21, 11163), (Start: 29 @11274 has 23 MA's), (47, 11412), (48, 11421), (55, 11466), (58, 11496), (62, 11520), (76, 11655), (80, 11676), (87, 11751), (90, 11769), (98, 11838), (118, 11892), (120, 11904), (126, 11943), (146, 12033), (154, 12072), (199, 12354), (230, 12444), (237, 12483), (241, 12516), (243, 12546), (270, 12684), (279, 12741), (281, 12756), (341, 12915), (343, 12921), (362, 12951), (369, 12966), (377, 13026), (389, 13107), (404, 13215), (425, 13311), (440, 13455), (441, 13461), (447, 13521), (455, 13578), (469, 13677), (470, 13683), (475, 13710), (479, 13731), (488, 13785), (491, 13794), (492, 13809), (508, 13923),

Gene: BetaFish_24 Start: 11477, Stop: 14140, Start Num: 29
Candidate Starts for BetaFish_24:
(20, 11363), (21, 11366), (Start: 29 @11477 has 23 MA's), (47, 11615), (48, 11624), (58, 11699), (62, 11723), (66, 11774), (72, 11810), (76, 11858), (80, 11879), (87, 11954), (90, 11972), (95, 12029), (98, 12041), (118, 12095), (120, 12107), (146, 12236), (154, 12275), (158, 12299), (162, 12326), (199, 12557), (230, 12647), (237, 12686), (243, 12749), (270, 12887), (279, 12944), (281, 12959), (341, 13118), (343, 13124), (362, 13154), (369, 13169), (377, 13229), (404, 13418), (425, 13514), (440, 13658), (441, 13664), (447, 13724), (455, 13781), (469, 13880), (470, 13886), (475, 13913), (479, 13934), (488, 13988), (491, 13997), (492, 14012), (508, 14126),

Gene: BirdInFrench_22 Start: 9464, Stop: 12697, Start Num: 34
Candidate Starts for BirdInFrench_22:
(Start: 34 @9464 has 53 MA's), (69, 9755), (74, 9797), (75, 9821), (80, 9845), (91, 9956), (100, 10028), (103, 10043), (125, 10157), (135, 10199), (146, 10250), (153, 10283), (188, 10520), (194, 10559), (197, 10571), (209, 10658), (215, 10694), (228, 10769), (230, 10781), (246, 10904), (247, 10913), (291, 11183), (294, 11192), (308, 11261), (311, 11270), (325, 11333), (326, 11336), (345, 11462), (393, 11795), (438, 12095), (440, 12116), (443, 12137), (450, 12212), (462, 12278), (476, 12377),

(480, 12407), (492, 12509), (493, 12521), (500, 12587),

Gene: Blab_21 Start: 10200, Stop: 13427, Start Num: 34
Candidate Starts for Blab_21:
(6, 9378), (9, 9669), (15, 10017), (18, 10047), (Start: 34 @10200 has 53 MA's), (67, 10482), (80, 10581), (92, 10707), (100, 10764), (103, 10779), (121, 10860), (125, 10893), (130, 10923), (146, 10995), (156, 11040), (162, 11082), (167, 11127), (194, 11307), (197, 11319), (218, 11391), (223, 11415), (230, 11457), (238, 11508), (247, 11589), (272, 11739), (281, 11808), (288, 11856), (312, 11979), (325, 12039), (326, 12042), (362, 12261), (365, 12288), (393, 12516), (395, 12528), (396, 12537), (411, 12627), (423, 12711), (461, 13020), (463, 13044), (465, 13053), (474, 13119),

Gene: Boise_14 Start: 8225, Stop: 11137, Start Num: 29
Candidate Starts for Boise_14:
(Start: 29 @8225 has 23 MA's), (37, 8285), (43, 8336), (50, 8381), (52, 8390), (53, 8405), (54, 8411), (58, 8447), (62, 8471), (63, 8483), (68, 8531), (72, 8558), (73, 8570), (78, 8612), (79, 8621), (80, 8627), (82, 8642), (85, 8678), (87, 8702), (98, 8789), (102, 8816), (120, 8879), (127, 8921), (136, 8954), (145, 8996), (153, 9029), (156, 9041), (161, 9080), (168, 9128), (171, 9140), (185, 9242), (190, 9293), (191, 9302), (239, 9476), (245, 9536), (253, 9569), (270, 9662), (273, 9671), (278, 9716), (283, 9749), (287, 9776), (331, 10004), (334, 10013), (377, 10214), (381, 10250), (396, 10355), (410, 10424), (438, 10628), (440, 10649), (441, 10655), (442, 10664), (443, 10670), (450, 10745), (458, 10787), (462, 10811), (474, 10889), (475, 10892), (479, 10913),

Gene: BruhMoment_19 Start: 10544, Stop: 13339, Start Num: 29
Candidate Starts for BruhMoment_19:
(Start: 29 @10544 has 23 MA's), (41, 10640), (47, 10682), (57, 10754), (58, 10766), (62, 10790), (80, 10946), (82, 10961), (85, 10997), (90, 11039), (97, 11099), (98, 11108), (156, 11396), (162, 11438), (165, 11462), (178, 11519), (199, 11672), (234, 11822), (237, 11855), (239, 11870), (253, 11963), (279, 12113), (281, 12128), (336, 12284), (337, 12287), (349, 12335), (369, 12380), (385, 12503), (396, 12581), (401, 12617), (402, 12620), (413, 12665), (419, 12704), (438, 12854), (441, 12881), (448, 12959), (474, 13127), (478, 13145), (479, 13151), (481, 13166), (490, 13211), (491, 13214), (501, 13256),

Gene: CandC_21 Start: 9150, Stop: 12302, Start Num: 34
Candidate Starts for CandC_21:
(17, 8991), (18, 8997), (Start: 34 @9150 has 53 MA's), (69, 9441), (70, 9447), (74, 9483), (75, 9507), (80, 9531), (91, 9642), (100, 9714), (103, 9729), (125, 9843), (135, 9885), (146, 9936), (153, 9969), (161, 10020), (188, 10206), (194, 10245), (203, 10257), (215, 10296), (230, 10383), (246, 10506), (247, 10515), (281, 10722), (294, 10794), (310, 10866), (311, 10869), (325, 10932), (326, 10935), (332, 10995), (352, 11103), (354, 11109), (367, 11190), (393, 11400), (426, 11568), (438, 11700), (440, 11721), (443, 11742), (462, 11883), (476, 11982), (480, 12012), (492, 12114), (493, 12126), (500, 12192),

Gene: Casend_24 Start: 10926, Stop: 14138, Start Num: 34
Candidate Starts for Casend_24:
(Start: 34 @10926 has 53 MA's), (38, 10968), (59, 11127), (67, 11208), (80, 11307), (92, 11433), (100, 11490), (103, 11505), (121, 11586), (125, 11619), (130, 11649), (135, 11664), (145, 11715), (153, 11748), (181, 11916), (194, 12024), (197, 12036), (222, 12108), (224, 12132), (230, 12174), (238, 12225), (247, 12306), (272, 12456), (281, 12525), (288, 12573), (312, 12696), (325, 12756), (326, 12759), (362, 12978), (365, 13005), (393, 13233), (395, 13245), (396, 13254), (411, 13338), (423, 13422), (461, 13731), (463, 13755), (465, 13764), (474, 13830),

Gene: DogYard_24 Start: 11344, Stop: 14007, Start Num: 29
Candidate Starts for DogYard_24:

(20, 11230), (21, 11233), (Start: 29 @11344 has 23 MA's), (47, 11482), (48, 11491), (58, 11566), (62, 11590), (66, 11641), (72, 11677), (76, 11725), (80, 11746), (87, 11821), (90, 11839), (95, 11896), (98, 11908), (118, 11962), (120, 11974), (146, 12103), (154, 12142), (158, 12166), (162, 12193), (199, 12424), (230, 12514), (237, 12553), (243, 12616), (270, 12754), (276, 12793), (279, 12811), (281, 12826), (341, 12985), (343, 12991), (362, 13021), (369, 13036), (377, 13096), (389, 13177), (404, 13285), (425, 13381), (440, 13525), (441, 13531), (447, 13591), (455, 13648), (469, 13747), (470, 13753), (475, 13780), (479, 13801), (488, 13855), (491, 13864), (508, 13993),

Gene: DonaldDuck_22 Start: 10272, Stop: 13484, Start Num: 34
Candidate Starts for DonaldDuck_22:
(Start: 34 @10272 has 53 MA's), (38, 10314), (59, 10473), (67, 10554), (80, 10653), (92, 10779), (100, 10836), (103, 10851), (121, 10932), (125, 10965), (130, 10995), (135, 11010), (145, 11061), (153, 11094), (181, 11262), (194, 11370), (197, 11382), (222, 11454), (224, 11478), (230, 11520), (238, 11571), (247, 11652), (272, 11802), (281, 11871), (288, 11919), (312, 12042), (325, 12102), (326, 12105), (362, 12324), (365, 12351), (393, 12579), (395, 12591), (396, 12600), (411, 12684), (423, 12768), (461, 13077), (463, 13101), (465, 13110), (474, 13176),

Gene: EverythinBagel_22 Start: 10666, Stop: 13887, Start Num: 34
Candidate Starts for EverythinBagel_22:
(2, 8956), (3, 8971), (4, 9256), (6, 9844), (9, 10135), (18, 10513), (Start: 34 @10666 has 53 MA's), (67, 10948), (80, 11047), (92, 11173), (100, 11230), (103, 11245), (133, 11401), (139, 11416), (142, 11449), (156, 11506), (161, 11545), (177, 11626), (194, 11773), (197, 11785), (222, 11857), (224, 11881), (230, 11923), (238, 11974), (247, 12055), (272, 12205), (281, 12274), (288, 12322), (289, 12325), (312, 12445), (325, 12505), (326, 12508), (362, 12727), (365, 12754), (393, 12982), (395, 12994), (407, 13072), (411, 13087), (423, 13171), (461, 13480), (463, 13504), (465, 13513), (474, 13579),

Gene: Fizzles_23 Start: 10269, Stop: 13466, Start Num: 34
Candidate Starts for Fizzles_23:
(33, 10266), (Start: 34 @10269 has 53 MA's), (67, 10551), (80, 10650), (92, 10776), (100, 10833), (103, 10848), (125, 10965), (130, 10992), (135, 11007), (145, 11058), (153, 11091), (167, 11190), (188, 11328), (194, 11367), (197, 11379), (230, 11517), (238, 11568), (247, 11649), (272, 11799), (277, 11841), (281, 11868), (288, 11916), (301, 11991), (325, 12099), (326, 12102), (362, 12309), (365, 12336), (389, 12525), (393, 12564), (395, 12576), (396, 12585), (411, 12669), (417, 12702), (423, 12756), (444, 12939), (456, 13038), (461, 13065), (465, 13098), (474, 13164), (477, 13176),

Gene: Forrestell_21 Start: 9985, Stop: 12645, Start Num: 29
Candidate Starts for Forrestell_21:
(20, 9871), (21, 9874), (Start: 29 @9985 has 23 MA's), (47, 10123), (48, 10132), (55, 10177), (58, 10207), (62, 10231), (72, 10318), (76, 10366), (80, 10387), (87, 10462), (90, 10480), (95, 10537), (98, 10549), (124, 10624), (153, 10777), (162, 10831), (171, 10888), (178, 10912), (199, 11062), (230, 11152), (237, 11191), (243, 11254), (270, 11392), (279, 11449), (281, 11464), (306, 11581), (341, 11623), (343, 11629), (362, 11659), (369, 11674), (377, 11734), (389, 11815), (404, 11923), (420, 11995), (425, 12019), (440, 12163), (447, 12229), (469, 12385), (470, 12391), (475, 12418), (479, 12439), (488, 12493), (491, 12502), (492, 12517), (508, 12631),

Gene: FrankDeliGuy_20 Start: 10132, Stop: 13446, Start Num: 34
Candidate Starts for FrankDeliGuy_20:
(1, 8293), (2, 8422), (3, 8437), (4, 8722), (6, 9310), (9, 9601), (18, 9979), (Start: 34 @10132 has 53 MA's), (59, 10333), (67, 10414), (80, 10513), (100, 10696), (103, 10711), (125, 10825), (130, 10855), (153, 10960), (156, 10972), (162, 11014), (167, 11059), (181, 11131), (194, 11239), (197, 11251), (206, 11305), (210, 11356), (214, 11377), (230, 11482), (238, 11533), (247, 11614), (272, 11764), (281, 11833), (288, 11881), (312, 12004), (325, 12064), (326, 12067), (362, 12286), (365, 12313),

(393, 12541), (395, 12553), (407, 12631), (411, 12646), (423, 12730), (437, 12862), (463, 13063), (465, 13072), (474, 13138),

Gene: Fransoyer_25 Start: 10895, Stop: 13540, Start Num: 113
Candidate Starts for Fransoyer_25:
(5, 9308), (7, 9476), (8, 9521), (Start: 113 @10895 has 3 MA's), (130, 10997), (139, 11021), (153, 11099), (155, 11105), (173, 11219), (176, 11228), (177, 11231), (188, 11339), (194, 11378), (197, 11390), (200, 11399), (205, 11441), (209, 11477), (230, 11600), (238, 11651), (247, 11732), (260, 11786), (272, 11870), (284, 11960), (288, 11987), (294, 12011), (300, 12041), (304, 12059), (312, 12098), (325, 12158), (362, 12380), (374, 12479), (393, 12629), (409, 12728), (411, 12734), (423, 12818), (431, 12896), (449, 13067), (463, 13151), (465, 13160), (474, 13226), (477, 13238), (478, 13244), (492, 13337), (505, 13451),

Gene: Fregley_23 Start: 9690, Stop: 12875, Start Num: 34
Candidate Starts for Fregley_23:
(17, 9531), (18, 9537), (Start: 34 @9690 has 53 MA's), (69, 9981), (70, 9987), (74, 10023), (75, 10047), (80, 10071), (91, 10182), (100, 10254), (103, 10269), (130, 10416), (135, 10431), (144, 10476), (153, 10542), (188, 10779), (194, 10818), (203, 10830), (230, 10956), (238, 11007), (246, 11079), (247, 11088), (281, 11295), (294, 11367), (310, 11439), (311, 11442), (325, 11505), (326, 11508), (332, 11568), (352, 11676), (354, 11682), (367, 11763), (393, 11973), (426, 12141), (438, 12273), (440, 12294), (443, 12315), (462, 12456), (476, 12555), (480, 12585), (492, 12687), (493, 12699), (500, 12765),

Gene: Gazebo_22 Start: 10766, Stop: 13993, Start Num: 34
Candidate Starts for Gazebo_22:
(6, 9944), (9, 10235), (15, 10583), (18, 10613), (Start: 34 @10766 has 53 MA's), (67, 11048), (80, 11147), (92, 11273), (100, 11330), (103, 11345), (121, 11426), (125, 11459), (130, 11489), (146, 11561), (156, 11606), (162, 11648), (167, 11693), (194, 11873), (197, 11885), (218, 11957), (223, 11981), (230, 12023), (238, 12074), (247, 12155), (272, 12305), (281, 12374), (288, 12422), (312, 12545), (325, 12605), (326, 12608), (362, 12827), (365, 12854), (393, 13082), (395, 13094), (396, 13103), (411, 13193), (423, 13277), (461, 13586), (463, 13610), (465, 13619), (474, 13685),

Gene: Grassboy_24 Start: 10948, Stop: 14160, Start Num: 34
Candidate Starts for Grassboy_24:
(18, 10795), (Start: 34 @10948 has 53 MA's), (59, 11149), (67, 11230), (80, 11329), (92, 11455), (100, 11512), (103, 11527), (121, 11608), (125, 11641), (130, 11671), (135, 11686), (145, 11737), (153, 11770), (181, 11938), (194, 12046), (197, 12058), (222, 12130), (224, 12154), (230, 12196), (238, 12247), (247, 12328), (272, 12478), (281, 12547), (288, 12595), (312, 12718), (325, 12778), (326, 12781), (362, 13000), (365, 13027), (393, 13255), (395, 13267), (407, 13345), (411, 13360), (423, 13444), (461, 13753), (463, 13777), (465, 13786), (474, 13852),

Gene: Hive_24 Start: 11358, Stop: 14021, Start Num: 29
Candidate Starts for Hive_24:
(20, 11244), (21, 11247), (Start: 29 @11358 has 23 MA's), (47, 11496), (48, 11505), (58, 11580), (62, 11604), (66, 11655), (72, 11691), (76, 11739), (80, 11760), (87, 11835), (90, 11853), (95, 11910), (98, 11922), (118, 11976), (120, 11988), (146, 12117), (154, 12156), (158, 12180), (162, 12207), (199, 12438), (230, 12528), (237, 12567), (243, 12630), (249, 12660), (270, 12768), (276, 12807), (279, 12825), (281, 12840), (306, 12957), (341, 12999), (343, 13005), (362, 13035), (369, 13050), (377, 13110), (389, 13191), (404, 13299), (407, 13311), (425, 13395), (440, 13539), (441, 13545), (447, 13605), (455, 13662), (469, 13761), (470, 13767), (475, 13794), (479, 13815), (488, 13869), (491, 13878), (508, 14007),

Gene: Hyperion_22 Start: 10639, Stop: 13953, Start Num: 34

Candidate Starts for Hyperion_22:
(Start: 34 @10639 has 53 MA's), (59, 10840), (67, 10921), (80, 11020), (92, 11146), (100, 11203), (103, 11218), (121, 11299), (125, 11332), (130, 11362), (146, 11434), (156, 11479), (162, 11521), (167, 11566), (194, 11746), (197, 11758), (206, 11812), (210, 11863), (214, 11884), (230, 11989), (238, 12040), (247, 12121), (272, 12271), (281, 12340), (288, 12388), (312, 12511), (325, 12571), (326, 12574), (362, 12793), (365, 12820), (393, 13048), (395, 13060), (407, 13138), (411, 13153), (423, 13237), (461, 13546), (463, 13570), (465, 13579), (474, 13645),

Gene: Jehoshaphat_25 Start: 11191, Stop: 14403, Start Num: 34
Candidate Starts for Jehoshaphat_25:
(Start: 34 @11191 has 53 MA's), (38, 11233), (59, 11392), (67, 11473), (80, 11572), (92, 11698), (100, 11755), (103, 11770), (121, 11851), (125, 11884), (130, 11914), (135, 11929), (145, 11980), (153, 12013), (181, 12181), (194, 12289), (197, 12301), (222, 12373), (224, 12397), (230, 12439), (238, 12490), (247, 12571), (272, 12721), (281, 12790), (288, 12838), (312, 12961), (325, 13021), (326, 13024), (362, 13243), (365, 13270), (393, 13498), (395, 13510), (396, 13519), (411, 13603), (423, 13687), (461, 13996), (463, 14020), (465, 14029), (474, 14095),

Gene: Judebell_25 Start: 10732, Stop: 13944, Start Num: 34
Candidate Starts for Judebell_25:
(Start: 34 @10732 has 53 MA's), (38, 10774), (59, 10933), (67, 11014), (80, 11113), (92, 11239), (100, 11296), (103, 11311), (121, 11392), (125, 11425), (130, 11455), (135, 11470), (145, 11521), (153, 11554), (181, 11722), (194, 11830), (197, 11842), (222, 11914), (224, 11938), (230, 11980), (238, 12031), (247, 12112), (272, 12262), (281, 12331), (288, 12379), (312, 12502), (325, 12562), (326, 12565), (362, 12784), (365, 12811), (393, 13039), (395, 13051), (396, 13060), (411, 13144), (423, 13228), (461, 13537), (463, 13561), (465, 13570), (474, 13636),

Gene: Kelcole_21 Start: 9542, Stop: 12727, Start Num: 34
Candidate Starts for Kelcole_21:
(Start: 34 @9542 has 53 MA's), (69, 9833), (70, 9839), (74, 9875), (75, 9899), (80, 9923), (91, 10034), (100, 10106), (103, 10121), (130, 10268), (135, 10283), (144, 10328), (153, 10394), (188, 10631), (194, 10670), (203, 10682), (230, 10808), (246, 10931), (247, 10940), (281, 11147), (294, 11219), (310, 11291), (311, 11294), (325, 11357), (326, 11360), (332, 11420), (352, 11528), (354, 11534), (367, 11615), (393, 11825), (426, 11993), (438, 12125), (440, 12146), (443, 12167), (462, 12308), (476, 12407), (480, 12437), (492, 12539), (493, 12551), (500, 12617),

Gene: KillerQueen_23 Start: 9358, Stop: 12549, Start Num: 34
Candidate Starts for KillerQueen_23:
(4, 7966), (6, 8554), (17, 9199), (18, 9205), (Start: 34 @9358 has 53 MA's), (69, 9649), (70, 9655), (74, 9691), (75, 9715), (80, 9739), (91, 9850), (100, 9922), (103, 9937), (130, 10084), (135, 10099), (144, 10144), (153, 10210), (163, 10270), (188, 10447), (194, 10486), (203, 10498), (230, 10624), (238, 10675), (246, 10747), (247, 10756), (281, 10963), (294, 11035), (301, 11068), (310, 11110), (311, 11113), (312, 11116), (321, 11161), (325, 11176), (332, 11239), (352, 11347), (354, 11353), (363, 11392), (367, 11431), (393, 11641), (403, 11710), (426, 11815), (438, 11947), (440, 11968), (443, 11989), (462, 12130), (476, 12229), (480, 12259), (492, 12361), (493, 12373), (500, 12439),

Gene: Kithara_23 Start: 11702, Stop: 14305, Start Num: 101
Candidate Starts for Kithara_23:
(Start: 101 @11702 has 1 MA's), (115, 11768), (123, 11801), (134, 11864), (148, 11936), (155, 11963), (160, 12005), (165, 12041), (180, 12110), (200, 12254), (211, 12266), (235, 12407), (242, 12467), (270, 12617), (296, 12788), (301, 12821), (319, 12902), (339, 13037), (347, 13079), (349, 13097), (360, 13142), (367, 13193), (393, 13403), (408, 13508), (425, 13610), (427, 13628), (434, 13685), (438, 13736), (440, 13757), (458, 13895), (463, 13934), (471, 13991), (474, 13997), (478, 14015), (479, 14021), (492, 14105), (499, 14180), (502, 14204),

Gene: Kubulix_25 Start: 11467, Stop: 14130, Start Num: 29
Candidate Starts for Kubulix_25:
(20, 11353), (21, 11356), (Start: 29 @11467 has 23 MA's), (47, 11605), (48, 11614), (55, 11659), (58, 11689), (62, 11713), (76, 11848), (80, 11869), (87, 11944), (90, 11962), (98, 12031), (118, 12085), (120, 12097), (146, 12226), (154, 12265), (199, 12547), (230, 12637), (237, 12676), (241, 12709), (243, 12739), (270, 12877), (279, 12934), (281, 12949), (306, 13066), (341, 13108), (343, 13114), (362, 13144), (369, 13159), (377, 13219), (389, 13300), (404, 13408), (425, 13504), (440, 13648), (441, 13654), (447, 13714), (455, 13771), (469, 13870), (470, 13876), (475, 13903), (479, 13924), (488, 13978), (491, 13987), (492, 14002), (508, 14116),

Gene: Kyva_25 Start: 10983, Stop: 14195, Start Num: 34
Candidate Starts for Kyva_25:
(18, 10830), (Start: 34 @10983 has 53 MA's), (59, 11184), (67, 11265), (80, 11364), (92, 11490), (100, 11547), (103, 11562), (121, 11643), (125, 11676), (130, 11706), (135, 11721), (145, 11772), (153, 11805), (181, 11973), (194, 12081), (197, 12093), (222, 12165), (224, 12189), (230, 12231), (238, 12282), (247, 12363), (272, 12513), (281, 12582), (288, 12630), (312, 12753), (325, 12813), (326, 12816), (362, 13035), (365, 13062), (393, 13290), (395, 13302), (407, 13380), (411, 13395), (423, 13479), (461, 13788), (463, 13812), (465, 13821), (474, 13887),

Gene: LilCahh_22 Start: 10294, Stop: 13515, Start Num: 34
Candidate Starts for LilCahh_22:
(2, 8584), (3, 8599), (4, 8884), (6, 9472), (9, 9763), (18, 10141), (Start: 34 @10294 has 53 MA's), (67, 10576), (80, 10675), (92, 10801), (100, 10858), (103, 10873), (133, 11029), (139, 11044), (142, 11077), (156, 11134), (161, 11173), (177, 11254), (194, 11401), (197, 11413), (222, 11485), (224, 11509), (230, 11551), (238, 11602), (247, 11683), (272, 11833), (281, 11902), (288, 11950), (289, 11953), (312, 12073), (325, 12133), (326, 12136), (362, 12355), (365, 12382), (393, 12610), (395, 12622), (407, 12700), (411, 12715), (423, 12799), (461, 13108), (463, 13132), (465, 13141), (474, 13207),

Gene: Llemily_22 Start: 9967, Stop: 13179, Start Num: 34
Candidate Starts for Llemily_22:
(Start: 34 @9967 has 53 MA's), (38, 10009), (59, 10168), (67, 10249), (80, 10348), (92, 10474), (100, 10531), (103, 10546), (121, 10627), (125, 10660), (130, 10690), (135, 10705), (145, 10756), (153, 10789), (181, 10957), (194, 11065), (197, 11077), (222, 11149), (224, 11173), (230, 11215), (238, 11266), (247, 11347), (272, 11497), (281, 11566), (288, 11614), (312, 11737), (325, 11797), (326, 11800), (362, 12019), (365, 12046), (393, 12274), (395, 12286), (396, 12295), (411, 12379), (423, 12463), (461, 12772), (463, 12796), (465, 12805), (474, 12871),

Gene: Lonelysoil_22 Start: 10212, Stop: 13424, Start Num: 34
Candidate Starts for Lonelysoil_22:
(Start: 34 @10212 has 53 MA's), (38, 10254), (59, 10413), (67, 10494), (80, 10593), (92, 10719), (100, 10776), (103, 10791), (121, 10872), (125, 10905), (130, 10935), (135, 10950), (145, 11001), (153, 11034), (181, 11202), (194, 11310), (197, 11322), (222, 11394), (224, 11418), (230, 11460), (238, 11511), (247, 11592), (272, 11742), (281, 11811), (288, 11859), (312, 11982), (325, 12042), (326, 12045), (362, 12264), (365, 12291), (393, 12519), (395, 12531), (396, 12540), (411, 12624), (423, 12708), (461, 13017), (463, 13041), (465, 13050), (474, 13116),

Gene: Maih_11 Start: 9885, Stop: 13463, Start Num: 13
Candidate Starts for Maih_11:
(11, 9711), (Start: 12 @9870 has 2 MA's), (Start: 13 @9885 has 9 MA's), (16, 9900), (25, 10011), (27, 10029), (28, 10047), (48, 10200), (51, 10212), (56, 10260), (62, 10299), (76, 10437), (77, 10440), (87, 10533), (89, 10548), (90, 10551), (95, 10608), (105, 10656), (120, 10707), (124, 10719), (126, 10746),

(148, 10854), (151, 10875), (152, 10884), (157, 10905), (160, 10938), (161, 10944), (170, 11007), (189, 11151), (199, 11190), (201, 11199), (230, 11394), (237, 11442), (240, 11478), (252, 11553), (256, 11568), (257, 11580), (258, 11583), (276, 11742), (282, 11772), (286, 11805), (289, 11817), (290, 11820), (307, 11922), (323, 12024), (327, 12036), (330, 12090), (340, 12144), (348, 12189), (349, 12204), (350, 12207), (358, 12237), (359, 12240), (363, 12249), (364, 12261), (366, 12273), (371, 12321), (375, 12351), (390, 12468), (394, 12510), (403, 12573), (405, 12600), (413, 12633), (415, 12651), (420, 12681), (428, 12744), (433, 12786), (440, 12864), (443, 12885), (449, 12957), (451, 12966), (454, 12981), (457, 12996), (462, 13026), (466, 13053), (468, 13077), (476, 13125), (477, 13131), (484, 13185), (487, 13209), (488, 13218), (494, 13272), (495, 13287), (503, 13347), (509, 13428),

Gene: Marcie_27 Start: 10256, Stop: 13402, Start Num: 34
Candidate Starts for Marcie_27:
(Start: 34 @10256 has 53 MA's), (45, 10364), (69, 10547), (74, 10589), (75, 10613), (80, 10637), (91, 10748), (100, 10820), (103, 10835), (125, 10949), (135, 10991), (146, 11042), (153, 11075), (161, 11126), (188, 11312), (194, 11351), (203, 11363), (228, 11477), (230, 11489), (246, 11612), (247, 11621), (281, 11828), (308, 11966), (311, 11975), (325, 12038), (326, 12041), (345, 12167), (393, 12500), (421, 12656), (429, 12719), (438, 12800), (440, 12821), (443, 12842), (445, 12869), (450, 12917), (462, 12983), (476, 13082), (483, 13145), (493, 13226), (500, 13292),

Gene: Mashley_21 Start: 10450, Stop: 13764, Start Num: 34
Candidate Starts for Mashley_21:
(Start: 34 @10450 has 53 MA's), (59, 10651), (67, 10732), (80, 10831), (92, 10957), (100, 11014), (103, 11029), (121, 11110), (125, 11143), (130, 11173), (146, 11245), (156, 11290), (162, 11332), (167, 11377), (194, 11557), (197, 11569), (206, 11623), (210, 11674), (214, 11695), (230, 11800), (238, 11851), (247, 11932), (272, 12082), (281, 12151), (288, 12199), (312, 12322), (325, 12382), (326, 12385), (362, 12604), (365, 12631), (393, 12859), (395, 12871), (407, 12949), (411, 12964), (423, 13048), (463, 13381), (465, 13390), (474, 13456),

Gene: MellowYellow_21 Start: 10012, Stop: 12672, Start Num: 29
Candidate Starts for MellowYellow_21:
(20, 9898), (21, 9901), (26, 9985), (Start: 29 @10012 has 23 MA's), (37, 10072), (47, 10150), (48, 10159), (55, 10204), (58, 10234), (62, 10258), (72, 10345), (76, 10393), (80, 10414), (87, 10489), (90, 10507), (95, 10564), (98, 10576), (124, 10651), (153, 10804), (162, 10858), (171, 10915), (178, 10939), (199, 11089), (230, 11179), (237, 11218), (243, 11281), (270, 11419), (276, 11458), (279, 11476), (281, 11491), (341, 11650), (343, 11656), (362, 11686), (369, 11701), (377, 11761), (404, 11950), (420, 12022), (425, 12046), (440, 12190), (441, 12196), (447, 12256), (469, 12412), (470, 12418), (475, 12445), (479, 12466), (488, 12520), (491, 12529), (492, 12544), (508, 12658),

Gene: Mentos_25 Start: 11546, Stop: 14851, Start Num: 34
Candidate Starts for Mentos_25:
(18, 11393), (Start: 34 @11546 has 53 MA's), (59, 11747), (67, 11828), (80, 11927), (92, 12053), (100, 12110), (103, 12125), (121, 12206), (125, 12239), (130, 12269), (135, 12284), (145, 12335), (153, 12368), (181, 12536), (194, 12644), (197, 12656), (206, 12710), (210, 12761), (214, 12782), (230, 12887), (238, 12938), (247, 13019), (272, 13169), (281, 13238), (288, 13286), (312, 13409), (325, 13469), (326, 13472), (362, 13691), (365, 13718), (393, 13946), (395, 13958), (407, 14036), (411, 14051), (423, 14135), (461, 14444), (463, 14468), (465, 14477), (474, 14543),

Gene: Mila11_25 Start: 11525, Stop: 14731, Start Num: 34
Candidate Starts for Mila11_25:
(Start: 34 @11525 has 53 MA's), (59, 11726), (67, 11807), (80, 11906), (92, 12032), (100, 12089), (103, 12104), (121, 12185), (125, 12218), (130, 12248), (156, 12365), (162, 12407), (194, 12632), (197, 12644), (218, 12716), (223, 12740), (230, 12782), (238, 12833), (247, 12914), (272, 13064),

(281, 13133), (284, 13154), (288, 13181), (312, 13304), (325, 13364), (326, 13367), (362, 13571), (368, 13625), (393, 13826), (395, 13838), (396, 13847), (407, 13916), (410, 13928), (411, 13931), (423, 14015), (463, 14348), (465, 14357), (474, 14423),

Gene: Mischief19_12 Start: 11430, Stop: 15269, Start Num: 13
Candidate Starts for Mischief19_12:
(10, 11109), (11, 11274), (Start: 13 @11430 has 9 MA's), (28, 11592), (30, 11607), (32, 11619), (73, 11946), (82, 12024), (88, 12093), (89, 12099), (93, 12141), (104, 12216), (106, 12237), (107, 12249), (111, 12357), (116, 12444), (120, 12483), (147, 12636), (161, 12738), (163, 12747), (166, 12783), (169, 12795), (179, 12834), (184, 12912), (193, 12981), (195, 12999), (202, 13017), (204, 13041), (207, 13065), (222, 13173), (227, 13218), (230, 13236), (236, 13281), (251, 13389), (259, 13446), (262, 13497), (265, 13524), (274, 13584), (288, 13677), (290, 13683), (295, 13713), (298, 13734), (307, 13785), (315, 13809), (323, 13866), (324, 13869), (327, 13878), (329, 13914), (342, 13989), (346, 14013), (349, 14046), (371, 14178), (388, 14313), (397, 14397), (406, 14466), (415, 14508), (424, 14568), (443, 14742), (449, 14814), (454, 14838), (457, 14853), (464, 14904), (467, 14916), (468, 14934), (473, 14973), (476, 14982), (477, 14988), (504, 15189),

Gene: MorillMayhem_23 Start: 10458, Stop: 13757, Start Num: 34
Candidate Starts for MorillMayhem_23:
(1, 8619), (2, 8748), (3, 8763), (4, 9048), (6, 9636), (9, 9927), (15, 10275), (18, 10305), (Start: 34 @10458 has 53 MA's), (67, 10740), (80, 10839), (92, 10965), (100, 11022), (103, 11037), (121, 11118), (125, 11151), (130, 11181), (146, 11253), (156, 11298), (162, 11340), (167, 11385), (194, 11565), (197, 11577), (203, 11604), (209, 11664), (218, 11724), (230, 11808), (238, 11859), (247, 11940), (272, 12090), (281, 12159), (288, 12207), (312, 12330), (325, 12390), (326, 12393), (362, 12597), (368, 12651), (393, 12852), (395, 12864), (407, 12942), (411, 12957), (423, 13041), (461, 13350), (463, 13374), (465, 13383), (474, 13449), (481, 13488),

Gene: Namago_23 Start: 10020, Stop: 13325, Start Num: 34
Candidate Starts for Namago_23:
(6, 9198), (9, 9489), (15, 9837), (18, 9867), (Start: 34 @10020 has 53 MA's), (59, 10221), (67, 10302), (80, 10401), (92, 10527), (100, 10584), (103, 10599), (121, 10680), (125, 10713), (130, 10743), (135, 10758), (145, 10809), (153, 10842), (181, 11010), (194, 11118), (197, 11130), (206, 11184), (210, 11235), (214, 11256), (230, 11361), (238, 11412), (247, 11493), (272, 11643), (281, 11712), (288, 11760), (312, 11883), (325, 11943), (326, 11946), (362, 12165), (365, 12192), (393, 12420), (395, 12432), (407, 12510), (411, 12525), (423, 12609), (461, 12918), (463, 12942), (465, 12951), (474, 13017),

Gene: Nikan_20 Start: 10494, Stop: 13184, Start Num: 29
Candidate Starts for Nikan_20:
(20, 10380), (21, 10383), (23, 10443), (26, 10467), (Start: 29 @10494 has 23 MA's), (47, 10632), (48, 10641), (55, 10686), (58, 10716), (60, 10725), (62, 10740), (76, 10875), (80, 10896), (88, 10980), (89, 10986), (90, 10989), (98, 11058), (120, 11121), (141, 11217), (158, 11313), (162, 11340), (178, 11421), (199, 11574), (226, 11652), (230, 11673), (233, 11682), (239, 11727), (255, 11826), (273, 11922), (279, 11970), (281, 11985), (306, 12102), (335, 12135), (369, 12216), (377, 12276), (405, 12468), (407, 12480), (425, 12561), (455, 12828), (458, 12843), (469, 12927), (470, 12933), (475, 12960), (488, 13035), (491, 13044), (507, 13149), (508, 13170),

Gene: Nike_23 Start: 10927, Stop: 14223, Start Num: 34
Candidate Starts for Nike_23:
(1, 9088), (2, 9217), (3, 9232), (4, 9517), (6, 10105), (9, 10396), (15, 10744), (18, 10774), (Start: 34 @10927 has 53 MA's), (67, 11209), (80, 11308), (92, 11434), (100, 11491), (103, 11506), (121, 11587), (125, 11620), (130, 11650), (145, 11716), (153, 11749), (164, 11815), (181, 11917), (194, 12025), (197, 12037), (206, 12091), (210, 12142), (214, 12163), (230, 12268), (238, 12319), (264,

12493), (271, 12544), (272, 12550), (281, 12619), (288, 12667), (299, 12724), (325, 12841), (326, 12844), (362, 13063), (365, 13090), (393, 13318), (395, 13330), (407, 13408), (411, 13423), (423, 13507), (459, 13810), (461, 13816), (463, 13840), (465, 13849), (474, 13915),

Gene: NyleyClemson_20 Start: 9957, Stop: 12617, Start Num: 29
Candidate Starts for NyleyClemson_20:
(20, 9843), (21, 9846), (Start: 29 @9957 has 23 MA's), (47, 10095), (48, 10104), (55, 10149), (58, 10179), (62, 10203), (72, 10290), (76, 10338), (80, 10359), (87, 10434), (90, 10452), (95, 10509), (98, 10521), (124, 10596), (153, 10749), (162, 10803), (171, 10860), (178, 10884), (199, 11034), (230, 11124), (237, 11163), (243, 11226), (270, 11364), (279, 11421), (281, 11436), (341, 11595), (343, 11601), (362, 11631), (369, 11646), (377, 11706), (404, 11895), (420, 11967), (425, 11991), (440, 12135), (441, 12141), (447, 12201), (469, 12357), (470, 12363), (475, 12390), (479, 12411), (488, 12465), (491, 12474), (492, 12489), (508, 12603),

Gene: Odyssey395_26 Start: 11469, Stop: 14132, Start Num: 29
Candidate Starts for Odyssey395_26:
(20, 11355), (21, 11358), (Start: 29 @11469 has 23 MA's), (47, 11607), (48, 11616), (58, 11691), (62, 11715), (66, 11766), (72, 11802), (76, 11850), (80, 11871), (87, 11946), (90, 11964), (95, 12021), (98, 12033), (118, 12087), (120, 12099), (146, 12228), (154, 12267), (158, 12291), (162, 12318), (199, 12549), (230, 12639), (237, 12678), (241, 12711), (243, 12741), (270, 12879), (279, 12936), (281, 12951), (341, 13110), (343, 13116), (362, 13146), (369, 13161), (377, 13221), (389, 13302), (404, 13410), (407, 13422), (425, 13506), (440, 13650), (441, 13656), (447, 13716), (455, 13773), (469, 13872), (470, 13878), (475, 13905), (479, 13926), (488, 13980), (491, 13989), (508, 14118),

Gene: Ollypop_22 Start: 10462, Stop: 13146, Start Num: 29
Candidate Starts for Ollypop_22:
(21, 10351), (26, 10435), (Start: 29 @10462 has 23 MA's), (47, 10600), (48, 10609), (52, 10627), (55, 10654), (58, 10684), (60, 10693), (62, 10708), (76, 10843), (80, 10864), (88, 10948), (89, 10954), (90, 10957), (98, 11026), (120, 11089), (141, 11185), (158, 11281), (161, 11305), (162, 11308), (170, 11359), (173, 11371), (178, 11389), (199, 11542), (226, 11614), (230, 11635), (233, 11644), (239, 11689), (255, 11788), (270, 11875), (273, 11884), (279, 11932), (281, 11947), (306, 12064), (369, 12178), (377, 12238), (389, 12319), (405, 12430), (407, 12442), (425, 12523), (447, 12733), (455, 12790), (458, 12805), (469, 12889), (470, 12895), (475, 12922), (488, 12997), (491, 13006), (507, 13111), (508, 13132),

Gene: OneinaGillian_22 Start: 9225, Stop: 12377, Start Num: 34
Candidate Starts for OneinaGillian_22:
(17, 9066), (18, 9072), (Start: 34 @9225 has 53 MA's), (69, 9516), (70, 9522), (74, 9558), (75, 9582), (80, 9606), (91, 9717), (100, 9789), (103, 9804), (125, 9918), (135, 9960), (146, 10011), (153, 10044), (161, 10095), (188, 10281), (194, 10320), (203, 10332), (215, 10371), (230, 10458), (246, 10581), (247, 10590), (281, 10797), (294, 10869), (310, 10941), (311, 10944), (325, 11007), (326, 11010), (332, 11070), (352, 11178), (354, 11184), (367, 11265), (393, 11475), (426, 11643), (438, 11775), (440, 11796), (443, 11817), (462, 11958), (476, 12057), (480, 12087), (492, 12189), (493, 12201), (500, 12267),

Gene: Pepe25_21 Start: 9481, Stop: 12714, Start Num: 34
Candidate Starts for Pepe25_21:
(Start: 34 @9481 has 53 MA's), (69, 9772), (74, 9814), (75, 9838), (80, 9862), (91, 9973), (100, 10045), (103, 10060), (125, 10174), (135, 10216), (146, 10267), (153, 10300), (188, 10537), (194, 10576), (197, 10588), (209, 10675), (215, 10711), (228, 10786), (230, 10798), (246, 10921), (247, 10930), (266, 11029), (291, 11200), (294, 11209), (308, 11278), (311, 11287), (325, 11350), (326, 11353), (345, 11479), (393, 11812), (438, 12112), (440, 12133), (443, 12154), (450, 12229), (462, 12295), (476, 12394), (480, 12424), (492, 12526), (493, 12538), (500, 12604),

Gene: Phabia_23 Start: 10385, Stop: 13597, Start Num: 34
Candidate Starts for Phabia_23:
(Start: 34 @10385 has 53 MA's), (38, 10427), (59, 10586), (67, 10667), (80, 10766), (92, 10892), (100, 10949), (103, 10964), (121, 11045), (125, 11078), (130, 11108), (135, 11123), (145, 11174), (153, 11207), (181, 11375), (194, 11483), (197, 11495), (222, 11567), (224, 11591), (230, 11633), (238, 11684), (247, 11765), (272, 11915), (281, 11984), (288, 12032), (312, 12155), (325, 12215), (326, 12218), (362, 12437), (365, 12464), (393, 12692), (395, 12704), (396, 12713), (411, 12797), (423, 12881), (461, 13190), (463, 13214), (465, 13223), (474, 13289),

Gene: Phinky_29 Start: 11324, Stop: 14482, Start Num: 34
Candidate Starts for Phinky_29:
(33, 11321), (Start: 34 @11324 has 53 MA's), (80, 11705), (87, 11780), (92, 11831), (93, 11837), (100, 11888), (103, 11903), (121, 11990), (133, 12059), (139, 12074), (142, 12107), (146, 12119), (156, 12164), (161, 12203), (177, 12284), (194, 12431), (197, 12443), (230, 12539), (238, 12590), (264, 12764), (268, 12800), (272, 12821), (281, 12890), (284, 12911), (288, 12938), (325, 13121), (326, 13124), (393, 13592), (406, 13679), (407, 13682), (423, 13781), (439, 13934), (463, 14114), (465, 14123), (474, 14189), (490, 14282),

Gene: PhuzzTulsa_22 Start: 11256, Stop: 13919, Start Num: 29
Candidate Starts for PhuzzTulsa_22:
(20, 11142), (21, 11145), (Start: 29 @11256 has 23 MA's), (47, 11394), (48, 11403), (55, 11448), (58, 11478), (62, 11502), (72, 11589), (76, 11637), (80, 11658), (87, 11733), (90, 11751), (95, 11808), (98, 11820), (118, 11874), (120, 11886), (126, 11925), (146, 12015), (154, 12054), (162, 12105), (199, 12336), (230, 12426), (237, 12465), (243, 12528), (270, 12666), (276, 12705), (279, 12723), (281, 12738), (306, 12855), (341, 12897), (343, 12903), (362, 12933), (369, 12948), (377, 13008), (389, 13089), (404, 13197), (407, 13209), (425, 13293), (440, 13437), (441, 13443), (447, 13503), (455, 13560), (469, 13659), (470, 13665), (475, 13692), (479, 13713), (488, 13767), (491, 13776), (508, 13905),

Gene: Pointis_24 Start: 11473, Stop: 14136, Start Num: 29
Candidate Starts for Pointis_24:
(20, 11359), (21, 11362), (Start: 29 @11473 has 23 MA's), (47, 11611), (48, 11620), (58, 11695), (62, 11719), (66, 11770), (72, 11806), (76, 11854), (80, 11875), (87, 11950), (90, 11968), (95, 12025), (98, 12037), (118, 12091), (120, 12103), (146, 12232), (154, 12271), (158, 12295), (162, 12322), (199, 12553), (230, 12643), (237, 12682), (243, 12745), (270, 12883), (276, 12922), (279, 12940), (281, 12955), (341, 13114), (343, 13120), (362, 13150), (369, 13165), (377, 13225), (389, 13306), (404, 13414), (425, 13510), (440, 13654), (441, 13660), (447, 13720), (455, 13777), (469, 13876), (470, 13882), (475, 13909), (479, 13930), (488, 13984), (491, 13993), (508, 14122),

Gene: Popstraw_23 Start: 11259, Stop: 13922, Start Num: 29
Candidate Starts for Popstraw_23:
(20, 11145), (21, 11148), (Start: 29 @11259 has 23 MA's), (47, 11397), (48, 11406), (58, 11481), (62, 11505), (66, 11556), (72, 11592), (76, 11640), (80, 11661), (87, 11736), (90, 11754), (98, 11823), (118, 11877), (120, 11889), (146, 12018), (154, 12057), (158, 12081), (162, 12108), (199, 12339), (230, 12429), (237, 12468), (243, 12531), (270, 12669), (279, 12726), (281, 12741), (341, 12900), (343, 12906), (362, 12936), (369, 12951), (377, 13011), (389, 13092), (404, 13200), (407, 13212), (425, 13296), (440, 13440), (441, 13446), (447, 13506), (455, 13563), (469, 13662), (470, 13668), (475, 13695), (479, 13716), (488, 13770), (491, 13779), (508, 13908),

Gene: Pureglobe5_26 Start: 11483, Stop: 14146, Start Num: 29
Candidate Starts for Pureglobe5_26:

(20, 11369), (21, 11372), (Start: 29 @11483 has 23 MA's), (47, 11621), (48, 11630), (55, 11675), (58, 11705), (62, 11729), (76, 11864), (80, 11885), (87, 11960), (90, 11978), (98, 12047), (118, 12101), (120, 12113), (126, 12152), (146, 12242), (154, 12281), (199, 12563), (230, 12653), (237, 12692), (241, 12725), (243, 12755), (270, 12893), (279, 12950), (281, 12965), (341, 13124), (343, 13130), (362, 13160), (369, 13175), (377, 13235), (389, 13316), (404, 13424), (425, 13520), (440, 13664), (441, 13670), (447, 13730), (455, 13787), (469, 13886), (470, 13892), (475, 13919), (479, 13940), (488, 13994), (491, 14003), (492, 14018), (508, 14132),

Gene: Quammi_21 Start: 9956, Stop: 13168, Start Num: 34
Candidate Starts for Quammi_21:
(Start: 34 @9956 has 53 MA's), (38, 9998), (59, 10157), (67, 10238), (80, 10337), (92, 10463), (100, 10520), (103, 10535), (121, 10616), (125, 10649), (130, 10679), (135, 10694), (145, 10745), (153, 10778), (181, 10946), (194, 11054), (197, 11066), (222, 11138), (224, 11162), (230, 11204), (238, 11255), (247, 11336), (272, 11486), (281, 11555), (288, 11603), (312, 11726), (325, 11786), (326, 11789), (362, 12008), (365, 12035), (393, 12263), (395, 12275), (407, 12353), (411, 12368), (423, 12452), (461, 12761), (463, 12785), (465, 12794), (474, 12860),

Gene: RIPWilbur_22 Start: 10619, Stop: 13282, Start Num: 29
Candidate Starts for RIPWilbur_22:
(20, 10505), (21, 10508), (Start: 29 @10619 has 23 MA's), (47, 10757), (48, 10766), (55, 10811), (58, 10841), (62, 10865), (76, 11000), (80, 11021), (87, 11096), (90, 11114), (95, 11171), (98, 11183), (118, 11237), (120, 11249), (126, 11288), (146, 11378), (154, 11417), (199, 11699), (230, 11789), (237, 11828), (241, 11861), (243, 11891), (270, 12029), (279, 12086), (281, 12101), (341, 12260), (343, 12266), (362, 12296), (369, 12311), (377, 12371), (389, 12452), (404, 12560), (425, 12656), (440, 12800), (441, 12806), (447, 12866), (455, 12923), (469, 13022), (470, 13028), (475, 13055), (479, 13076), (488, 13130), (491, 13139), (492, 13154), (508, 13268),

Gene: RainyPolka_11 Start: 9835, Stop: 13392, Start Num: 13
Candidate Starts for RainyPolka_11:
(Start: 13 @9835 has 9 MA's), (25, 9961), (27, 9979), (28, 9997), (30, 10012), (48, 10150), (51, 10162), (56, 10210), (62, 10249), (77, 10390), (88, 10492), (89, 10498), (95, 10558), (105, 10606), (117, 10642), (120, 10657), (124, 10669), (126, 10696), (147, 10792), (148, 10804), (157, 10855), (160, 10888), (161, 10894), (170, 10957), (181, 11023), (189, 11101), (199, 11140), (208, 11191), (230, 11344), (237, 11392), (240, 11428), (252, 11503), (256, 11518), (257, 11530), (258, 11533), (263, 11584), (289, 11764), (301, 11836), (307, 11869), (314, 11890), (316, 11908), (317, 11914), (323, 11965), (327, 11977), (328, 11998), (332, 12037), (340, 12085), (349, 12145), (350, 12148), (358, 12178), (359, 12181), (364, 12202), (366, 12214), (371, 12262), (375, 12292), (390, 12409), (394, 12451), (397, 12481), (403, 12514), (405, 12541), (406, 12550), (413, 12574), (415, 12592), (443, 12826), (449, 12898), (452, 12910), (453, 12916), (454, 12922), (457, 12937), (462, 12967), (466, 12994), (468, 13018), (473, 13057), (484, 13126), (487, 13150), (488, 13159), (494, 13213), (495, 13228), (503, 13276), (509, 13357),

Gene: Ranunculus_18 Start: 10289, Stop: 13027, Start Num: 29
Candidate Starts for Ranunculus_18:
(24, 10241), (Start: 29 @10289 has 23 MA's), (41, 10385), (47, 10427), (48, 10436), (52, 10454), (58, 10511), (65, 10580), (71, 10616), (76, 10670), (79, 10685), (80, 10691), (84, 10739), (88, 10775), (89, 10781), (90, 10784), (94, 10838), (98, 10853), (127, 10976), (132, 11003), (146, 11063), (167, 11192), (168, 11195), (172, 11210), (230, 11510), (239, 11564), (270, 11750), (279, 11807), (281, 11822), (284, 11837), (331, 11963), (337, 11981), (369, 12044), (389, 12185), (411, 12323), (438, 12521), (446, 12596), (447, 12608), (453, 12653), (469, 12764), (472, 12788), (478, 12812), (486, 12857), (491, 12884), (496, 12923), (506, 12977),

Gene: RazzB_20 Start: 9785, Stop: 12445, Start Num: 29

Candidate Starts for RazzB_20:
(20, 9671), (21, 9674), (Start: 29 @9785 has 23 MA's), (47, 9923), (48, 9932), (55, 9977), (58, 10007), (62, 10031), (72, 10118), (76, 10166), (80, 10187), (87, 10262), (90, 10280), (95, 10337), (98, 10349), (153, 10577), (162, 10631), (171, 10688), (178, 10712), (199, 10862), (230, 10952), (237, 10991), (243, 11054), (270, 11192), (279, 11249), (281, 11264), (341, 11423), (343, 11429), (362, 11459), (369, 11474), (377, 11534), (404, 11723), (420, 11795), (425, 11819), (440, 11963), (441, 11969), (447, 12029), (469, 12185), (470, 12191), (475, 12218), (479, 12239), (488, 12293), (491, 12302), (492, 12317), (508, 12431),

Gene: Ren19_20 Start: 10494, Stop: 13184, Start Num: 29
Candidate Starts for Ren19_20:
(20, 10380), (21, 10383), (23, 10443), (26, 10467), (Start: 29 @10494 has 23 MA's), (47, 10632), (48, 10641), (55, 10686), (58, 10716), (60, 10725), (62, 10740), (76, 10875), (80, 10896), (88, 10980), (89, 10986), (90, 10989), (98, 11058), (120, 11121), (141, 11217), (158, 11313), (162, 11340), (178, 11421), (199, 11574), (226, 11652), (230, 11673), (233, 11682), (239, 11727), (255, 11826), (273, 11922), (279, 11970), (281, 11985), (306, 12102), (335, 12135), (369, 12216), (377, 12276), (405, 12468), (407, 12480), (425, 12561), (455, 12828), (458, 12843), (469, 12927), (470, 12933), (475, 12960), (488, 13035), (491, 13044), (507, 13149), (508, 13170),

Gene: Rizwana_17 Start: 10224, Stop: 12896, Start Num: 29
Candidate Starts for Rizwana_17:
(Start: 29 @10224 has 23 MA's), (37, 10278), (42, 10326), (80, 10623), (86, 10689), (87, 10698), (88, 10707), (89, 10713), (97, 10776), (98, 10785), (126, 10893), (129, 10911), (131, 10920), (186, 11241), (196, 11313), (198, 11316), (216, 11367), (232, 11430), (248, 11556), (254, 11571), (261, 11607), (303, 11817), (305, 11823), (309, 11850), (319, 11853), (320, 11856), (372, 11949), (375, 11964), (376, 11982), (379, 12018), (382, 12036), (392, 12105), (398, 12159), (413, 12213), (419, 12255), (438, 12405), (440, 12426), (446, 12492), (453, 12549), (465, 12624), (472, 12684), (475, 12693), (478, 12708), (486, 12750), (488, 12768), (491, 12777),

Gene: RobinRose_24 Start: 9693, Stop: 12878, Start Num: 34
Candidate Starts for RobinRose_24:
(17, 9534), (18, 9540), (Start: 34 @9693 has 53 MA's), (69, 9984), (70, 9990), (74, 10026), (75, 10050), (80, 10074), (91, 10185), (100, 10257), (103, 10272), (130, 10419), (135, 10434), (144, 10479), (153, 10545), (163, 10605), (188, 10782), (194, 10821), (203, 10833), (230, 10959), (238, 11010), (246, 11082), (247, 11091), (281, 11298), (294, 11370), (310, 11442), (311, 11445), (325, 11508), (326, 11511), (332, 11571), (352, 11679), (354, 11685), (367, 11766), (393, 11976), (426, 12144), (438, 12276), (440, 12297), (443, 12318), (462, 12459), (476, 12558), (480, 12588), (492, 12690), (493, 12702), (500, 12768),

Gene: RomansRevenge_14 Start: 8225, Stop: 11137, Start Num: 29
Candidate Starts for RomansRevenge_14:
(Start: 29 @8225 has 23 MA's), (37, 8285), (43, 8336), (50, 8381), (52, 8390), (53, 8405), (54, 8411), (58, 8447), (62, 8471), (63, 8483), (68, 8531), (72, 8558), (73, 8570), (78, 8612), (79, 8621), (80, 8627), (82, 8642), (85, 8678), (87, 8702), (98, 8789), (102, 8816), (120, 8879), (127, 8921), (136, 8954), (145, 8996), (153, 9029), (156, 9041), (161, 9080), (168, 9128), (171, 9140), (185, 9242), (190, 9293), (191, 9302), (239, 9476), (245, 9536), (253, 9569), (270, 9662), (273, 9671), (278, 9716), (283, 9749), (287, 9776), (331, 10004), (334, 10013), (377, 10214), (381, 10250), (396, 10355), (410, 10424), (438, 10628), (440, 10649), (441, 10655), (442, 10664), (443, 10670), (450, 10745), (458, 10787), (462, 10811), (474, 10889), (475, 10892), (479, 10913),

Gene: Romm_24 Start: 9693, Stop: 12878, Start Num: 34
Candidate Starts for Romm_24:

(17, 9534), (18, 9540), (Start: 34 @9693 has 53 MA's), (69, 9984), (70, 9990), (74, 10026), (75, 10050), (80, 10074), (91, 10185), (100, 10257), (103, 10272), (130, 10419), (135, 10434), (144, 10479), (153, 10545), (163, 10605), (188, 10782), (194, 10821), (203, 10833), (230, 10959), (238, 11010), (246, 11082), (247, 11091), (281, 11298), (294, 11370), (310, 11442), (311, 11445), (325, 11508), (326, 11511), (332, 11571), (352, 11679), (354, 11685), (367, 11766), (393, 11976), (426, 12144), (438, 12276), (440, 12297), (443, 12318), (462, 12459), (476, 12558), (480, 12588), (492, 12690), (493, 12702), (500, 12768),

Gene: Rowlf_19 Start: 9723, Stop: 12926, Start Num: 34
Candidate Starts for Rowlf_19:
(6, 8901), (9, 9192), (18, 9570), (Start: 34 @9723 has 53 MA's), (59, 9924), (67, 10005), (80, 10104), (92, 10230), (100, 10287), (103, 10302), (121, 10383), (125, 10416), (130, 10446), (135, 10461), (145, 10512), (153, 10545), (181, 10713), (194, 10821), (197, 10833), (210, 10905), (220, 10929), (230, 10971), (238, 11022), (247, 11103), (272, 11253), (281, 11322), (284, 11343), (288, 11370), (299, 11427), (325, 11544), (362, 11766), (365, 11793), (393, 12021), (395, 12033), (407, 12111), (411, 12126), (423, 12210), (461, 12519), (463, 12543), (465, 12552), (474, 12618),

Gene: RubyRalph_25 Start: 10829, Stop: 13474, Start Num: 113
Candidate Starts for RubyRalph_25:
(5, 9242), (7, 9410), (8, 9455), (Start: 113 @10829 has 3 MA's), (130, 10931), (139, 10955), (153, 11033), (155, 11039), (173, 11153), (176, 11162), (177, 11165), (188, 11273), (194, 11312), (197, 11324), (200, 11333), (205, 11375), (209, 11411), (230, 11534), (238, 11585), (247, 11666), (260, 11720), (272, 11804), (284, 11894), (288, 11921), (294, 11945), (300, 11975), (304, 11993), (312, 12032), (325, 12092), (362, 12314), (374, 12413), (393, 12563), (409, 12662), (411, 12668), (423, 12752), (431, 12830), (449, 13001), (463, 13085), (465, 13094), (474, 13160), (477, 13172), (478, 13178), (492, 13271), (505, 13385),

Gene: Rudy_21 Start: 9956, Stop: 13168, Start Num: 34
Candidate Starts for Rudy_21:
(Start: 34 @9956 has 53 MA's), (38, 9998), (59, 10157), (67, 10238), (80, 10337), (92, 10463), (100, 10520), (103, 10535), (121, 10616), (125, 10649), (130, 10679), (135, 10694), (145, 10745), (153, 10778), (181, 10946), (194, 11054), (197, 11066), (222, 11138), (224, 11162), (230, 11204), (238, 11255), (247, 11336), (272, 11486), (281, 11555), (288, 11603), (312, 11726), (325, 11786), (326, 11789), (362, 12008), (365, 12035), (393, 12263), (395, 12275), (407, 12353), (411, 12368), (423, 12452), (461, 12761), (463, 12785), (465, 12794), (474, 12860),

Gene: SadLad_26 Start: 11286, Stop: 13931, Start Num: 113
Candidate Starts for SadLad_26:
(5, 9699), (7, 9867), (8, 9912), (Start: 113 @11286 has 3 MA's), (130, 11388), (139, 11412), (153, 11490), (155, 11496), (173, 11610), (176, 11619), (177, 11622), (188, 11730), (194, 11769), (197, 11781), (200, 11790), (205, 11832), (209, 11868), (230, 11991), (238, 12042), (247, 12123), (260, 12177), (272, 12261), (284, 12351), (288, 12378), (294, 12402), (300, 12432), (304, 12450), (312, 12489), (325, 12549), (362, 12771), (374, 12870), (393, 13020), (409, 13119), (411, 13125), (423, 13209), (431, 13287), (449, 13458), (463, 13542), (465, 13551), (474, 13617), (477, 13629), (478, 13635), (492, 13728), (505, 13842),

Gene: Salete_11 Start: 9871, Stop: 13464, Start Num: 12
Candidate Starts for Salete_11:
(11, 9712), (Start: 12 @9871 has 2 MA's), (Start: 13 @9886 has 9 MA's), (16, 9901), (25, 10012), (27, 10030), (28, 10048), (48, 10201), (51, 10213), (56, 10261), (62, 10300), (76, 10438), (77, 10441), (87, 10534), (89, 10549), (90, 10552), (95, 10609), (105, 10657), (120, 10708), (124, 10720), (126, 10747), (148, 10855), (151, 10876), (152, 10885), (157, 10906), (160, 10939), (161, 10945), (170, 11008), (189, 11152), (199, 11191), (201, 11200), (230, 11395), (237, 11443), (240, 11479), (252, 11554),

(256, 11569), (257, 11581), (258, 11584), (276, 11743), (282, 11773), (286, 11806), (289, 11818), (290, 11821), (307, 11923), (323, 12025), (327, 12037), (330, 12091), (340, 12145), (348, 12190), (349, 12205), (350, 12208), (358, 12238), (359, 12241), (363, 12250), (364, 12262), (366, 12274), (371, 12322), (375, 12352), (390, 12469), (394, 12511), (403, 12574), (405, 12601), (413, 12634), (415, 12652), (420, 12682), (428, 12745), (433, 12787), (440, 12865), (443, 12886), (449, 12958), (451, 12967), (454, 12982), (457, 12997), (462, 13027), (466, 13054), (468, 13078), (476, 13126), (477, 13132), (484, 13186), (487, 13210), (488, 13219), (494, 13273), (495, 13288), (503, 13348), (509, 13429),

Gene: SallyK_24 Start: 11117, Stop: 14320, Start Num: 34
Candidate Starts for SallyK_24:
(6, 10295), (9, 10586), (18, 10964), (Start: 34 @11117 has 53 MA's), (59, 11318), (67, 11399), (80, 11498), (92, 11624), (100, 11681), (103, 11696), (121, 11777), (125, 11810), (130, 11840), (135, 11855), (145, 11906), (153, 11939), (181, 12107), (194, 12215), (197, 12227), (210, 12299), (220, 12323), (230, 12365), (238, 12416), (247, 12497), (272, 12647), (281, 12716), (284, 12737), (288, 12764), (299, 12821), (325, 12938), (362, 13160), (365, 13187), (393, 13415), (395, 13427), (407, 13505), (411, 13520), (423, 13604), (461, 13913), (463, 13937), (465, 13946), (474, 14012),

Gene: SilentRX_19 Start: 10411, Stop: 13206, Start Num: 29
Candidate Starts for SilentRX_19:
(Start: 29 @10411 has 23 MA's), (41, 10507), (57, 10621), (73, 10756), (75, 10789), (80, 10813), (89, 10903), (98, 10975), (122, 11044), (150, 11194), (151, 11200), (153, 11203), (165, 11281), (173, 11320), (199, 11491), (213, 11548), (226, 11632), (230, 11653), (237, 11689), (239, 11704), (242, 11743), (253, 11797), (270, 11890), (279, 11947), (280, 11956), (281, 11962), (292, 12010), (369, 12241), (396, 12442), (399, 12472), (401, 12478), (407, 12502), (422, 12580), (438, 12709), (443, 12751), (469, 12952), (472, 12976), (478, 13000), (479, 13006), (481, 13021), (486, 13042),

Gene: Sillytadpoles_22 Start: 9954, Stop: 13166, Start Num: 34
Candidate Starts for Sillytadpoles_22:
(Start: 34 @9954 has 53 MA's), (38, 9996), (59, 10155), (67, 10236), (80, 10335), (92, 10461), (100, 10518), (103, 10533), (121, 10614), (125, 10647), (130, 10677), (135, 10692), (145, 10743), (153, 10776), (181, 10944), (194, 11052), (197, 11064), (222, 11136), (224, 11160), (230, 11202), (238, 11253), (247, 11334), (272, 11484), (281, 11553), (288, 11601), (312, 11724), (325, 11784), (326, 11787), (362, 12006), (365, 12033), (393, 12261), (395, 12273), (407, 12351), (411, 12366), (423, 12450), (461, 12759), (463, 12783), (465, 12792), (474, 12858),

Gene: SlySloth_25 Start: 10909, Stop: 14223, Start Num: 34
Candidate Starts for SlySloth_25:
(6, 10087), (9, 10378), (18, 10756), (Start: 34 @10909 has 53 MA's), (59, 11110), (67, 11191), (80, 11290), (92, 11416), (100, 11473), (103, 11488), (121, 11569), (125, 11602), (130, 11632), (146, 11704), (156, 11749), (162, 11791), (167, 11836), (194, 12016), (197, 12028), (206, 12082), (210, 12133), (214, 12154), (230, 12259), (238, 12310), (247, 12391), (272, 12541), (281, 12610), (288, 12658), (312, 12781), (325, 12841), (326, 12844), (362, 13063), (365, 13090), (393, 13318), (395, 13330), (407, 13408), (411, 13423), (423, 13507), (461, 13816), (463, 13840), (465, 13849), (474, 13915),

Gene: Spiderpig_22 Start: 9464, Stop: 12697, Start Num: 34
Candidate Starts for Spiderpig_22:
(Start: 34 @9464 has 53 MA's), (69, 9755), (74, 9797), (75, 9821), (80, 9845), (91, 9956), (100, 10028), (103, 10043), (125, 10157), (135, 10199), (146, 10250), (153, 10283), (188, 10520), (194, 10559), (197, 10571), (209, 10658), (215, 10694), (228, 10769), (230, 10781), (246, 10904), (247, 10913), (291, 11183), (294, 11192), (308, 11261), (311, 11270), (325, 11333), (326, 11336), (345, 11462), (393, 11795), (438, 12095), (440, 12116), (443, 12137), (450, 12212), (462, 12278), (476, 12377),

(480, 12407), (492, 12509), (493, 12521), (500, 12587),

Gene: Squash_25 Start: 10982, Stop: 14236, Start Num: 34
Candidate Starts for Squash_25:
(1, 9143), (2, 9272), (3, 9287), (4, 9572), (6, 10160), (9, 10451), (15, 10799), (18, 10829), (Start: 34 @10982 has 53 MA's), (67, 11264), (80, 11363), (92, 11489), (100, 11546), (103, 11561), (121, 11642), (125, 11675), (130, 11705), (145, 11771), (153, 11804), (164, 11870), (181, 11972), (194, 12080), (197, 12092), (210, 12188), (230, 12281), (247, 12413), (272, 12563), (281, 12632), (284, 12653), (288, 12680), (299, 12737), (325, 12854), (326, 12857), (362, 13076), (365, 13103), (393, 13331), (395, 13343), (407, 13421), (411, 13436), (423, 13520), (459, 13823), (461, 13829), (463, 13853), (465, 13862), (474, 13928),

Gene: Statler_24 Start: 10936, Stop: 14148, Start Num: 34
Candidate Starts for Statler_24:
(1, 9097), (2, 9226), (3, 9241), (4, 9526), (6, 10114), (9, 10405), (18, 10783), (Start: 34 @10936 has 53 MA's), (59, 11137), (67, 11218), (80, 11317), (92, 11443), (100, 11500), (103, 11515), (121, 11596), (125, 11629), (130, 11659), (156, 11776), (162, 11818), (167, 11863), (194, 12043), (197, 12055), (218, 12127), (223, 12151), (230, 12193), (238, 12244), (247, 12325), (272, 12475), (281, 12544), (284, 12565), (288, 12592), (299, 12649), (325, 12766), (362, 12988), (365, 13015), (393, 13243), (395, 13255), (407, 13333), (411, 13348), (423, 13432), (461, 13741), (463, 13765), (465, 13774), (474, 13840),

Gene: StrawberryJamm_25 Start: 10256, Stop: 13468, Start Num: 34
Candidate Starts for StrawberryJamm_25:
(2, 8546), (3, 8561), (4, 8846), (6, 9434), (9, 9725), (18, 10103), (Start: 34 @10256 has 53 MA's), (59, 10457), (67, 10538), (80, 10637), (92, 10763), (100, 10820), (103, 10835), (121, 10916), (125, 10949), (130, 10979), (135, 10994), (145, 11045), (153, 11078), (181, 11246), (194, 11354), (197, 11366), (222, 11438), (224, 11462), (230, 11504), (238, 11555), (247, 11636), (272, 11786), (281, 11855), (284, 11876), (288, 11903), (312, 12026), (325, 12086), (326, 12089), (362, 12308), (365, 12335), (393, 12563), (395, 12575), (407, 12653), (411, 12668), (423, 12752), (461, 13061), (463, 13085), (465, 13094), (474, 13160),

Gene: Sunfish_27 Start: 11573, Stop: 13966, Start Num: 96
Candidate Starts for Sunfish_27:
(81, 11417), (Start: 96 @11573 has 1 MA's), (99, 11588), (123, 11711), (138, 11786), (146, 11831), (148, 11846), (155, 11873), (160, 11915), (197, 12158), (219, 12188), (221, 12200), (229, 12248), (250, 12395), (285, 12587), (293, 12620), (297, 12650), (302, 12674), (310, 12710), (356, 12920), (387, 13100), (393, 13148), (396, 13169), (414, 13253), (418, 13280), (429, 13391), (432, 13406), (478, 13748),

Gene: TP1604_11 Start: 9886, Stop: 13464, Start Num: 13
Candidate Starts for TP1604_11:
(Start: 13 @9886 has 9 MA's), (25, 10012), (27, 10030), (28, 10048), (48, 10201), (51, 10213), (56, 10261), (62, 10300), (76, 10438), (77, 10441), (87, 10534), (89, 10549), (90, 10552), (95, 10609), (105, 10657), (120, 10708), (124, 10720), (126, 10747), (148, 10855), (151, 10876), (152, 10885), (157, 10906), (160, 10939), (161, 10945), (170, 11008), (189, 11152), (199, 11191), (201, 11200), (230, 11395), (237, 11443), (240, 11479), (252, 11554), (256, 11569), (257, 11581), (258, 11584), (276, 11743), (282, 11773), (286, 11806), (289, 11818), (290, 11821), (307, 11923), (323, 12025), (327, 12037), (330, 12091), (340, 12145), (348, 12190), (349, 12205), (350, 12208), (358, 12238), (359, 12241), (363, 12250), (364, 12262), (366, 12274), (371, 12322), (375, 12352), (390, 12469), (394, 12511), (403, 12574), (405, 12601), (413, 12634), (415, 12652), (420, 12682), (428, 12745), (433, 12787), (440, 12865), (443, 12886), (447, 12931), (449, 12958), (451, 12967), (454, 12982), (457, 12997), (462, 13027), (466, 13054), (468, 13078), (476, 13126), (477, 13132), (484, 13186), (485,

13192), (487, 13210), (488, 13219), (494, 13273), (495, 13288), (503, 13348), (509, 13429),

Gene: Tank_18 Start: 10257, Stop: 12758, Start Num: 29
Candidate Starts for Tank_18:
(Start: 29 @10257 has 23 MA's), (41, 10347), (49, 10401), (55, 10443), (58, 10473), (61, 10491), (70, 10575), (71, 10584), (73, 10602), (80, 10659), (87, 10734), (90, 10752), (93, 10791), (94, 10806), (98, 10821), (128, 10896), (135, 10929), (137, 10932), (140, 10947), (143, 10968), (157, 11022), (159, 11037), (166, 11082), (183, 11133), (192, 11181), (199, 11196), (217, 11214), (248, 11367), (261, 11400), (303, 11613), (309, 11646), (319, 11649), (372, 11745), (375, 11760), (376, 11778), (378, 11799), (379, 11814), (382, 11832), (392, 11901), (398, 11955), (412, 12006), (416, 12030), (419, 12051), (422, 12072), (440, 12222), (443, 12243), (446, 12288), (453, 12345), (472, 12480), (474, 12486), (478, 12504), (486, 12546), (491, 12573), (498, 12639),

Gene: Teehee_24 Start: 11191, Stop: 14403, Start Num: 34
Candidate Starts for Teehee_24:
(Start: 34 @11191 has 53 MA's), (38, 11233), (59, 11392), (67, 11473), (80, 11572), (92, 11698), (100, 11755), (103, 11770), (121, 11851), (125, 11884), (130, 11914), (135, 11929), (145, 11980), (153, 12013), (181, 12181), (194, 12289), (197, 12301), (222, 12373), (224, 12397), (230, 12439), (238, 12490), (247, 12571), (272, 12721), (281, 12790), (288, 12838), (312, 12961), (325, 13021), (326, 13024), (362, 13243), (365, 13270), (393, 13498), (395, 13510), (396, 13519), (411, 13603), (423, 13687), (461, 13996), (463, 14020), (465, 14029), (474, 14095),

Gene: Tempo_22 Start: 9569, Stop: 12754, Start Num: 34
Candidate Starts for Tempo_22:
(Start: 34 @9569 has 53 MA's), (69, 9860), (70, 9866), (74, 9902), (75, 9926), (80, 9950), (91, 10061), (100, 10133), (103, 10148), (130, 10295), (135, 10310), (144, 10355), (153, 10421), (188, 10658), (194, 10697), (203, 10709), (230, 10835), (246, 10958), (247, 10967), (281, 11174), (294, 11246), (310, 11318), (311, 11321), (325, 11384), (326, 11387), (332, 11447), (352, 11555), (354, 11561), (367, 11642), (393, 11852), (426, 12020), (438, 12152), (440, 12173), (443, 12194), (462, 12335), (476, 12434), (480, 12464), (492, 12566), (493, 12578), (500, 12644),

Gene: Tissue_23 Start: 10765, Stop: 13968, Start Num: 34
Candidate Starts for Tissue_23:
(2, 9055), (3, 9070), (4, 9355), (6, 9943), (9, 10234), (15, 10582), (18, 10612), (Start: 34 @10765 has 53 MA's), (59, 10966), (67, 11047), (80, 11146), (92, 11272), (100, 11329), (103, 11344), (121, 11425), (125, 11458), (130, 11488), (135, 11503), (145, 11554), (153, 11587), (181, 11755), (194, 11863), (197, 11875), (210, 11947), (220, 11971), (230, 12013), (238, 12064), (247, 12145), (272, 12295), (281, 12364), (284, 12385), (288, 12412), (299, 12469), (325, 12586), (362, 12808), (365, 12835), (393, 13063), (395, 13075), (407, 13153), (411, 13168), (423, 13252), (461, 13561), (463, 13585), (465, 13594), (474, 13660),

Gene: TurkishDelight_15 Start: 8994, Stop: 12437, Start Num: 14
Candidate Starts for TurkishDelight_15:
(Start: 14 @8994 has 1 MA's), (19, 9039), (25, 9117), (28, 9153), (35, 9192), (39, 9234), (46, 9324), (51, 9348), (53, 9369), (77, 9576), (83, 9630), (87, 9669), (89, 9684), (110, 9840), (114, 9864), (119, 9894), (120, 9903), (149, 10065), (161, 10146), (163, 10155), (203, 10422), (208, 10449), (222, 10524), (230, 10590), (244, 10713), (251, 10743), (258, 10779), (279, 10875), (322, 11061), (324, 11067), (333, 11136), (335, 11142), (344, 11181), (349, 11223), (353, 11235), (357, 11238), (370, 11301), (373, 11316), (380, 11373), (383, 11391), (384, 11397), (391, 11430), (394, 11448), (397, 11475), (400, 11490), (404, 11520), (405, 11523), (413, 11556), (415, 11574), (428, 11667), (435, 11727), (436, 11742), (443, 11811), (444, 11817), (468, 12003), (477, 12057), (482, 12093), (488, 12150), (489, 12159), (491, 12165), (497, 12228), (511, 12378),

Gene: Viceroy_22 Start: 9956, Stop: 13168, Start Num: 34
Candidate Starts for Viceroy_22:
(Start: 34 @9956 has 53 MA's), (38, 9998), (59, 10157), (67, 10238), (80, 10337), (92, 10463), (100, 10520), (103, 10535), (121, 10616), (125, 10649), (130, 10679), (135, 10694), (145, 10745), (153, 10778), (181, 10946), (194, 11054), (197, 11066), (222, 11138), (224, 11162), (230, 11204), (238, 11255), (247, 11336), (272, 11486), (281, 11555), (288, 11603), (312, 11726), (325, 11786), (326, 11789), (362, 12008), (365, 12035), (393, 12263), (395, 12275), (407, 12353), (411, 12368), (423, 12452), (461, 12761), (463, 12785), (465, 12794), (474, 12860),

Gene: Wayne3_24 Start: 10921, Stop: 14133, Start Num: 34
Candidate Starts for Wayne3_24:
(Start: 34 @10921 has 53 MA's), (38, 10963), (59, 11122), (67, 11203), (80, 11302), (92, 11428), (100, 11485), (103, 11500), (121, 11581), (125, 11614), (130, 11644), (135, 11659), (145, 11710), (153, 11743), (181, 11911), (194, 12019), (197, 12031), (222, 12103), (224, 12127), (230, 12169), (238, 12220), (247, 12301), (272, 12451), (281, 12520), (288, 12568), (312, 12691), (325, 12751), (326, 12754), (362, 12973), (365, 13000), (393, 13228), (395, 13240), (396, 13249), (411, 13333), (423, 13417), (461, 13726), (463, 13750), (465, 13759), (474, 13825),

Gene: WheelerS25_28 Start: 11697, Stop: 14969, Start Num: 34
Candidate Starts for WheelerS25_28:
(9, 11166), (15, 11514), (18, 11544), (Start: 34 @11697 has 53 MA's), (67, 11979), (80, 12078), (92, 12204), (100, 12261), (103, 12276), (121, 12357), (125, 12390), (130, 12420), (146, 12492), (156, 12537), (162, 12579), (167, 12624), (194, 12804), (197, 12816), (212, 12912), (230, 13005), (247, 13137), (272, 13287), (281, 13356), (284, 13377), (288, 13404), (312, 13527), (325, 13587), (326, 13590), (362, 13809), (365, 13836), (393, 14064), (395, 14076), (396, 14085), (410, 14166), (411, 14169), (423, 14253), (461, 14562), (463, 14586), (465, 14595), (474, 14661),

Gene: Wheelie_22 Start: 10272, Stop: 13484, Start Num: 34
Candidate Starts for Wheelie_22:
(Start: 34 @10272 has 53 MA's), (38, 10314), (59, 10473), (67, 10554), (80, 10653), (92, 10779), (100, 10836), (103, 10851), (121, 10932), (125, 10965), (130, 10995), (135, 11010), (145, 11061), (153, 11094), (181, 11262), (194, 11370), (197, 11382), (222, 11454), (224, 11478), (230, 11520), (238, 11571), (247, 11652), (272, 11802), (281, 11871), (288, 11919), (312, 12042), (325, 12102), (326, 12105), (362, 12324), (365, 12351), (393, 12579), (395, 12591), (396, 12600), (411, 12684), (423, 12768), (461, 13077), (463, 13101), (465, 13110), (474, 13176),

Gene: Wilca_22 Start: 9464, Stop: 12697, Start Num: 34
Candidate Starts for Wilca_22:
(Start: 34 @9464 has 53 MA's), (69, 9755), (74, 9797), (75, 9821), (80, 9845), (91, 9956), (100, 10028), (103, 10043), (125, 10157), (135, 10199), (146, 10250), (153, 10283), (188, 10520), (194, 10559), (197, 10571), (209, 10658), (215, 10694), (228, 10769), (230, 10781), (246, 10904), (247, 10913), (291, 11183), (294, 11192), (308, 11261), (311, 11270), (325, 11333), (326, 11336), (345, 11462), (393, 11795), (438, 12095), (440, 12116), (443, 12137), (450, 12212), (462, 12278), (476, 12377), (480, 12407), (492, 12509), (493, 12521), (500, 12587),

Gene: Wilde_18 Start: 10185, Stop: 12686, Start Num: 29
Candidate Starts for Wilde_18:
(Start: 29 @10185 has 23 MA's), (41, 10275), (42, 10287), (55, 10371), (58, 10401), (64, 10455), (70, 10503), (71, 10512), (73, 10530), (80, 10587), (87, 10662), (90, 10680), (93, 10719), (94, 10734), (98, 10749), (128, 10824), (137, 10860), (140, 10875), (143, 10896), (157, 10950), (159, 10965), (166, 11010), (183, 11061), (192, 11109), (199, 11124), (217, 11142), (248, 11295), (261, 11328), (303, 11541), (309, 11574), (319, 11577), (349, 11622), (372, 11673), (375, 11688), (376, 11706), (378, 11727), (379, 11742), (382, 11760), (392, 11829), (398, 11883), (412, 11934), (416, 11958), (419,

11979), (422, 12000), (440, 12150), (443, 12171), (446, 12216), (453, 12273), (472, 12408), (474, 12414), (478, 12432), (486, 12474), (491, 12501), (498, 12567),

Gene: Xkcd426_12 Start: 10921, Stop: 14457, Start Num: 13
Candidate Starts for Xkcd426_12:
(11, 10747), (Start: 13 @10921 has 9 MA's), (25, 11047), (27, 11065), (28, 11083), (32, 11110), (40, 11176), (54, 11275), (56, 11296), (62, 11335), (69, 11398), (77, 11476), (82, 11509), (83, 11530), (87, 11569), (89, 11584), (95, 11644), (105, 11686), (120, 11737), (121, 11740), (124, 11749), (175, 12052), (179, 12070), (182, 12121), (184, 12142), (189, 12184), (208, 12274), (230, 12427), (231, 12430), (244, 12550), (249, 12574), (257, 12613), (269, 12727), (275, 12775), (276, 12781), (288, 12859), (298, 12916), (313, 12985), (323, 13051), (327, 13063), (328, 13084), (332, 13123), (338, 13141), (342, 13174), (350, 13234), (351, 13237), (355, 13249), (366, 13282), (367, 13297), (371, 13330), (397, 13549), (403, 13582), (405, 13609), (406, 13618), (413, 13642), (415, 13660), (424, 13720), (428, 13753), (443, 13894), (449, 13966), (452, 13978), (454, 13990), (457, 14005), (468, 14086), (476, 14134), (477, 14140), (484, 14194), (487, 14218), (494, 14281), (503, 14341), (508, 14410),

Gene: YDN12_12 Start: 9829, Stop: 13401, Start Num: 13
Candidate Starts for YDN12_12:
(Start: 13 @9829 has 9 MA's), (22, 9934), (25, 9955), (27, 9973), (28, 9991), (32, 10018), (48, 10144), (51, 10156), (56, 10204), (62, 10243), (77, 10384), (82, 10417), (87, 10477), (89, 10492), (90, 10495), (95, 10552), (105, 10600), (120, 10651), (124, 10663), (126, 10690), (148, 10798), (157, 10849), (160, 10882), (170, 10951), (174, 10963), (189, 11095), (199, 11134), (206, 11167), (208, 11185), (230, 11338), (237, 11386), (252, 11497), (256, 11512), (257, 11524), (258, 11527), (263, 11581), (269, 11632), (276, 11686), (282, 11716), (289, 11761), (290, 11764), (301, 11833), (307, 11866), (318, 11914), (323, 11962), (327, 11974), (330, 12028), (340, 12082), (348, 12127), (350, 12145), (358, 12175), (359, 12178), (363, 12187), (364, 12199), (366, 12211), (371, 12259), (375, 12289), (388, 12394), (390, 12406), (394, 12448), (403, 12511), (405, 12538), (413, 12571), (415, 12589), (420, 12619), (428, 12682), (433, 12724), (440, 12802), (443, 12823), (449, 12895), (451, 12904), (454, 12919), (457, 12934), (462, 12964), (466, 12991), (468, 13015), (473, 13054), (476, 13063), (477, 13069), (484, 13123), (485, 13129), (487, 13147), (488, 13156), (494, 13210), (495, 13225), (503, 13285), (509, 13366), (510, 13369),

Gene: Zagie_23 Start: 10460, Stop: 13672, Start Num: 34
Candidate Starts for Zagie_23:
(6, 9638), (9, 9929), (18, 10307), (Start: 34 @10460 has 53 MA's), (59, 10661), (67, 10742), (80, 10841), (92, 10967), (100, 11024), (103, 11039), (121, 11120), (125, 11153), (130, 11183), (135, 11198), (145, 11249), (153, 11282), (181, 11450), (194, 11558), (197, 11570), (222, 11642), (224, 11666), (230, 11708), (238, 11759), (247, 11840), (272, 11990), (281, 12059), (288, 12107), (312, 12230), (325, 12290), (326, 12293), (362, 12512), (365, 12539), (393, 12767), (395, 12779), (407, 12857), (411, 12872), (423, 12956), (461, 13265), (463, 13289), (465, 13298), (474, 13364),

Gene: ZestyBestie_21 Start: 10130, Stop: 13444, Start Num: 34
Candidate Starts for ZestyBestie_21:
(1, 8291), (2, 8420), (3, 8435), (4, 8720), (6, 9308), (9, 9599), (18, 9977), (Start: 34 @10130 has 53 MA's), (59, 10331), (67, 10412), (80, 10511), (100, 10694), (103, 10709), (125, 10823), (130, 10853), (153, 10958), (156, 10970), (162, 11012), (167, 11057), (181, 11129), (194, 11237), (197, 11249), (206, 11303), (210, 11354), (214, 11375), (230, 11480), (238, 11531), (247, 11612), (272, 11762), (281, 11831), (288, 11879), (312, 12002), (325, 12062), (326, 12065), (362, 12284), (365, 12311), (393, 12539), (395, 12551), (407, 12629), (411, 12644), (423, 12728), (437, 12860), (463, 13061), (465, 13070), (474, 13136),

Gene: Zhafia_25 Start: 10690, Stop: 13995, Start Num: 34

Candidate Starts for Zhafia_25:
(6, 9868), (9, 10159), (15, 10507), (18, 10537), (Start: 34 @10690 has 53 MA's), (59, 10891), (67, 10972), (80, 11071), (92, 11197), (100, 11254), (103, 11269), (121, 11350), (125, 11383), (130, 11413), (135, 11428), (145, 11479), (153, 11512), (181, 11680), (194, 11788), (197, 11800), (206, 11854), (210, 11905), (214, 11926), (230, 12031), (238, 12082), (247, 12163), (272, 12313), (281, 12382), (288, 12430), (312, 12553), (325, 12613), (326, 12616), (362, 12835), (365, 12862), (393, 13090), (395, 13102), (407, 13180), (411, 13195), (423, 13279), (461, 13588), (463, 13612), (465, 13621), (474, 13687),