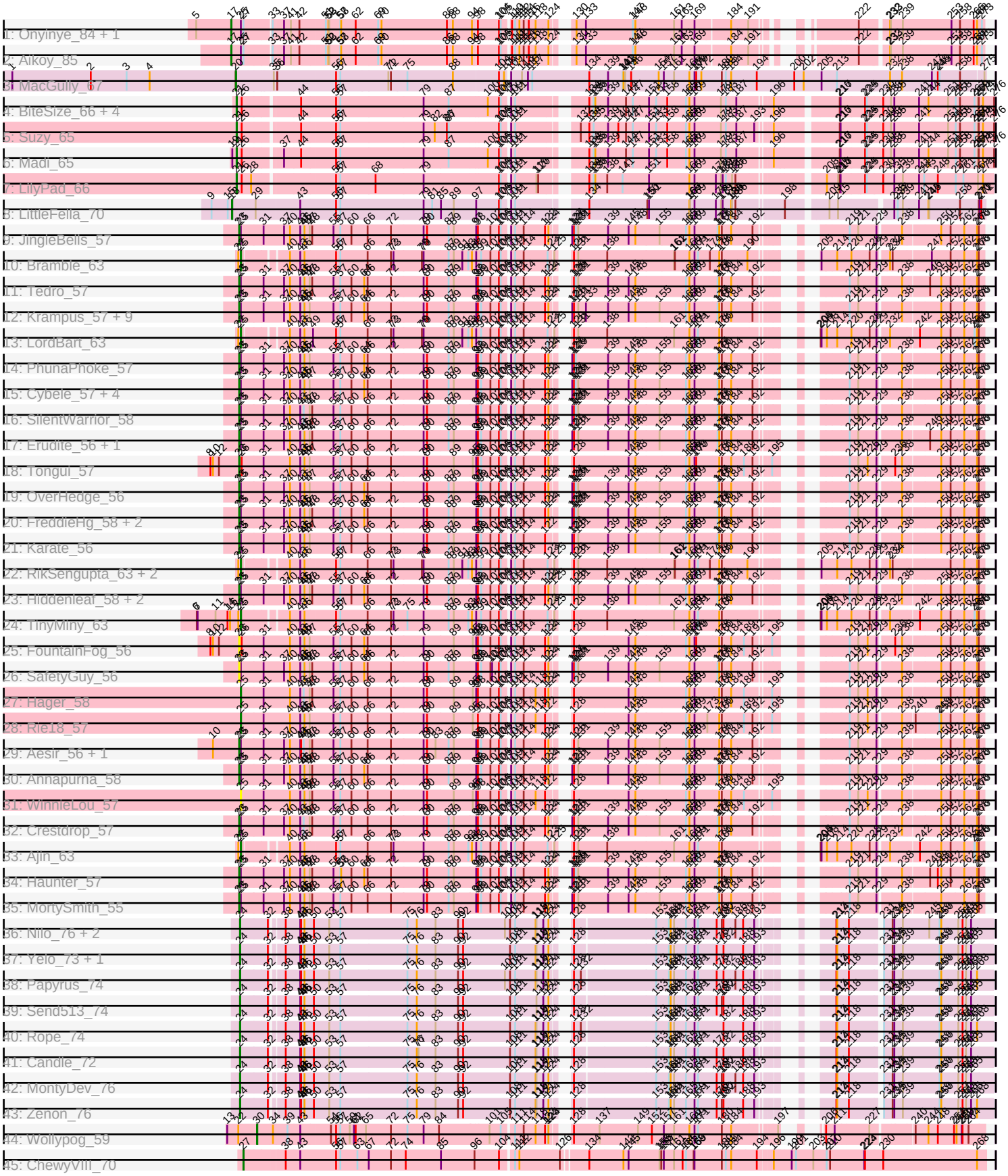
Pham 347560


1: Onyinye_84 + 1
2: Aikoy_85
3: MacGully_67
4: BiteSize_66 + 4
5: Suzy_65
6: Madi_65
7: LilyPad_66
8: LittleFella_70
9: JingleBells_57
10: Bramble_63
11: Tedro_57
12: Krampus_57 + 9
13: LordBart_63
14: PhunaPhoke_57
15: Cybele_57 + 4
16: SilentWarrior_58
17: Erudite_56 + 1
18: Tongui_57
19: OverHedge_56
20: FreddieHg_58 + 2
21: Karate_56
22: RikSengupta_63 + 2
23: Hiddenleaf_58 + 2
24: TinyMiny_63
25: FountainFog_56
26: SafetyGuy_56
27: Hager_58
28: Rie18_57
29: Aesir_56 + 1
30: Annapurna_58
31: WinnieLou_57
32: Crestdrop_57
33: Ajin_63
34: Haunter_57
35: MortySmith_55
36: Nilo_76 + 2
37: Yelo_73 + 1
38: Papyrus_74
39: Send513_74
40: Rope_74
41: Candle_72
42: MontyDev_76
43: Zenon_76
44: Wollypog_59
45: ChewyVIII_70

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 347560 Report

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

Pham number 347560 has 74 members, 5 are drafts.

Phages represented in each track:
- Track 1 : Onyinye_84, Leopard_84
- Track 2 : Aikoy_85
- Track 3 : MacGully_67
- Track 4 : BiteSize_66, Terapin_67, Sienna_66, Djokovic_66, Beyoncage_66
- Track 5 : Suzy_65
- Track 6 : Madi_65
- Track 7 : LilyPad_66
- Track 8 : LittleFella_70
- Track 9 : JingleBells_57
- Track 10 : Bramble_63
- Track 11 : Tedro_57
- Track 12 : Krampus_57, Rachella_57, Kate_57, Pharpay_56, AnnaSerena_57, Artiphact_57, NarutoRun_57, Gilda_57, OhDear_57, Anakin_57
- Track 13 : LordBart_63
- Track 14 : PhunaPhoke_57
- Track 15 : Cybele_57, Neptune_57, Potty_56, CoolCookie_56, Tiggy93_57
- Track 16 : SilentWarrior_58
- Track 17 : Erudite_56, Dauntless_56
- Track 18 : Tongui_57
- Track 19 : OverHedge_56
- Track 20 : FreddieHg_58, DannyDe_58, Poultress_56
- Track 21 : Karate_56
- Track 22 : RikSengupta_63, Sparcetus_63, Kors_63
- Track 23 : Hiddenleaf_58, Chivey_58, Snakehole_58
- Track 24 : TinyMiny_63
- Track 25 : FountainFog_56
- Track 26 : SafetyGuy_56
- Track 27 : Hager_58
- Track 28 : Rie18_57
- Track 29 : Aesir_56, JDawG_56
- Track 30 : Annapurna_58
- Track 31 : WinnieLou_57
- Track 32 : Crestdrop_57
- Track 33 : Ajin_63
- Track 34 : Haunter_57
- Track 35 : MortySmith_55
- Track 36 : Nilo_76, Weiss13_74, Riparian_76

• Track 37 : Yelo_73, Gimesa_75
• Track 38 : Papyrus_74
• Track 39 : Send513_74
• Track 40 : Rope_74
• Track 41 : Candle_72
• Track 42 : MontyDev_76
• Track 43 : Zenon_76
• Track 44 : Wollypog_59
• Track 45 : ChewyVIII_70

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

The start number called the most often in the published annotations is 23, it was called in 35 of the 69 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aesir_56, Anakin_57, AnnaSerena_57, Annapurna_58, Artiphact_57, Chivey_58, CoolCookie_56, Crestdrop_57, Cybele_57, DannyDe_58, Dauntless_56, Erudite_56, FountainFog_56, FreddieHg_58, Gilda_57, Haunter_57, Hiddenleaf_58, JDawG_56, JingleBells_57, Karate_56, Kate_57, Krampus_57, MortySmith_55, NarutoRun_57, Neptune_57, OhDear_57, OverHedge_56, Pharpay_56, PhunaPhoke_57, Potty_56, Poultress_56, Rachella_57, SafetyGuy_56, SilentWarrior_58, Snakehole_58, Tedro_57, Tiggy93_57, Tongui_57,

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

Genes that do not have the "Most Annotated" start:
• Aikoy_85, Ajin_63, Beyoncage_66, BiteSize_66, Bramble_63, Candle_72, ChewyVIII_70, Djokovic_66, Gimesa_75, Hager_58, Kors_63, Leopard_84, LilyPad_66, LittleFella_70, LordBart_63, MacGully_67, Madi_65, MontyDev_76, Nilo_76, Onyinye_84, Papyrus_74, Rie18_57, RikSengupta_63, Riparian_76, Rope_74, Send513_74, Sienna_66, Sparcetus_63, Suzy_65, Terapin_67, TinyMiny_63, Weiss13_74, WinnieLou_57, Wollypog_59, Yelo_73, Zenon_76,

Summary by start number:

Start 17:
• Found in 3 of 74 (4.1%) of genes in pham
• Manual Annotations of this start: 3 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aikoy_85 (AE), Leopard_84 (AE), Onyinye_84 (AE),

Start 18:
• Found in 1 of 74 (1.4%) of genes in pham
• Manual Annotations of this start: 1 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LittleFella_70 (DG2),

Start 20:
• Found in 1 of 74 (1.4%) of genes in pham
• Manual Annotations of this start: 1 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MacGully_67 (CR7),

Start 21:
• Found in 8 of 74 (10.8%) of genes in pham
• Manual Annotations of this start: 8 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beyoncage_66 (DG1), BiteSize_66 (DG1), Djokovic_66 (DG1), LilyPad_66 (DG1), Madi_65 (DG1), Sienna_66 (DG1), Suzy_65 (DG1), Terapin_67 (DG1),

Start 23:
• Found in 38 of 74 (51.4%) of genes in pham
• Manual Annotations of this start: 35 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aesir_56 (EF), Anakin_57 (EF), AnnaSerena_57 (EF), Annapurna_58 (EF), Artiphact_57 (EF), Chivey_58 (EF), CoolCookie_56 (EF), Crestdrop_57 (EF), Cybele_57 (EF), DannyDe_58 (EF), Dauntless_56 (EF), Erudite_56 (EF), FountainFog_56 (EF), FreddieHg_58 (EF), Gilda_57 (EF), Haunter_57 (EF), Hiddenleaf_58 (EF), JDawG_56 (EF), JingleBells_57 (EF), Karate_56 (EF), Kate_57 (EF), Krampus_57 (EF), MortySmith_55 (EF), NarutoRun_57 (EF), Neptune_57 (EF), OhDear_57 (EF), OverHedge_56 (EF), Pharpay_56 (EF), PhunaPhoke_57 (EF), Potty_56 (EF), Poultress_56 (EF), Rachella_57 (EF), SafetyGuy_56 (EF), SilentWarrior_58 (EF), Snakehole_58 (EF), Tedro_57 (EF), Tiggy93_57 (EF), Tongui_57 (EF),

Start 24:
• Found in 11 of 74 (14.9%) of genes in pham
• Manual Annotations of this start: 10 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Candle_72 (R), Gimesa_75 (R), MontyDev_76 (R), Nilo_76 (R), Papyrus_74 (R), Riparian_76 (R), Rope_74 (R), Send513_74 (R), Weiss13_74 (R), Yelo_73 (R), Zenon_76 (R),

Start 25:
• Found in 49 of 74 (66.2%) of genes in pham
• Manual Annotations of this start: 9 of 69
• Called 20.4% of time when present
• Phage (with cluster) where this start called: Ajin_63 (EF), Bramble_63 (EF), Hager_58 (EF), Kors_63 (EF), LordBart_63 (EF), Rie18_57 (EF), RikSengupta_63 (EF), Sparcetus_63 (EF), TinyMiny_63 (EF), WinnieLou_57 (EF),

Start 27:
• Found in 4 of 74 (5.4%) of genes in pham
• Manual Annotations of this start: 1 of 69
• Called 25.0% of time when present
• Phage (with cluster) where this start called: ChewyVIII_70 (singleton),

Start 30:
• Found in 1 of 74 (1.4%) of genes in pham

• Manual Annotations of this start: 1 of 69
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Wollypog_59 (singleton),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, AE, CR7, EF, DG2, DG1, R,

Info for manual annotations of cluster AE:
•Start number 17 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster CR7:
•Start number 20 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster DG1:
•Start number 21 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DG2:
•Start number 18 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster EF:
•Start number 23 was manually annotated 35 times for cluster EF.
•Start number 25 was manually annotated 9 times for cluster EF.

Info for manual annotations of cluster R:
•Start number 24 was manually annotated 10 times for cluster R.

Gene Information:

Gene: Aesir_56 Start: 40899, Stop: 43199, Start Num: 23
Candidate Starts for Aesir_56:
(10, 40809), (Start: 23 @40899 has 35 MA's), (Start: 25 @40905 has 9 MA's), (31, 40980), (37, 41052), (40, 41073), (43, 41106), (44, 41109), (45, 41118), (47, 41139), (48, 41145), (55, 41214), (57, 41238), (60, 41277), (66, 41334), (72, 41415), (79, 41529), (80, 41541), (83, 41571), (87, 41616), (89, 41634), (97, 41712), (98, 41718), (99, 41727), (102, 41760), (104, 41790), (105, 41796), (109, 41817), (111, 41826), (114, 41856), (122, 41931), (124, 41940), (128, 41970), (131, 41985), (139, 42087), (145, 42159), (148, 42183), (155, 42267), (165, 42357), (166, 42369), (169, 42387), (178, 42471), (180, 42480), (184, 42513), (192, 42585), (219, 42765), (221, 42795), (229, 42858), (238, 42930), (250, 43053), (252, 43086), (262, 43131), (268, 43176), (270, 43182),

Gene: Aikoy_85 Start: 57850, Stop: 60138, Start Num: 17
Candidate Starts for Aikoy_85:
(Start: 17 @57850 has 3 MA's), (Start: 25 @57883 has 9 MA's), (Start: 27 @57889 has 1 MA's), (33, 57979), (37, 58012), (41, 58036), (42, 58063), (51, 58147), (52, 58156), (53, 58159), (57, 58198), (58, 58201), (62, 58252), (69, 58330), (70, 58342), (86, 58570), (88, 58591), (94, 58654), (98, 58666), (104, 58738), (105, 58744), (110, 58768), (111, 58774), (112, 58789), (114, 58804), (116, 58822), (118, 58846), (124, 58888), (130, 58927), (133, 58960), (147, 59122), (148, 59131), (161, 59266), (163, 59293), (169, 59338), (184, 59452), (191, 59512), (222, 59728), (232, 59815), (233, 59818), (239, 59860), (253, 60025), (258, 60055), (266, 60103), (268, 60115), (273, 60130),

Gene: Ajin_63 Start: 42544, Stop: 44799, Start Num: 25

Candidate Starts for Ajin_63:
(22, 42535), (Start: 25 @42544 has 9 MA's), (40, 42679), (43, 42712), (46, 42727), (56, 42829), (57, 42844), (66, 42940), (72, 43021), (73, 43030), (79, 43135), (87, 43222), (89, 43240), (93, 43291), (94, 43303), (97, 43318), (99, 43333), (102, 43366), (104, 43396), (105, 43402), (109, 43423), (111, 43432), (114, 43462), (123, 43543), (125, 43558), (128, 43576), (131, 43591), (138, 43690), (161, 43921), (166, 43975), (169, 43993), (171, 44005), (178, 44077), (180, 44086), (204, 44275), (205, 44278), (208, 44296), (214, 44329), (220, 44374), (228, 44437), (229, 44461), (232, 44491), (242, 44581), (250, 44653), (252, 44686), (262, 44731), (267, 44767), (268, 44776), (270, 44782),

Gene: Anakin_57 Start: 41234, Stop: 43537, Start Num: 23
Candidate Starts for Anakin_57:
(Start: 23 @41234 has 35 MA's), (Start: 25 @41240 has 9 MA's), (31, 41318), (37, 41390), (40, 41411), (43, 41444), (45, 41456), (46, 41459), (47, 41477), (55, 41552), (57, 41576), (60, 41615), (64, 41660), (66, 41672), (72, 41753), (79, 41867), (80, 41879), (87, 41954), (89, 41972), (97, 42050), (98, 42056), (99, 42065), (102, 42098), (104, 42128), (105, 42134), (109, 42155), (111, 42164), (114, 42194), (122, 42269), (124, 42278), (127, 42302), (128, 42308), (131, 42323), (133, 42350), (139, 42425), (145, 42497), (148, 42521), (155, 42605), (165, 42695), (166, 42707), (169, 42725), (177, 42803), (178, 42809), (180, 42818), (184, 42851), (192, 42923), (219, 43103), (221, 43133), (229, 43196), (238, 43268), (250, 43391), (252, 43424), (262, 43469), (268, 43514), (270, 43520),

Gene: AnnaSerena_57 Start: 41268, Stop: 43571, Start Num: 23
Candidate Starts for AnnaSerena_57:
(Start: 23 @41268 has 35 MA's), (Start: 25 @41274 has 9 MA's), (31, 41352), (37, 41424), (40, 41445), (43, 41478), (45, 41490), (46, 41493), (47, 41511), (55, 41586), (57, 41610), (60, 41649), (64, 41694), (66, 41706), (72, 41787), (79, 41901), (80, 41913), (87, 41988), (89, 42006), (97, 42084), (98, 42090), (99, 42099), (102, 42132), (104, 42162), (105, 42168), (109, 42189), (111, 42198), (114, 42228), (122, 42303), (124, 42312), (127, 42336), (128, 42342), (131, 42357), (133, 42384), (139, 42459), (145, 42531), (148, 42555), (155, 42639), (165, 42729), (166, 42741), (169, 42759), (177, 42837), (178, 42843), (180, 42852), (184, 42885), (192, 42957), (219, 43137), (221, 43167), (229, 43230), (238, 43302), (250, 43425), (252, 43458), (262, 43503), (268, 43548), (270, 43554),

Gene: Annapurna_58 Start: 40745, Stop: 43048, Start Num: 23
Candidate Starts for Annapurna_58:
(Start: 23 @40745 has 35 MA's), (Start: 25 @40751 has 9 MA's), (31, 40829), (37, 40901), (40, 40922), (43, 40955), (45, 40967), (46, 40970), (47, 40988), (48, 40994), (55, 41063), (57, 41087), (60, 41126), (64, 41171), (66, 41183), (72, 41264), (79, 41378), (80, 41390), (87, 41465), (89, 41483), (97, 41561), (98, 41567), (99, 41576), (102, 41609), (104, 41639), (105, 41645), (109, 41666), (111, 41675), (114, 41705), (122, 41780), (124, 41789), (127, 41813), (128, 41819), (131, 41834), (139, 41936), (145, 42008), (148, 42032), (155, 42116), (165, 42206), (166, 42218), (169, 42236), (177, 42314), (178, 42320), (180, 42329), (184, 42362), (192, 42434), (219, 42614), (221, 42644), (229, 42707), (238, 42779), (250, 42902), (252, 42935), (262, 42980), (268, 43025), (270, 43031),

Gene: Artiphact_57 Start: 41258, Stop: 43561, Start Num: 23
Candidate Starts for Artiphact_57:
(Start: 23 @41258 has 35 MA's), (Start: 25 @41264 has 9 MA's), (31, 41342), (37, 41414), (40, 41435), (43, 41468), (45, 41480), (46, 41483), (47, 41501), (55, 41576), (57, 41600), (60, 41639), (64, 41684), (66, 41696), (72, 41777), (79, 41891), (80, 41903), (87, 41978), (89, 41996), (97, 42074), (98, 42080), (99, 42089), (102, 42122), (104, 42152), (105, 42158), (109, 42179), (111, 42188), (114, 42218), (122, 42293), (124, 42302), (127, 42326), (128, 42332), (131, 42347), (133, 42374), (139, 42449), (145, 42521), (148, 42545), (155, 42629), (165, 42719), (166, 42731), (169, 42749), (177, 42827), (178, 42833), (180, 42842), (184, 42875), (192, 42947), (219, 43127), (221, 43157), (229, 43220), (238, 43292), (250, 43415), (252, 43448), (262, 43493), (268, 43538), (270, 43544),

Gene: Beyoncage_66 Start: 47716, Stop: 50151, Start Num: 21
Candidate Starts for Beyoncage_66:
(Start: 21 @47716 has 8 MA's), (26, 47734), (44, 47914), (56, 48028), (57, 48043), (79, 48334), (87, 48421), (100, 48550), (104, 48589), (105, 48595), (109, 48616), (111, 48625), (134, 48823), (135, 48838), (136, 48844), (139, 48886), (144, 48949), (147, 48973), (151, 49030), (153, 49054), (158, 49093), (165, 49159), (166, 49171), (169, 49189), (179, 49282), (183, 49297), (187, 49333), (196, 49435), (216, 49627), (217, 49630), (224, 49705), (225, 49711), (230, 49768), (233, 49795), (235, 49807), (241, 49891), (244, 49921), (251, 49990), (255, 50014), (258, 50029), (267, 50080), (269, 50092), (270, 50095), (274, 50110), (276, 50146),

Gene: BiteSize_66 Start: 47802, Stop: 50237, Start Num: 21
Candidate Starts for BiteSize_66:
(Start: 21 @47802 has 8 MA's), (26, 47820), (44, 48000), (56, 48114), (57, 48129), (79, 48420), (87, 48507), (100, 48636), (104, 48675), (105, 48681), (109, 48702), (111, 48711), (134, 48909), (135, 48924), (136, 48930), (139, 48972), (144, 49035), (147, 49059), (151, 49116), (153, 49140), (158, 49179), (165, 49245), (166, 49257), (169, 49275), (179, 49368), (183, 49383), (187, 49419), (196, 49521), (216, 49713), (217, 49716), (224, 49791), (225, 49797), (230, 49854), (233, 49881), (235, 49893), (241, 49977), (244, 50007), (251, 50076), (255, 50100), (258, 50115), (267, 50166), (269, 50178), (270, 50181), (274, 50196), (276, 50232),

Gene: Bramble_63 Start: 42556, Stop: 44811, Start Num: 25
Candidate Starts for Bramble_63:
(22, 42547), (Start: 25 @42556 has 9 MA's), (40, 42691), (43, 42724), (46, 42739), (56, 42841), (57, 42856), (66, 42952), (72, 43033), (73, 43042), (78, 43141), (79, 43147), (87, 43234), (89, 43252), (91, 43282), (93, 43303), (94, 43315), (97, 43330), (99, 43345), (102, 43378), (104, 43408), (105, 43414), (109, 43435), (111, 43444), (114, 43474), (123, 43555), (125, 43570), (128, 43588), (131, 43603), (138, 43702), (161, 43933), (162, 43936), (166, 43987), (169, 44005), (171, 44017), (174, 44059), (178, 44089), (180, 44098), (190, 44188), (205, 44290), (214, 44341), (220, 44386), (228, 44449), (229, 44473), (232, 44503), (234, 44509), (247, 44632), (252, 44698), (262, 44743), (268, 44788), (270, 44794),

Gene: Candle_72 Start: 55921, Stop: 58233, Start Num: 24
Candidate Starts for Candle_72:
(Start: 24 @55921 has 10 MA's), (32, 56017), (38, 56056), (43, 56107), (44, 56110), (45, 56119), (46, 56122), (50, 56152), (53, 56200), (57, 56236), (75, 56470), (76, 56503), (77, 56509), (83, 56569), (90, 56647), (92, 56665), (108, 56830), (111, 56848), (118, 56920), (119, 56923), (121, 56947), (124, 56962), (128, 56992), (153, 57265), (159, 57307), (160, 57313), (161, 57325), (165, 57367), (169, 57397), (171, 57409), (176, 57469), (182, 57493), (188, 57562), (193, 57598), (212, 57721), (214, 57724), (218, 57760), (231, 57859), (234, 57886), (235, 57892), (239, 57922), (249, 58051), (250, 58057), (257, 58114), (260, 58129), (263, 58141), (265, 58159),

Gene: ChewyVIII_70 Start: 52283, Stop: 49815, Start Num: 27
Candidate Starts for ChewyVIII_70:
(Start: 27 @52283 has 1 MA's), (38, 52151), (43, 52103), (56, 51977), (57, 51962), (63, 51902), (67, 51863), (72, 51785), (74, 51734), (85, 51611), (96, 51497), (104, 51419), (111, 51380), (112, 51365), (126, 51233), (134, 51152), (142, 51035), (145, 51017), (155, 50909), (156, 50903), (157, 50894), (161, 50858), (164, 50828), (165, 50816), (168, 50789), (169, 50786), (180, 50693), (183, 50681), (184, 50663), (194, 50576), (196, 50534), (199, 50477), (201, 50462), (203, 50408), (207, 50366), (210, 50354), (223, 50234), (224, 50231), (230, 50168), (268, 49844),

Gene: Chivey_58 Start: 40699, Stop: 43002, Start Num: 23
Candidate Starts for Chivey_58:

(Start: 23 @40699 has 35 MA's), (Start: 25 @40705 has 9 MA's), (31, 40783), (37, 40855), (40, 40876), (43, 40909), (45, 40921), (46, 40924), (47, 40942), (48, 40948), (55, 41017), (57, 41041), (60, 41080), (64, 41125), (66, 41137), (72, 41218), (79, 41332), (80, 41344), (87, 41419), (89, 41437), (97, 41515), (98, 41521), (99, 41530), (102, 41563), (104, 41593), (105, 41599), (109, 41620), (111, 41629), (114, 41659), (122, 41734), (124, 41743), (125, 41755), (128, 41773), (131, 41788), (139, 41890), (145, 41962), (148, 41986), (155, 42070), (165, 42160), (166, 42172), (169, 42190), (177, 42268), (178, 42274), (180, 42283), (184, 42316), (192, 42388), (219, 42568), (221, 42598), (229, 42661), (238, 42733), (250, 42856), (252, 42889), (262, 42934), (268, 42979), (270, 42985),

Gene: CoolCookie_56 Start: 41279, Stop: 43582, Start Num: 23
Candidate Starts for CoolCookie_56:
(Start: 23 @41279 has 35 MA's), (Start: 25 @41285 has 9 MA's), (31, 41363), (37, 41435), (40, 41456), (43, 41489), (45, 41501), (46, 41504), (47, 41522), (55, 41597), (57, 41621), (60, 41660), (64, 41705), (66, 41717), (72, 41798), (79, 41912), (80, 41924), (87, 41999), (89, 42017), (97, 42095), (98, 42101), (99, 42110), (102, 42143), (104, 42173), (105, 42179), (109, 42200), (111, 42209), (114, 42239), (122, 42314), (124, 42323), (127, 42347), (128, 42353), (129, 42359), (131, 42368), (139, 42470), (145, 42542), (148, 42566), (155, 42650), (165, 42740), (166, 42752), (169, 42770), (177, 42848), (178, 42854), (180, 42863), (184, 42896), (192, 42968), (219, 43148), (221, 43178), (229, 43241), (238, 43313), (250, 43436), (252, 43469), (262, 43514), (268, 43559), (270, 43565),

Gene: Crestdrop_57 Start: 40973, Stop: 43273, Start Num: 23
Candidate Starts for Crestdrop_57:
(Start: 23 @40973 has 35 MA's), (Start: 25 @40979 has 9 MA's), (31, 41054), (37, 41126), (40, 41147), (43, 41180), (45, 41192), (47, 41213), (48, 41219), (55, 41288), (57, 41312), (60, 41351), (66, 41408), (72, 41489), (79, 41603), (80, 41615), (87, 41690), (89, 41708), (97, 41786), (98, 41792), (99, 41801), (102, 41834), (104, 41864), (105, 41870), (109, 41891), (111, 41900), (114, 41930), (122, 42005), (124, 42014), (127, 42038), (128, 42044), (131, 42059), (139, 42161), (145, 42233), (148, 42257), (155, 42341), (165, 42431), (166, 42443), (169, 42461), (177, 42539), (178, 42545), (180, 42554), (184, 42587), (192, 42659), (219, 42839), (221, 42869), (229, 42932), (238, 43004), (250, 43127), (252, 43160), (262, 43205), (268, 43250), (270, 43256),

Gene: Cybele_57 Start: 41252, Stop: 43555, Start Num: 23
Candidate Starts for Cybele_57:
(Start: 23 @41252 has 35 MA's), (Start: 25 @41258 has 9 MA's), (31, 41336), (37, 41408), (40, 41429), (43, 41462), (45, 41474), (46, 41477), (47, 41495), (55, 41570), (57, 41594), (60, 41633), (64, 41678), (66, 41690), (72, 41771), (79, 41885), (80, 41897), (87, 41972), (89, 41990), (97, 42068), (98, 42074), (99, 42083), (102, 42116), (104, 42146), (105, 42152), (109, 42173), (111, 42182), (114, 42212), (122, 42287), (124, 42296), (127, 42320), (128, 42326), (129, 42332), (131, 42341), (139, 42443), (145, 42515), (148, 42539), (155, 42623), (165, 42713), (166, 42725), (169, 42743), (177, 42821), (178, 42827), (180, 42836), (184, 42869), (192, 42941), (219, 43121), (221, 43151), (229, 43214), (238, 43286), (250, 43409), (252, 43442), (262, 43487), (268, 43532), (270, 43538),

Gene: DannyDe_58 Start: 40700, Stop: 43003, Start Num: 23
Candidate Starts for DannyDe_58:
(Start: 23 @40700 has 35 MA's), (Start: 25 @40706 has 9 MA's), (31, 40784), (37, 40856), (40, 40877), (43, 40910), (45, 40922), (46, 40925), (47, 40943), (48, 40949), (55, 41018), (57, 41042), (60, 41081), (64, 41126), (66, 41138), (72, 41219), (79, 41333), (80, 41345), (87, 41420), (89, 41438), (97, 41516), (98, 41522), (99, 41531), (102, 41564), (104, 41594), (105, 41600), (109, 41621), (111, 41630), (114, 41660), (122, 41735), (124, 41744), (127, 41768), (128, 41774), (129, 41780), (131, 41789), (139, 41891), (145, 41963), (148, 41987), (155, 42071), (165, 42161), (166, 42173), (169, 42191), (177, 42269), (178, 42275), (180, 42284), (184, 42317), (192, 42389), (219, 42569), (221, 42599), (229, 42662), (238, 42734), (250, 42857), (252, 42890), (262, 42935), (268, 42980), (270, 42986),

Gene: Dauntless_56 Start: 40834, Stop: 43134, Start Num: 23
Candidate Starts for Dauntless_56:
(Start: 23 @40834 has 35 MA's), (Start: 25 @40840 has 9 MA's), (31, 40915), (37, 40987), (40, 41008), (43, 41041), (45, 41053), (46, 41056), (47, 41074), (48, 41080), (55, 41149), (57, 41173), (60, 41212), (66, 41269), (72, 41350), (79, 41464), (80, 41476), (87, 41551), (89, 41569), (97, 41647), (98, 41653), (99, 41662), (102, 41695), (104, 41725), (105, 41731), (109, 41752), (111, 41761), (114, 41791), (122, 41866), (124, 41875), (127, 41899), (128, 41905), (131, 41920), (139, 42022), (145, 42094), (148, 42118), (155, 42202), (165, 42292), (166, 42304), (169, 42322), (177, 42400), (178, 42406), (180, 42415), (184, 42448), (192, 42520), (219, 42700), (221, 42730), (229, 42793), (238, 42865), (246, 42949), (250, 42988), (252, 43021), (262, 43066), (268, 43111), (270, 43117),

Gene: Djokovic_66 Start: 47715, Stop: 50150, Start Num: 21
Candidate Starts for Djokovic_66:
(Start: 21 @47715 has 8 MA's), (26, 47733), (44, 47913), (56, 48027), (57, 48042), (79, 48333), (87, 48420), (100, 48549), (104, 48588), (105, 48594), (109, 48615), (111, 48624), (134, 48822), (135, 48837), (136, 48843), (139, 48885), (144, 48948), (147, 48972), (151, 49029), (153, 49053), (158, 49092), (165, 49158), (166, 49170), (169, 49188), (179, 49281), (183, 49296), (187, 49332), (196, 49434), (216, 49626), (217, 49629), (224, 49704), (225, 49710), (230, 49767), (233, 49794), (235, 49806), (241, 49890), (244, 49920), (251, 49989), (255, 50013), (258, 50028), (267, 50079), (269, 50091), (270, 50094), (274, 50109), (276, 50145),

Gene: Erudite_56 Start: 40834, Stop: 43134, Start Num: 23
Candidate Starts for Erudite_56:
(Start: 23 @40834 has 35 MA's), (Start: 25 @40840 has 9 MA's), (31, 40915), (37, 40987), (40, 41008), (43, 41041), (45, 41053), (46, 41056), (47, 41074), (48, 41080), (55, 41149), (57, 41173), (60, 41212), (66, 41269), (72, 41350), (79, 41464), (80, 41476), (87, 41551), (89, 41569), (97, 41647), (98, 41653), (99, 41662), (102, 41695), (104, 41725), (105, 41731), (109, 41752), (111, 41761), (114, 41791), (122, 41866), (124, 41875), (127, 41899), (128, 41905), (131, 41920), (139, 42022), (145, 42094), (148, 42118), (155, 42202), (165, 42292), (166, 42304), (169, 42322), (177, 42400), (178, 42406), (180, 42415), (184, 42448), (192, 42520), (219, 42700), (221, 42730), (229, 42793), (238, 42865), (246, 42949), (250, 42988), (252, 43021), (262, 43066), (268, 43111), (270, 43117),

Gene: FountainFog_56 Start: 40481, Stop: 42781, Start Num: 23
Candidate Starts for FountainFog_56:
(8, 40382), (10, 40391), (12, 40412), (Start: 23 @40481 has 35 MA's), (26, 40487), (31, 40562), (40, 40655), (43, 40688), (45, 40700), (46, 40703), (47, 40721), (55, 40796), (57, 40820), (60, 40859), (64, 40904), (66, 40916), (72, 40997), (79, 41111), (89, 41216), (95, 41282), (97, 41294), (98, 41300), (99, 41309), (102, 41342), (104, 41372), (105, 41378), (109, 41399), (111, 41408), (114, 41438), (122, 41513), (124, 41522), (128, 41552), (145, 41741), (148, 41765), (165, 41939), (166, 41951), (169, 41969), (170, 41975), (178, 42053), (180, 42062), (184, 42095), (189, 42140), (192, 42167), (195, 42209), (219, 42347), (221, 42377), (226, 42410), (229, 42440), (236, 42488), (238, 42512), (250, 42635), (252, 42668), (262, 42713), (268, 42758), (270, 42764),

Gene: FreddieHg_58 Start: 40716, Stop: 43019, Start Num: 23
Candidate Starts for FreddieHg_58:
(Start: 23 @40716 has 35 MA's), (Start: 25 @40722 has 9 MA's), (31, 40800), (37, 40872), (40, 40893), (43, 40926), (45, 40938), (46, 40941), (47, 40959), (48, 40965), (55, 41034), (57, 41058), (60, 41097), (64, 41142), (66, 41154), (72, 41235), (79, 41349), (80, 41361), (87, 41436), (89, 41454), (97, 41532), (98, 41538), (99, 41547), (102, 41580), (104, 41610), (105, 41616), (109, 41637), (111, 41646), (114, 41676), (122, 41751), (124, 41760), (127, 41784), (128, 41790), (129, 41796), (131, 41805), (139, 41907), (145, 41979), (148, 42003), (155, 42087), (165, 42177), (166, 42189), (169, 42207), (177, 42285), (178, 42291), (180, 42300), (184, 42333), (192, 42405), (219, 42585), (221, 42615), (229, 42678), (238, 42750), (250, 42873), (252, 42906), (262, 42951), (268, 42996), (270, 43002),

Gene: Gilda_57 Start: 41255, Stop: 43558, Start Num: 23
Candidate Starts for Gilda_57:
(Start: 23 @41255 has 35 MA's), (Start: 25 @41261 has 9 MA's), (31, 41339), (37, 41411), (40, 41432), (43, 41465), (45, 41477), (46, 41480), (47, 41498), (55, 41573), (57, 41597), (60, 41636), (64, 41681), (66, 41693), (72, 41774), (79, 41888), (80, 41900), (87, 41975), (89, 41993), (97, 42071), (98, 42077), (99, 42086), (102, 42119), (104, 42149), (105, 42155), (109, 42176), (111, 42185), (114, 42215), (122, 42290), (124, 42299), (127, 42323), (128, 42329), (131, 42344), (133, 42371), (139, 42446), (145, 42518), (148, 42542), (155, 42626), (165, 42716), (166, 42728), (169, 42746), (177, 42824), (178, 42830), (180, 42839), (184, 42872), (192, 42944), (219, 43124), (221, 43154), (229, 43217), (238, 43289), (250, 43412), (252, 43445), (262, 43490), (268, 43535), (270, 43541),

Gene: Gimesa_75 Start: 55791, Stop: 58103, Start Num: 24
Candidate Starts for Gimesa_75:
(Start: 24 @55791 has 10 MA's), (32, 55887), (38, 55926), (43, 55977), (44, 55980), (45, 55989), (46, 55992), (50, 56022), (53, 56070), (57, 56106), (75, 56340), (76, 56373), (83, 56439), (90, 56517), (92, 56535), (108, 56700), (111, 56718), (118, 56790), (119, 56793), (121, 56817), (124, 56832), (128, 56862), (153, 57135), (159, 57177), (160, 57183), (161, 57195), (165, 57237), (169, 57267), (171, 57279), (176, 57339), (182, 57363), (188, 57432), (193, 57468), (212, 57591), (214, 57594), (218, 57630), (231, 57729), (234, 57756), (235, 57762), (239, 57792), (249, 57921), (250, 57927), (257, 57984), (260, 57999), (263, 58011), (265, 58029),

Gene: Hager_58 Start: 40653, Stop: 42950, Start Num: 25
Candidate Starts for Hager_58:
(Start: 25 @40653 has 9 MA's), (31, 40731), (40, 40824), (43, 40857), (45, 40869), (47, 40890), (48, 40896), (55, 40965), (57, 40989), (60, 41028), (66, 41085), (72, 41166), (79, 41280), (80, 41292), (89, 41385), (95, 41451), (97, 41463), (98, 41469), (102, 41511), (104, 41541), (105, 41547), (109, 41568), (111, 41577), (114, 41607), (118, 41649), (122, 41682), (124, 41691), (128, 41721), (145, 41910), (148, 41934), (165, 42108), (166, 42120), (169, 42138), (178, 42222), (180, 42231), (184, 42264), (189, 42309), (195, 42378), (219, 42516), (221, 42546), (226, 42579), (229, 42609), (238, 42681), (250, 42804), (252, 42837), (262, 42882), (268, 42927), (270, 42933),

Gene: Haunter_57 Start: 40472, Stop: 42772, Start Num: 23
Candidate Starts for Haunter_57:
(Start: 23 @40472 has 35 MA's), (Start: 25 @40478 has 9 MA's), (31, 40553), (37, 40625), (40, 40646), (43, 40679), (45, 40691), (46, 40694), (47, 40712), (48, 40718), (55, 40787), (57, 40811), (58, 40814), (60, 40850), (64, 40895), (66, 40907), (72, 40988), (79, 41102), (80, 41114), (87, 41189), (89, 41207), (97, 41285), (98, 41291), (99, 41300), (102, 41333), (104, 41363), (105, 41369), (109, 41390), (111, 41399), (114, 41429), (122, 41504), (124, 41513), (127, 41537), (128, 41543), (129, 41549), (131, 41558), (139, 41660), (145, 41732), (148, 41756), (155, 41840), (165, 41930), (166, 41942), (169, 41960), (177, 42038), (178, 42044), (180, 42053), (184, 42086), (192, 42158), (219, 42338), (221, 42368), (229, 42431), (238, 42503), (246, 42587), (248, 42614), (250, 42626), (252, 42659), (262, 42704), (268, 42749), (270, 42755),

Gene: Hiddenleaf_58 Start: 40699, Stop: 43002, Start Num: 23
Candidate Starts for Hiddenleaf_58:
(Start: 23 @40699 has 35 MA's), (Start: 25 @40705 has 9 MA's), (31, 40783), (37, 40855), (40, 40876), (43, 40909), (45, 40921), (46, 40924), (47, 40942), (48, 40948), (55, 41017), (57, 41041), (60, 41080), (64, 41125), (66, 41137), (72, 41218), (79, 41332), (80, 41344), (87, 41419), (89, 41437), (97, 41515), (98, 41521), (99, 41530), (102, 41563), (104, 41593), (105, 41599), (109, 41620), (111, 41629), (114, 41659), (122, 41734), (124, 41743), (125, 41755), (128, 41773), (131, 41788), (139, 41890), (145, 41962), (148, 41986), (155, 42070), (165, 42160), (166, 42172), (169, 42190), (177, 42268), (178, 42274), (180, 42283), (184, 42316), (192, 42388), (219, 42568), (221, 42598), (229, 42661), (238,

42733), (250, 42856), (252, 42889), (262, 42934), (268, 42979), (270, 42985),

Gene: JDawG_56 Start: 40894, Stop: 43194, Start Num: 23
Candidate Starts for JDawG_56:
(10, 40804), (Start: 23 @40894 has 35 MA's), (Start: 25 @40900 has 9 MA's), (31, 40975), (37, 41047), (40, 41068), (43, 41101), (44, 41104), (45, 41113), (47, 41134), (48, 41140), (55, 41209), (57, 41233), (60, 41272), (66, 41329), (72, 41410), (79, 41524), (80, 41536), (83, 41566), (87, 41611), (89, 41629), (97, 41707), (98, 41713), (99, 41722), (102, 41755), (104, 41785), (105, 41791), (109, 41812), (111, 41821), (114, 41851), (122, 41926), (124, 41935), (128, 41965), (131, 41980), (139, 42082), (145, 42154), (148, 42178), (155, 42262), (165, 42352), (166, 42364), (169, 42382), (178, 42466), (180, 42475), (184, 42508), (192, 42580), (219, 42760), (221, 42790), (229, 42853), (238, 42925), (250, 43048), (252, 43081), (262, 43126), (268, 43171), (270, 43177),

Gene: JingleBells_57 Start: 40808, Stop: 43108, Start Num: 23
Candidate Starts for JingleBells_57:
(Start: 23 @40808 has 35 MA's), (Start: 25 @40814 has 9 MA's), (31, 40889), (37, 40961), (40, 40982), (43, 41015), (45, 41027), (46, 41030), (47, 41048), (48, 41054), (55, 41123), (57, 41147), (60, 41186), (66, 41243), (72, 41324), (79, 41438), (80, 41450), (87, 41525), (89, 41543), (97, 41621), (98, 41627), (102, 41669), (104, 41699), (105, 41705), (109, 41726), (111, 41735), (114, 41765), (122, 41840), (124, 41849), (127, 41873), (128, 41879), (129, 41885), (131, 41894), (139, 41996), (145, 42068), (148, 42092), (155, 42176), (165, 42266), (166, 42278), (169, 42296), (177, 42374), (178, 42380), (180, 42389), (184, 42422), (192, 42494), (219, 42674), (221, 42704), (229, 42767), (238, 42839), (250, 42962), (252, 42995), (262, 43040), (268, 43085), (270, 43091),

Gene: Karate_56 Start: 41072, Stop: 43375, Start Num: 23
Candidate Starts for Karate_56:
(Start: 23 @41072 has 35 MA's), (Start: 25 @41078 has 9 MA's), (31, 41156), (37, 41228), (40, 41249), (43, 41282), (45, 41294), (46, 41297), (47, 41315), (55, 41390), (57, 41414), (60, 41453), (66, 41510), (72, 41591), (79, 41705), (80, 41717), (87, 41792), (89, 41810), (97, 41888), (98, 41894), (99, 41903), (102, 41936), (104, 41966), (105, 41972), (109, 41993), (111, 42002), (114, 42032), (122, 42107), (127, 42140), (128, 42146), (131, 42161), (139, 42263), (145, 42335), (148, 42359), (155, 42443), (165, 42533), (166, 42545), (169, 42563), (177, 42641), (178, 42647), (180, 42656), (184, 42689), (192, 42761), (219, 42941), (221, 42971), (229, 43034), (238, 43106), (250, 43229), (252, 43262), (262, 43307), (268, 43352), (270, 43358),

Gene: Kate_57 Start: 41173, Stop: 43476, Start Num: 23
Candidate Starts for Kate_57:
(Start: 23 @41173 has 35 MA's), (Start: 25 @41179 has 9 MA's), (31, 41257), (37, 41329), (40, 41350), (43, 41383), (45, 41395), (46, 41398), (47, 41416), (55, 41491), (57, 41515), (60, 41554), (64, 41599), (66, 41611), (72, 41692), (79, 41806), (80, 41818), (87, 41893), (89, 41911), (97, 41989), (98, 41995), (99, 42004), (102, 42037), (104, 42067), (105, 42073), (109, 42094), (111, 42103), (114, 42133), (122, 42208), (124, 42217), (127, 42241), (128, 42247), (131, 42262), (133, 42289), (139, 42364), (145, 42436), (148, 42460), (155, 42544), (165, 42634), (166, 42646), (169, 42664), (177, 42742), (178, 42748), (180, 42757), (184, 42790), (192, 42862), (219, 43042), (221, 43072), (229, 43135), (238, 43207), (250, 43330), (252, 43363), (262, 43408), (268, 43453), (270, 43459),

Gene: Kors_63 Start: 42629, Stop: 44884, Start Num: 25
Candidate Starts for Kors_63:
(22, 42620), (Start: 25 @42629 has 9 MA's), (40, 42764), (43, 42797), (46, 42812), (56, 42914), (57, 42929), (66, 43025), (72, 43106), (73, 43115), (78, 43214), (79, 43220), (87, 43307), (89, 43325), (91, 43355), (93, 43376), (94, 43388), (97, 43403), (99, 43418), (102, 43451), (104, 43481), (105, 43487), (109, 43508), (111, 43517), (114, 43547), (123, 43628), (125, 43643), (128, 43661), (131, 43676), (138, 43775), (161, 44006), (162, 44009), (166, 44060), (169, 44078), (171, 44090), (174, 44132),

(178, 44162), (180, 44171), (190, 44261), (205, 44363), (214, 44414), (220, 44459), (228, 44522), (229, 44546), (232, 44576), (234, 44582), (252, 44771), (262, 44816), (268, 44861), (270, 44867),

Gene: Krampus_57 Start: 41269, Stop: 43572, Start Num: 23
Candidate Starts for Krampus_57:
(Start: 23 @41269 has 35 MA's), (Start: 25 @41275 has 9 MA's), (31, 41353), (37, 41425), (40, 41446), (43, 41479), (45, 41491), (46, 41494), (47, 41512), (55, 41587), (57, 41611), (60, 41650), (64, 41695), (66, 41707), (72, 41788), (79, 41902), (80, 41914), (87, 41989), (89, 42007), (97, 42085), (98, 42091), (99, 42100), (102, 42133), (104, 42163), (105, 42169), (109, 42190), (111, 42199), (114, 42229), (122, 42304), (124, 42313), (127, 42337), (128, 42343), (131, 42358), (133, 42385), (139, 42460), (145, 42532), (148, 42556), (155, 42640), (165, 42730), (166, 42742), (169, 42760), (177, 42838), (178, 42844), (180, 42853), (184, 42886), (192, 42958), (219, 43138), (221, 43168), (229, 43231), (238, 43303), (250, 43426), (252, 43459), (262, 43504), (268, 43549), (270, 43555),

Gene: Leopard_84 Start: 58148, Stop: 60436, Start Num: 17
Candidate Starts for Leopard_84:
(5, 58025), (Start: 17 @58148 has 3 MA's), (Start: 25 @58181 has 9 MA's), (Start: 27 @58187 has 1 MA's), (33, 58277), (37, 58310), (41, 58334), (42, 58361), (51, 58445), (52, 58454), (53, 58457), (57, 58496), (58, 58499), (62, 58550), (69, 58628), (70, 58640), (86, 58868), (88, 58889), (94, 58952), (98, 58964), (104, 59036), (105, 59042), (110, 59066), (111, 59072), (112, 59087), (114, 59102), (116, 59120), (118, 59144), (124, 59186), (130, 59225), (133, 59258), (147, 59420), (148, 59429), (161, 59564), (163, 59591), (169, 59636), (184, 59750), (191, 59810), (222, 60026), (232, 60113), (233, 60116), (239, 60158), (253, 60323), (258, 60353), (266, 60401), (268, 60413), (273, 60428),

Gene: LilyPad_66 Start: 48330, Stop: 50759, Start Num: 21
Candidate Starts for LilyPad_66:
(Start: 21 @48330 has 8 MA's), (26, 48348), (28, 48381), (56, 48642), (57, 48657), (68, 48780), (79, 48948), (104, 49203), (105, 49209), (109, 49230), (111, 49239), (119, 49314), (120, 49320), (134, 49437), (135, 49452), (136, 49458), (138, 49497), (141, 49551), (151, 49644), (166, 49785), (169, 49803), (175, 49878), (179, 49896), (181, 49902), (183, 49911), (185, 49932), (186, 49944), (208, 50199), (215, 50235), (216, 50241), (217, 50244), (224, 50319), (225, 50325), (230, 50382), (235, 50421), (239, 50451), (241, 50505), (243, 50520), (248, 50568), (255, 50628), (261, 50655), (269, 50706), (274, 50724),

Gene: LittleFella_70 Start: 49071, Stop: 51476, Start Num: 18
Candidate Starts for LittleFella_70:
(9, 48999), (15, 49056), (Start: 18 @49071 has 1 MA's), (29, 49152), (43, 49299), (56, 49416), (57, 49431), (79, 49722), (81, 49752), (85, 49782), (89, 49827), (97, 49899), (104, 49977), (105, 49983), (109, 50004), (111, 50013), (134, 50211), (150, 50412), (151, 50418), (166, 50559), (167, 50562), (169, 50577), (175, 50652), (179, 50670), (181, 50676), (184, 50703), (185, 50706), (186, 50718), (198, 50859), (209, 50979), (215, 51006), (235, 51165), (237, 51177), (239, 51195), (241, 51249), (244, 51279), (245, 51282), (258, 51387), (270, 51453), (271, 51456), (272, 51462),

Gene: LordBart_63 Start: 42526, Stop: 44781, Start Num: 25
Candidate Starts for LordBart_63:
(22, 42517), (Start: 25 @42526 has 9 MA's), (40, 42661), (43, 42694), (46, 42709), (49, 42736), (56, 42811), (57, 42826), (66, 42922), (72, 43003), (73, 43012), (78, 43111), (79, 43117), (87, 43204), (89, 43222), (91, 43252), (93, 43273), (94, 43285), (97, 43300), (99, 43315), (102, 43348), (104, 43378), (105, 43384), (109, 43405), (111, 43414), (114, 43444), (123, 43525), (125, 43540), (128, 43558), (131, 43573), (138, 43672), (161, 43903), (166, 43957), (169, 43975), (171, 43987), (178, 44059), (180, 44068), (204, 44257), (205, 44260), (208, 44278), (214, 44311), (220, 44356), (228, 44419), (229, 44443), (232, 44473), (242, 44563), (250, 44635), (252, 44668), (262, 44713), (267, 44749), (268, 44758), (270, 44764),

Gene: MacGully_67 Start: 47987, Stop: 45444, Start Num: 20
Candidate Starts for MacGully_67:
(1, 48773), (2, 48497), (3, 48371), (4, 48290), (Start: 20 @47987 has 1 MA's), (35, 47864), (36, 47858), (56, 47660), (57, 47645), (71, 47483), (72, 47474), (75, 47417), (88, 47258), (104, 47108), (106, 47090), (109, 47081), (113, 47045), (115, 47024), (117, 47009), (134, 46808), (139, 46742), (141, 46691), (142, 46688), (143, 46682), (146, 46664), (154, 46568), (157, 46550), (161, 46514), (166, 46460), (169, 46442), (170, 46436), (172, 46418), (180, 46349), (183, 46337), (184, 46319), (194, 46229), (200, 46097), (202, 46064), (205, 46001), (213, 45947), (232, 45761), (238, 45719), (247, 45620), (248, 45599), (249, 45593), (258, 45524), (275, 45449),

Gene: Madi_65 Start: 47552, Stop: 49987, Start Num: 21
Candidate Starts for Madi_65:
(19, 47537), (Start: 21 @47552 has 8 MA's), (26, 47570), (37, 47693), (44, 47750), (56, 47864), (57, 47879), (79, 48170), (87, 48257), (100, 48386), (104, 48425), (105, 48431), (109, 48452), (111, 48461), (134, 48659), (135, 48674), (136, 48680), (139, 48722), (144, 48785), (147, 48809), (151, 48866), (153, 48890), (158, 48929), (165, 48995), (166, 49007), (169, 49025), (179, 49118), (183, 49133), (187, 49169), (196, 49271), (216, 49463), (217, 49466), (224, 49541), (225, 49547), (230, 49604), (233, 49631), (235, 49643), (241, 49727), (244, 49757), (251, 49826), (255, 49850), (258, 49865), (267, 49916), (269, 49928), (270, 49931), (274, 49946), (276, 49982),

Gene: MontyDev_76 Start: 55561, Stop: 57873, Start Num: 24
Candidate Starts for MontyDev_76:
(Start: 24 @55561 has 10 MA's), (32, 55657), (38, 55696), (43, 55747), (44, 55750), (45, 55759), (46, 55762), (50, 55792), (53, 55840), (57, 55876), (75, 56110), (76, 56143), (83, 56209), (90, 56287), (92, 56305), (108, 56470), (111, 56488), (118, 56560), (119, 56563), (121, 56587), (124, 56602), (128, 56632), (153, 56905), (159, 56947), (160, 56953), (161, 56965), (165, 57007), (169, 57037), (171, 57049), (176, 57109), (180, 57127), (182, 57133), (186, 57175), (188, 57202), (193, 57238), (212, 57361), (214, 57364), (218, 57400), (231, 57499), (234, 57526), (235, 57532), (239, 57562), (249, 57691), (250, 57697), (257, 57754), (260, 57769), (263, 57781), (265, 57799),

Gene: MortySmith_55 Start: 40308, Stop: 42608, Start Num: 23
Candidate Starts for MortySmith_55:
(Start: 23 @40308 has 35 MA's), (Start: 25 @40314 has 9 MA's), (31, 40389), (37, 40461), (40, 40482), (43, 40515), (45, 40527), (46, 40530), (47, 40548), (48, 40554), (55, 40623), (57, 40647), (60, 40686), (66, 40743), (72, 40824), (79, 40938), (80, 40950), (87, 41025), (89, 41043), (97, 41121), (98, 41127), (99, 41136), (102, 41169), (104, 41199), (105, 41205), (109, 41226), (111, 41235), (114, 41265), (122, 41340), (124, 41349), (127, 41373), (128, 41379), (131, 41394), (139, 41496), (145, 41568), (148, 41592), (155, 41676), (165, 41766), (166, 41778), (169, 41796), (177, 41874), (178, 41880), (180, 41889), (184, 41922), (192, 41994), (219, 42174), (221, 42204), (229, 42267), (238, 42339), (250, 42462), (262, 42540), (268, 42585), (270, 42591),

Gene: NarutoRun_57 Start: 41234, Stop: 43537, Start Num: 23
Candidate Starts for NarutoRun_57:
(Start: 23 @41234 has 35 MA's), (Start: 25 @41240 has 9 MA's), (31, 41318), (37, 41390), (40, 41411), (43, 41444), (45, 41456), (46, 41459), (47, 41477), (55, 41552), (57, 41576), (60, 41615), (64, 41660), (66, 41672), (72, 41753), (79, 41867), (80, 41879), (87, 41954), (89, 41972), (97, 42050), (98, 42056), (99, 42065), (102, 42098), (104, 42128), (105, 42134), (109, 42155), (111, 42164), (114, 42194), (122, 42269), (124, 42278), (127, 42302), (128, 42308), (131, 42323), (133, 42350), (139, 42425), (145, 42497), (148, 42521), (155, 42605), (165, 42695), (166, 42707), (169, 42725), (177, 42803), (178, 42809), (180, 42818), (184, 42851), (192, 42923), (219, 43103), (221, 43133), (229, 43196), (238, 43268), (250, 43391), (252, 43424), (262, 43469), (268, 43514), (270, 43520),

Gene: Neptune_57 Start: 41252, Stop: 43555, Start Num: 23
Candidate Starts for Neptune_57:
(Start: 23 @41252 has 35 MA's), (Start: 25 @41258 has 9 MA's), (31, 41336), (37, 41408), (40, 41429), (43, 41462), (45, 41474), (46, 41477), (47, 41495), (55, 41570), (57, 41594), (60, 41633), (64, 41678), (66, 41690), (72, 41771), (79, 41885), (80, 41897), (87, 41972), (89, 41990), (97, 42068), (98, 42074), (99, 42083), (102, 42116), (104, 42146), (105, 42152), (109, 42173), (111, 42182), (114, 42212), (122, 42287), (124, 42296), (127, 42320), (128, 42326), (129, 42332), (131, 42341), (139, 42443), (145, 42515), (148, 42539), (155, 42623), (165, 42713), (166, 42725), (169, 42743), (177, 42821), (178, 42827), (180, 42836), (184, 42869), (192, 42941), (219, 43121), (221, 43151), (229, 43214), (238, 43286), (250, 43409), (252, 43442), (262, 43487), (268, 43532), (270, 43538),

Gene: Nilo_76 Start: 55918, Stop: 58230, Start Num: 24
Candidate Starts for Nilo_76:
(Start: 24 @55918 has 10 MA's), (32, 56014), (38, 56053), (43, 56104), (44, 56107), (46, 56119), (50, 56149), (53, 56197), (57, 56233), (75, 56467), (76, 56500), (83, 56566), (90, 56644), (92, 56662), (107, 56809), (108, 56827), (111, 56845), (118, 56917), (119, 56920), (121, 56944), (124, 56959), (128, 56989), (153, 57262), (159, 57304), (160, 57310), (161, 57322), (165, 57364), (169, 57394), (171, 57406), (176, 57466), (180, 57484), (182, 57490), (186, 57532), (188, 57559), (193, 57595), (212, 57718), (214, 57721), (218, 57757), (231, 57856), (234, 57883), (235, 57889), (239, 57919), (245, 58012), (249, 58048), (250, 58054), (257, 58111), (260, 58126), (263, 58138), (265, 58156),

Gene: OhDear_57 Start: 41232, Stop: 43535, Start Num: 23
Candidate Starts for OhDear_57:
(Start: 23 @41232 has 35 MA's), (Start: 25 @41238 has 9 MA's), (31, 41316), (37, 41388), (40, 41409), (43, 41442), (45, 41454), (46, 41457), (47, 41475), (55, 41550), (57, 41574), (60, 41613), (64, 41658), (66, 41670), (72, 41751), (79, 41865), (80, 41877), (87, 41952), (89, 41970), (97, 42048), (98, 42054), (99, 42063), (102, 42096), (104, 42126), (105, 42132), (109, 42153), (111, 42162), (114, 42192), (122, 42267), (124, 42276), (127, 42300), (128, 42306), (131, 42321), (133, 42348), (139, 42423), (145, 42495), (148, 42519), (155, 42603), (165, 42693), (166, 42705), (169, 42723), (177, 42801), (178, 42807), (180, 42816), (184, 42849), (192, 42921), (219, 43101), (221, 43131), (229, 43194), (238, 43266), (250, 43389), (252, 43422), (262, 43467), (268, 43512), (270, 43518),

Gene: Onyinye_84 Start: 57643, Stop: 59931, Start Num: 17
Candidate Starts for Onyinye_84:
(5, 57520), (Start: 17 @57643 has 3 MA's), (Start: 25 @57676 has 9 MA's), (Start: 27 @57682 has 1 MA's), (33, 57772), (37, 57805), (41, 57829), (42, 57856), (51, 57940), (52, 57949), (53, 57952), (57, 57991), (58, 57994), (62, 58045), (69, 58123), (70, 58135), (86, 58363), (88, 58384), (94, 58447), (98, 58459), (104, 58531), (105, 58537), (110, 58561), (111, 58567), (112, 58582), (114, 58597), (116, 58615), (118, 58639), (124, 58681), (130, 58720), (133, 58753), (147, 58915), (148, 58924), (161, 59059), (163, 59086), (169, 59131), (184, 59245), (191, 59305), (222, 59521), (232, 59608), (233, 59611), (239, 59653), (253, 59818), (258, 59848), (266, 59896), (268, 59908), (273, 59923),

Gene: OverHedge_56 Start: 41131, Stop: 43434, Start Num: 23
Candidate Starts for OverHedge_56:
(Start: 23 @41131 has 35 MA's), (Start: 25 @41137 has 9 MA's), (31, 41215), (37, 41287), (40, 41308), (43, 41341), (46, 41356), (47, 41374), (55, 41449), (57, 41473), (60, 41512), (64, 41557), (66, 41569), (72, 41650), (79, 41764), (80, 41776), (87, 41851), (89, 41869), (97, 41947), (98, 41953), (99, 41962), (102, 41995), (104, 42025), (105, 42031), (109, 42052), (111, 42061), (114, 42091), (122, 42166), (124, 42175), (127, 42199), (128, 42205), (129, 42211), (131, 42220), (139, 42322), (145, 42394), (148, 42418), (155, 42502), (165, 42592), (166, 42604), (169, 42622), (177, 42700), (178, 42706), (180, 42715), (184, 42748), (192, 42820), (219, 43000), (221, 43030), (229, 43093), (238, 43165), (250, 43288), (252, 43321), (262, 43366), (268, 43411), (270, 43417),

Gene: Papyrus_74 Start: 55529, Stop: 57841, Start Num: 24
Candidate Starts for Papyrus_74:
(Start: 24 @55529 has 10 MA's), (32, 55625), (38, 55664), (43, 55715), (44, 55718), (46, 55730), (50, 55760), (53, 55808), (57, 55844), (75, 56078), (76, 56111), (83, 56177), (90, 56255), (92, 56273), (107, 56420), (108, 56438), (111, 56456), (118, 56528), (119, 56531), (121, 56555), (124, 56570), (128, 56600), (132, 56624), (153, 56873), (159, 56915), (160, 56921), (161, 56933), (165, 56975), (169, 57005), (171, 57017), (176, 57077), (182, 57101), (186, 57143), (188, 57170), (193, 57206), (212, 57329), (214, 57332), (218, 57368), (231, 57467), (234, 57494), (235, 57500), (239, 57530), (249, 57659), (250, 57665), (257, 57722), (260, 57737), (263, 57749), (265, 57767), (268, 57788),

Gene: Pharpay_56 Start: 41279, Stop: 43582, Start Num: 23
Candidate Starts for Pharpay_56:
(Start: 23 @41279 has 35 MA's), (Start: 25 @41285 has 9 MA's), (31, 41363), (37, 41435), (40, 41456), (43, 41489), (45, 41501), (46, 41504), (47, 41522), (55, 41597), (57, 41621), (60, 41660), (64, 41705), (66, 41717), (72, 41798), (79, 41912), (80, 41924), (87, 41999), (89, 42017), (97, 42095), (98, 42101), (99, 42110), (102, 42143), (104, 42173), (105, 42179), (109, 42200), (111, 42209), (114, 42239), (122, 42314), (124, 42323), (127, 42347), (128, 42353), (131, 42368), (133, 42395), (139, 42470), (145, 42542), (148, 42566), (155, 42650), (165, 42740), (166, 42752), (169, 42770), (177, 42848), (178, 42854), (180, 42863), (184, 42896), (192, 42968), (219, 43148), (221, 43178), (229, 43241), (238, 43313), (250, 43436), (252, 43469), (262, 43514), (268, 43559), (270, 43565),

Gene: PhunaPhoke_57 Start: 41249, Stop: 43552, Start Num: 23
Candidate Starts for PhunaPhoke_57:
(Start: 23 @41249 has 35 MA's), (Start: 25 @41255 has 9 MA's), (31, 41333), (37, 41405), (40, 41426), (43, 41459), (45, 41471), (46, 41474), (47, 41492), (55, 41567), (57, 41591), (60, 41630), (64, 41675), (66, 41687), (72, 41768), (79, 41882), (80, 41894), (87, 41969), (89, 41987), (97, 42065), (98, 42071), (99, 42080), (102, 42113), (104, 42143), (105, 42149), (109, 42170), (111, 42179), (114, 42209), (122, 42284), (124, 42293), (127, 42317), (128, 42323), (129, 42329), (139, 42440), (145, 42512), (148, 42536), (155, 42620), (165, 42710), (166, 42722), (169, 42740), (177, 42818), (178, 42824), (180, 42833), (184, 42866), (192, 42938), (219, 43118), (221, 43148), (229, 43211), (238, 43283), (250, 43406), (252, 43439), (262, 43484), (268, 43529), (270, 43535),

Gene: Potty_56 Start: 41179, Stop: 43482, Start Num: 23
Candidate Starts for Potty_56:
(Start: 23 @41179 has 35 MA's), (Start: 25 @41185 has 9 MA's), (31, 41263), (37, 41335), (40, 41356), (43, 41389), (45, 41401), (46, 41404), (47, 41422), (55, 41497), (57, 41521), (60, 41560), (64, 41605), (66, 41617), (72, 41698), (79, 41812), (80, 41824), (87, 41899), (89, 41917), (97, 41995), (98, 42001), (99, 42010), (102, 42043), (104, 42073), (105, 42079), (109, 42100), (111, 42109), (114, 42139), (122, 42214), (124, 42223), (127, 42247), (128, 42253), (129, 42259), (131, 42268), (139, 42370), (145, 42442), (148, 42466), (155, 42550), (165, 42640), (166, 42652), (169, 42670), (177, 42748), (178, 42754), (180, 42763), (184, 42796), (192, 42868), (219, 43048), (221, 43078), (229, 43141), (238, 43213), (250, 43336), (252, 43369), (262, 43414), (268, 43459), (270, 43465),

Gene: Poultress_56 Start: 41476, Stop: 43779, Start Num: 23
Candidate Starts for Poultress_56:
(Start: 23 @41476 has 35 MA's), (Start: 25 @41482 has 9 MA's), (31, 41560), (37, 41632), (40, 41653), (43, 41686), (45, 41698), (46, 41701), (47, 41719), (48, 41725), (55, 41794), (57, 41818), (60, 41857), (64, 41902), (66, 41914), (72, 41995), (79, 42109), (80, 42121), (87, 42196), (89, 42214), (97, 42292), (98, 42298), (99, 42307), (102, 42340), (104, 42370), (105, 42376), (109, 42397), (111, 42406), (114, 42436), (122, 42511), (124, 42520), (127, 42544), (128, 42550), (129, 42556), (131, 42565), (139, 42667), (145, 42739), (148, 42763), (155, 42847), (165, 42937), (166, 42949), (169, 42967), (177, 43045), (178, 43051), (180, 43060), (184, 43093), (192, 43165), (219, 43345), (221, 43375), (229, 43438), (238, 43510), (250, 43633), (252, 43666), (262, 43711), (268, 43756), (270, 43762),

Gene: Rachella_57 Start: 41260, Stop: 43563, Start Num: 23
Candidate Starts for Rachella_57:
(Start: 23 @41260 has 35 MA's), (Start: 25 @41266 has 9 MA's), (31, 41344), (37, 41416), (40, 41437), (43, 41470), (45, 41482), (46, 41485), (47, 41503), (55, 41578), (57, 41602), (60, 41641), (64, 41686), (66, 41698), (72, 41779), (79, 41893), (80, 41905), (87, 41980), (89, 41998), (97, 42076), (98, 42082), (99, 42091), (102, 42124), (104, 42154), (105, 42160), (109, 42181), (111, 42190), (114, 42220), (122, 42295), (124, 42304), (127, 42328), (128, 42334), (131, 42349), (133, 42376), (139, 42451), (145, 42523), (148, 42547), (155, 42631), (165, 42721), (166, 42733), (169, 42751), (177, 42829), (178, 42835), (180, 42844), (184, 42877), (192, 42949), (219, 43129), (221, 43159), (229, 43222), (238, 43294), (250, 43417), (252, 43450), (262, 43495), (268, 43540), (270, 43546),

Gene: Rie18_57 Start: 41055, Stop: 43352, Start Num: 25
Candidate Starts for Rie18_57:
(Start: 25 @41055 has 9 MA's), (31, 41133), (40, 41226), (43, 41259), (45, 41271), (46, 41274), (47, 41292), (55, 41367), (57, 41391), (60, 41430), (66, 41487), (72, 41568), (79, 41682), (80, 41694), (89, 41787), (95, 41853), (98, 41871), (102, 41913), (104, 41943), (105, 41949), (109, 41970), (111, 41979), (114, 42009), (118, 42051), (122, 42084), (128, 42123), (145, 42312), (148, 42336), (165, 42510), (166, 42522), (169, 42540), (173, 42585), (178, 42624), (180, 42633), (189, 42711), (192, 42738), (195, 42780), (219, 42918), (221, 42948), (226, 42981), (229, 43011), (238, 43083), (240, 43119), (249, 43200), (250, 43206), (252, 43239), (262, 43284), (268, 43329), (270, 43335),

Gene: RikSengupta_63 Start: 42657, Stop: 44912, Start Num: 25
Candidate Starts for RikSengupta_63:
(22, 42648), (Start: 25 @42657 has 9 MA's), (40, 42792), (43, 42825), (46, 42840), (56, 42942), (57, 42957), (66, 43053), (72, 43134), (73, 43143), (78, 43242), (79, 43248), (87, 43335), (89, 43353), (91, 43383), (93, 43404), (94, 43416), (97, 43431), (99, 43446), (102, 43479), (104, 43509), (105, 43515), (109, 43536), (111, 43545), (114, 43575), (123, 43656), (125, 43671), (128, 43689), (131, 43704), (138, 43803), (161, 44034), (162, 44037), (166, 44088), (169, 44106), (171, 44118), (174, 44160), (178, 44190), (180, 44199), (190, 44289), (205, 44391), (214, 44442), (220, 44487), (228, 44550), (229, 44574), (232, 44604), (234, 44610), (252, 44799), (262, 44844), (268, 44889), (270, 44895),

Gene: Riparian_76 Start: 55365, Stop: 57677, Start Num: 24
Candidate Starts for Riparian_76:
(Start: 24 @55365 has 10 MA's), (32, 55461), (38, 55500), (43, 55551), (44, 55554), (46, 55566), (50, 55596), (53, 55644), (57, 55680), (75, 55914), (76, 55947), (83, 56013), (90, 56091), (92, 56109), (107, 56256), (108, 56274), (111, 56292), (118, 56364), (119, 56367), (121, 56391), (124, 56406), (128, 56436), (153, 56709), (159, 56751), (160, 56757), (161, 56769), (165, 56811), (169, 56841), (171, 56853), (176, 56913), (180, 56931), (182, 56937), (186, 56979), (188, 57006), (193, 57042), (212, 57165), (214, 57168), (218, 57204), (231, 57303), (234, 57330), (235, 57336), (239, 57366), (245, 57459), (249, 57495), (250, 57501), (257, 57558), (260, 57573), (263, 57585), (265, 57603),

Gene: Rope_74 Start: 55521, Stop: 57833, Start Num: 24
Candidate Starts for Rope_74:
(Start: 24 @55521 has 10 MA's), (32, 55617), (38, 55656), (43, 55707), (44, 55710), (46, 55722), (50, 55752), (53, 55800), (57, 55836), (75, 56070), (76, 56103), (83, 56169), (90, 56247), (92, 56265), (108, 56430), (111, 56448), (118, 56520), (119, 56523), (121, 56547), (124, 56562), (128, 56592), (132, 56616), (153, 56865), (159, 56907), (160, 56913), (161, 56925), (165, 56967), (169, 56997), (171, 57009), (182, 57093), (188, 57162), (193, 57198), (212, 57321), (214, 57324), (218, 57360), (231, 57459), (234, 57486), (235, 57492), (239, 57522), (249, 57651), (250, 57657), (257, 57714), (260, 57729), (263, 57741), (265, 57759), (268, 57780),

Gene: SafetyGuy_56 Start: 41243, Stop: 43543, Start Num: 23

Candidate Starts for SafetyGuy_56:
(Start: 23 @41243 has 35 MA's), (Start: 25 @41249 has 9 MA's), (31, 41324), (37, 41396), (40, 41417), (43, 41450), (45, 41462), (46, 41465), (47, 41483), (48, 41489), (55, 41558), (57, 41582), (60, 41621), (64, 41666), (66, 41678), (72, 41759), (79, 41873), (80, 41885), (87, 41960), (89, 41978), (97, 42056), (98, 42062), (99, 42071), (102, 42104), (103, 42110), (104, 42134), (105, 42140), (109, 42161), (111, 42170), (114, 42200), (122, 42275), (124, 42284), (127, 42308), (128, 42314), (129, 42320), (131, 42329), (139, 42431), (145, 42503), (148, 42527), (155, 42611), (166, 42713), (169, 42731), (177, 42809), (178, 42815), (180, 42824), (184, 42857), (192, 42929), (219, 43109), (221, 43139), (229, 43202), (238, 43274), (250, 43397), (252, 43430), (262, 43475), (268, 43520), (270, 43526),

Gene: Send513_74 Start: 55899, Stop: 58211, Start Num: 24
Candidate Starts for Send513_74:
(Start: 24 @55899 has 10 MA's), (32, 55995), (38, 56034), (43, 56085), (44, 56088), (45, 56097), (46, 56100), (50, 56130), (53, 56178), (57, 56214), (75, 56448), (76, 56481), (83, 56547), (90, 56625), (92, 56643), (108, 56808), (111, 56826), (119, 56901), (121, 56925), (124, 56940), (128, 56970), (153, 57243), (159, 57285), (160, 57291), (161, 57303), (165, 57345), (169, 57375), (171, 57387), (176, 57447), (180, 57465), (182, 57471), (188, 57540), (193, 57576), (212, 57699), (214, 57702), (218, 57738), (231, 57837), (234, 57864), (235, 57870), (239, 57900), (249, 58029), (250, 58035), (257, 58092), (260, 58107), (263, 58119), (265, 58137),

Gene: Sienna_66 Start: 47793, Stop: 50228, Start Num: 21
Candidate Starts for Sienna_66:
(Start: 21 @47793 has 8 MA's), (26, 47811), (44, 47991), (56, 48105), (57, 48120), (79, 48411), (87, 48498), (100, 48627), (104, 48666), (105, 48672), (109, 48693), (111, 48702), (134, 48900), (135, 48915), (136, 48921), (139, 48963), (144, 49026), (147, 49050), (151, 49107), (153, 49131), (158, 49170), (165, 49236), (166, 49248), (169, 49266), (179, 49359), (183, 49374), (187, 49410), (196, 49512), (216, 49704), (217, 49707), (224, 49782), (225, 49788), (230, 49845), (233, 49872), (235, 49884), (241, 49968), (244, 49998), (251, 50067), (255, 50091), (258, 50106), (267, 50157), (269, 50169), (270, 50172), (274, 50187), (276, 50223),

Gene: SilentWarrior_58 Start: 40669, Stop: 42969, Start Num: 23
Candidate Starts for SilentWarrior_58:
(Start: 23 @40669 has 35 MA's), (Start: 25 @40675 has 9 MA's), (31, 40750), (37, 40822), (40, 40843), (43, 40876), (45, 40888), (47, 40909), (48, 40915), (55, 40984), (57, 41008), (60, 41047), (66, 41104), (72, 41185), (79, 41299), (80, 41311), (87, 41386), (89, 41404), (97, 41482), (98, 41488), (99, 41497), (102, 41530), (104, 41560), (105, 41566), (109, 41587), (111, 41596), (114, 41626), (122, 41701), (124, 41710), (127, 41734), (128, 41740), (129, 41746), (131, 41755), (139, 41857), (145, 41929), (148, 41953), (155, 42037), (165, 42127), (166, 42139), (169, 42157), (177, 42235), (178, 42241), (180, 42250), (184, 42283), (192, 42355), (219, 42535), (221, 42565), (229, 42628), (238, 42700), (250, 42823), (252, 42856), (262, 42901), (268, 42946), (270, 42952),

Gene: Snakehole_58 Start: 40677, Stop: 42980, Start Num: 23
Candidate Starts for Snakehole_58:
(Start: 23 @40677 has 35 MA's), (Start: 25 @40683 has 9 MA's), (31, 40761), (37, 40833), (40, 40854), (43, 40887), (45, 40899), (46, 40902), (47, 40920), (48, 40926), (55, 40995), (57, 41019), (60, 41058), (64, 41103), (66, 41115), (72, 41196), (79, 41310), (80, 41322), (87, 41397), (89, 41415), (97, 41493), (98, 41499), (99, 41508), (102, 41541), (104, 41571), (105, 41577), (109, 41598), (111, 41607), (114, 41637), (122, 41712), (124, 41721), (125, 41733), (128, 41751), (131, 41766), (139, 41868), (145, 41940), (148, 41964), (155, 42048), (165, 42138), (166, 42150), (169, 42168), (177, 42246), (178, 42252), (180, 42261), (184, 42294), (192, 42366), (219, 42546), (221, 42576), (229, 42639), (238, 42711), (250, 42834), (252, 42867), (262, 42912), (268, 42957), (270, 42963),

Gene: Sparcetus_63 Start: 42534, Stop: 44789, Start Num: 25

Candidate Starts for Sparcetus_63:
(22, 42525), (Start: 25 @42534 has 9 MA's), (40, 42669), (43, 42702), (46, 42717), (56, 42819), (57, 42834), (66, 42930), (72, 43011), (73, 43020), (78, 43119), (79, 43125), (87, 43212), (89, 43230), (91, 43260), (93, 43281), (94, 43293), (97, 43308), (99, 43323), (102, 43356), (104, 43386), (105, 43392), (109, 43413), (111, 43422), (114, 43452), (123, 43533), (125, 43548), (128, 43566), (131, 43581), (138, 43680), (161, 43911), (162, 43914), (166, 43965), (169, 43983), (171, 43995), (174, 44037), (178, 44067), (180, 44076), (190, 44166), (205, 44268), (214, 44319), (220, 44364), (228, 44427), (229, 44451), (232, 44481), (234, 44487), (252, 44676), (262, 44721), (268, 44766), (270, 44772),

Gene: Suzy_65 Start: 48746, Stop: 51181, Start Num: 21
Candidate Starts for Suzy_65:
(Start: 21 @48746 has 8 MA's), (26, 48764), (44, 48944), (56, 49058), (57, 49073), (79, 49364), (82, 49403), (86, 49445), (87, 49451), (104, 49619), (105, 49625), (109, 49646), (111, 49655), (132, 49823), (134, 49853), (135, 49868), (139, 49916), (140, 49952), (144, 49979), (147, 50003), (151, 50060), (153, 50084), (158, 50123), (165, 50189), (166, 50201), (169, 50219), (179, 50312), (183, 50327), (187, 50363), (193, 50423), (196, 50465), (216, 50657), (217, 50660), (224, 50735), (225, 50741), (230, 50798), (233, 50825), (235, 50837), (241, 50921), (251, 51020), (255, 51044), (258, 51059), (267, 51110), (269, 51122), (270, 51125), (274, 51140), (276, 51176),

Gene: Tedro_57 Start: 40690, Stop: 42990, Start Num: 23
Candidate Starts for Tedro_57:
(Start: 23 @40690 has 35 MA's), (Start: 25 @40696 has 9 MA's), (31, 40771), (37, 40843), (40, 40864), (43, 40897), (45, 40909), (46, 40912), (47, 40930), (48, 40936), (55, 41005), (57, 41029), (60, 41068), (64, 41113), (66, 41125), (72, 41206), (79, 41320), (80, 41332), (87, 41407), (89, 41425), (97, 41503), (98, 41509), (99, 41518), (102, 41551), (104, 41581), (105, 41587), (109, 41608), (111, 41617), (114, 41647), (122, 41722), (124, 41731), (128, 41761), (129, 41767), (131, 41776), (139, 41878), (145, 41950), (148, 41974), (165, 42148), (166, 42160), (169, 42178), (177, 42256), (178, 42262), (180, 42271), (184, 42304), (192, 42376), (219, 42556), (221, 42586), (229, 42649), (238, 42721), (246, 42805), (250, 42844), (252, 42877), (262, 42922), (268, 42967), (270, 42973),

Gene: Terapin_67 Start: 47717, Stop: 50152, Start Num: 21
Candidate Starts for Terapin_67:
(Start: 21 @47717 has 8 MA's), (26, 47735), (44, 47915), (56, 48029), (57, 48044), (79, 48335), (87, 48422), (100, 48551), (104, 48590), (105, 48596), (109, 48617), (111, 48626), (134, 48824), (135, 48839), (136, 48845), (139, 48887), (144, 48950), (147, 48974), (151, 49031), (153, 49055), (158, 49094), (165, 49160), (166, 49172), (169, 49190), (179, 49283), (183, 49298), (187, 49334), (196, 49436), (216, 49628), (217, 49631), (224, 49706), (225, 49712), (230, 49769), (233, 49796), (235, 49808), (241, 49892), (244, 49922), (251, 49991), (255, 50015), (258, 50030), (267, 50081), (269, 50093), (270, 50096), (274, 50111), (276, 50147),

Gene: Tiggy93_57 Start: 41278, Stop: 43581, Start Num: 23
Candidate Starts for Tiggy93_57:
(Start: 23 @41278 has 35 MA's), (Start: 25 @41284 has 9 MA's), (31, 41362), (37, 41434), (40, 41455), (43, 41488), (45, 41500), (46, 41503), (47, 41521), (55, 41596), (57, 41620), (60, 41659), (64, 41704), (66, 41716), (72, 41797), (79, 41911), (80, 41923), (87, 41998), (89, 42016), (97, 42094), (98, 42100), (99, 42109), (102, 42142), (104, 42172), (105, 42178), (109, 42199), (111, 42208), (114, 42238), (122, 42313), (124, 42322), (127, 42346), (128, 42352), (129, 42358), (131, 42367), (139, 42469), (145, 42541), (148, 42565), (155, 42649), (165, 42739), (166, 42751), (169, 42769), (177, 42847), (178, 42853), (180, 42862), (184, 42895), (192, 42967), (219, 43147), (221, 43177), (229, 43240), (238, 43312), (250, 43435), (252, 43468), (262, 43513), (268, 43558), (270, 43564),

Gene: TinyMiny_63 Start: 42556, Stop: 44817, Start Num: 25
Candidate Starts for TinyMiny_63:

(6, 42403), (7, 42406), (11, 42469), (14, 42511), (16, 42520), (22, 42547), (Start: 25 @42556 has 9 MA's), (40, 42697), (43, 42730), (46, 42745), (56, 42847), (57, 42862), (66, 42958), (72, 43039), (73, 43048), (75, 43096), (79, 43153), (87, 43240), (89, 43258), (93, 43309), (94, 43321), (97, 43336), (99, 43351), (102, 43384), (104, 43414), (105, 43420), (109, 43441), (111, 43450), (114, 43480), (123, 43561), (125, 43576), (128, 43594), (138, 43708), (161, 43939), (166, 43993), (169, 44011), (171, 44023), (178, 44095), (180, 44104), (204, 44293), (205, 44296), (208, 44314), (214, 44347), (220, 44392), (228, 44455), (229, 44479), (232, 44509), (242, 44599), (250, 44671), (252, 44704), (262, 44749), (267, 44785), (268, 44794), (270, 44800),

Gene: Tongui_57 Start: 40964, Stop: 43264, Start Num: 23
Candidate Starts for Tongui_57:
(8, 40865), (10, 40874), (12, 40895), (Start: 23 @40964 has 35 MA's), (26, 40970), (31, 41045), (40, 41138), (43, 41171), (45, 41183), (46, 41186), (47, 41204), (55, 41279), (57, 41303), (60, 41342), (66, 41399), (72, 41480), (79, 41594), (80, 41606), (89, 41699), (95, 41765), (97, 41777), (98, 41783), (99, 41792), (102, 41825), (104, 41855), (105, 41861), (109, 41882), (111, 41891), (114, 41921), (122, 41996), (124, 42005), (128, 42035), (145, 42224), (148, 42248), (165, 42422), (166, 42434), (169, 42452), (170, 42458), (178, 42536), (180, 42545), (184, 42578), (189, 42623), (192, 42650), (195, 42692), (219, 42830), (221, 42860), (226, 42893), (229, 42923), (236, 42971), (238, 42995), (250, 43118), (252, 43151), (262, 43196), (268, 43241), (270, 43247),

Gene: Weiss13_74 Start: 55602, Stop: 57914, Start Num: 24
Candidate Starts for Weiss13_74:
(Start: 24 @55602 has 10 MA's), (32, 55698), (38, 55737), (43, 55788), (44, 55791), (46, 55803), (50, 55833), (53, 55881), (57, 55917), (75, 56151), (76, 56184), (83, 56250), (90, 56328), (92, 56346), (107, 56493), (108, 56511), (111, 56529), (118, 56601), (119, 56604), (121, 56628), (124, 56643), (128, 56673), (153, 56946), (159, 56988), (160, 56994), (161, 57006), (165, 57048), (169, 57078), (171, 57090), (176, 57150), (180, 57168), (182, 57174), (186, 57216), (188, 57243), (193, 57279), (212, 57402), (214, 57405), (218, 57441), (231, 57540), (234, 57567), (235, 57573), (239, 57603), (245, 57696), (249, 57732), (250, 57738), (257, 57795), (260, 57810), (263, 57822), (265, 57840),

Gene: WinnieLou_57 Start: 40653, Stop: 42950, Start Num: 25
Candidate Starts for WinnieLou_57:
(Start: 25 @40653 has 9 MA's), (31, 40731), (40, 40824), (43, 40857), (45, 40869), (46, 40872), (47, 40890), (48, 40896), (55, 40965), (57, 40989), (60, 41028), (66, 41085), (72, 41166), (79, 41280), (80, 41292), (89, 41385), (95, 41451), (97, 41463), (98, 41469), (102, 41511), (104, 41541), (105, 41547), (109, 41568), (111, 41577), (114, 41607), (118, 41649), (122, 41682), (128, 41721), (145, 41910), (148, 41934), (165, 42108), (166, 42120), (169, 42138), (178, 42222), (180, 42231), (184, 42264), (189, 42309), (195, 42378), (219, 42516), (221, 42546), (226, 42579), (229, 42609), (238, 42681), (250, 42804), (252, 42837), (262, 42882), (268, 42927), (270, 42933),

Gene: Wollypog_59 Start: 44236, Stop: 46455, Start Num: 30
Candidate Starts for Wollypog_59:
(13, 44131), (22, 44170), (Start: 30 @44236 has 1 MA's), (34, 44287), (39, 44335), (43, 44377), (54, 44476), (56, 44494), (57, 44509), (59, 44542), (61, 44557), (62, 44563), (65, 44599), (72, 44686), (75, 44743), (79, 44800), (84, 44854), (101, 45022), (105, 45061), (111, 45091), (114, 45121), (118, 45163), (122, 45196), (123, 45202), (124, 45205), (128, 45235), (137, 45325), (149, 45457), (152, 45505), (157, 45547), (161, 45583), (166, 45637), (169, 45655), (171, 45667), (180, 45748), (184, 45781), (197, 45913), (206, 45946), (211, 45973), (227, 46090), (240, 46219), (244, 46261), (248, 46294), (254, 46351), (256, 46357), (259, 46375), (260, 46378), (264, 46399),

Gene: Yelo_73 Start: 55981, Stop: 58293, Start Num: 24
Candidate Starts for Yelo_73:

(Start: 24 @55981 has 10 MA's), (32, 56077), (38, 56116), (43, 56167), (44, 56170), (45, 56179), (46, 56182), (50, 56212), (53, 56260), (57, 56296), (75, 56530), (76, 56563), (83, 56629), (90, 56707), (92, 56725), (108, 56890), (111, 56908), (118, 56980), (119, 56983), (121, 57007), (124, 57022), (128, 57052), (153, 57325), (159, 57367), (160, 57373), (161, 57385), (165, 57427), (169, 57457), (171, 57469), (176, 57529), (182, 57553), (188, 57622), (193, 57658), (212, 57781), (214, 57784), (218, 57820), (231, 57919), (234, 57946), (235, 57952), (239, 57982), (249, 58111), (250, 58117), (257, 58174), (260, 58189), (263, 58201), (265, 58219),

Gene: Zenon_76 Start: 55925, Stop: 58237, Start Num: 24
Candidate Starts for Zenon_76:
(Start: 24 @55925 has 10 MA's), (32, 56021), (38, 56060), (43, 56111), (44, 56114), (45, 56123), (46, 56126), (50, 56156), (53, 56204), (57, 56240), (75, 56474), (76, 56507), (83, 56573), (90, 56651), (92, 56669), (108, 56834), (111, 56852), (118, 56924), (119, 56927), (121, 56951), (124, 56966), (128, 56996), (153, 57269), (159, 57311), (160, 57317), (161, 57329), (165, 57371), (169, 57401), (171, 57413), (176, 57473), (180, 57491), (182, 57497), (188, 57566), (193, 57602), (212, 57725), (214, 57728), (218, 57764), (231, 57863), (234, 57890), (235, 57896), (239, 57926), (249, 58055), (250, 58061), (257, 58118), (260, 58133), (263, 58145), (265, 58163), (268, 58184),