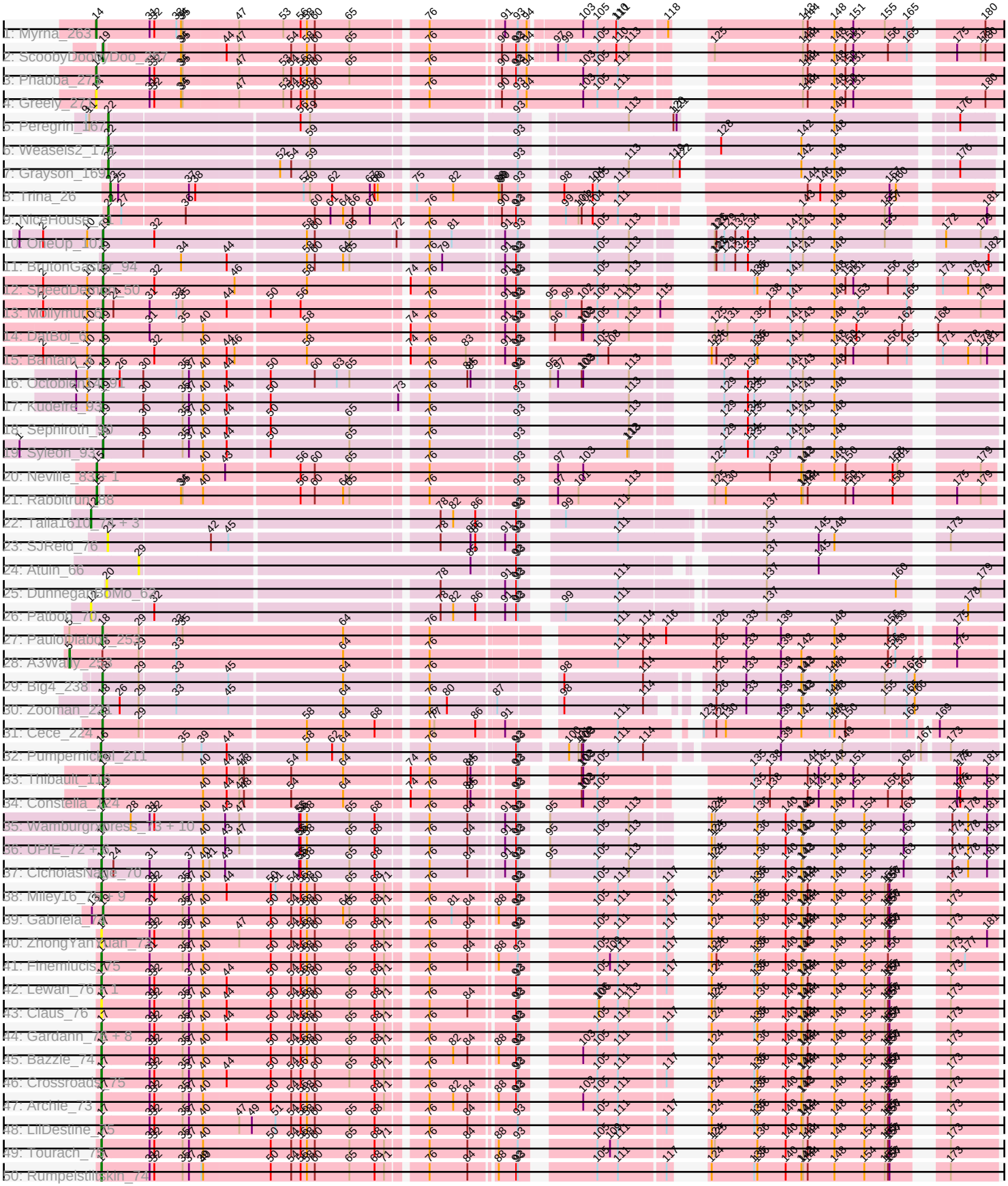
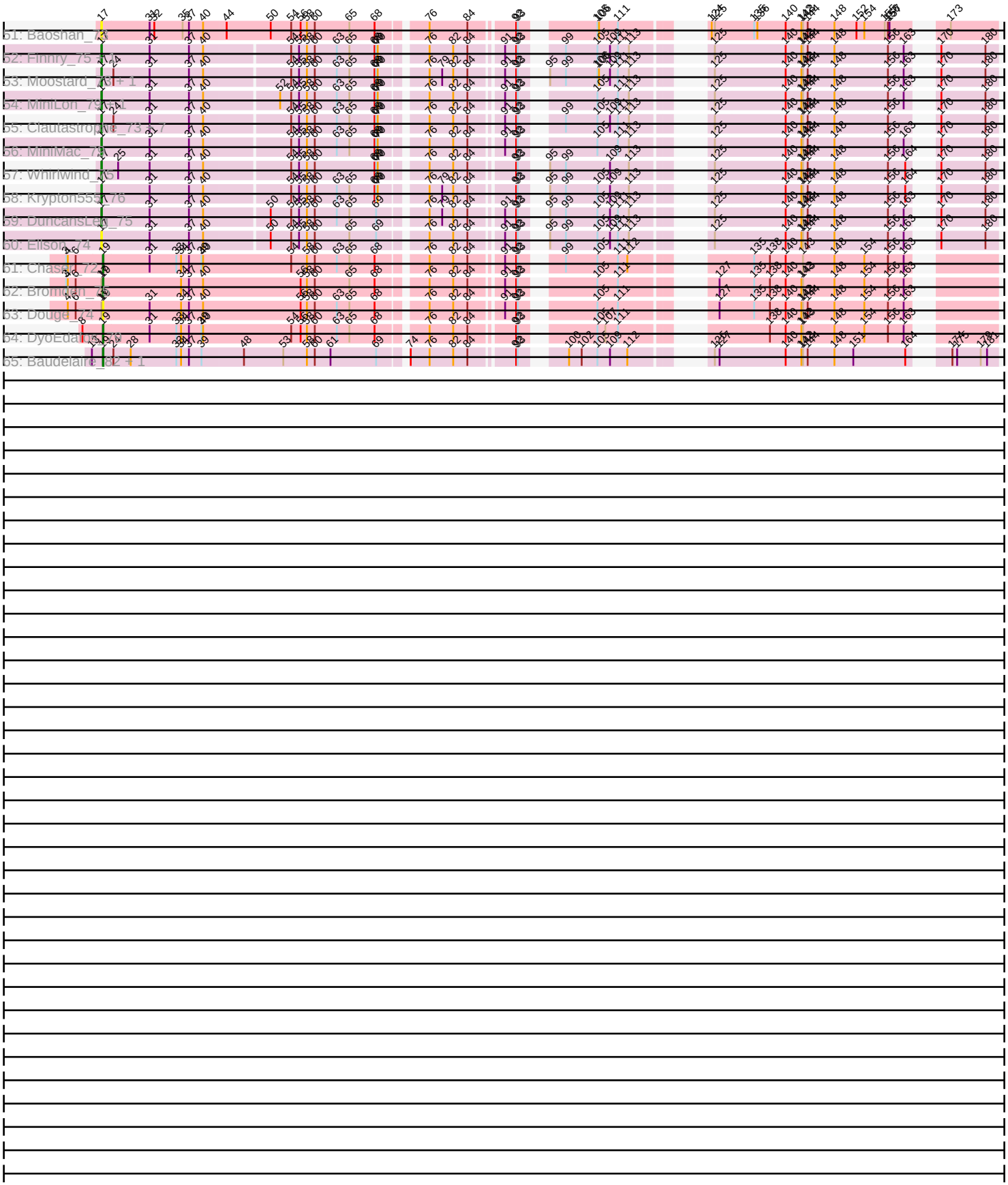
Pham 943


1: Myrna_263
2: ScoobyDoodyDoo_267
3: Phabba_273
4: Greely_271
5: Peregrin_167
6: Weasels2_170
7: Grayson_169
8: Trina_26
9: NiceHouse_21
10: OneUp_10
11: BrutonGaster_94
12: SpeedDesign_50
13: Mollymun_69
14: DatBoi_69
15: Bantam_69
16: Octobient_91
17: Kudeire_93
18: Sephiroth_90
19: Syleon_93
20: Neville_83 + 1
21: Rabbitrun_88
22: Talia1610_73 + 3
23: SJReid_76
24: Atuin_66
25: DunneganBoMo_63
26: Patbob_70
27: Paulowlabos_253
28: A3Wally_253
29: Big4_238
30: Zooman_228
31: Cece_224
32: Pumpernickel_211
33: Thibault_115
34: Constella_224
35: Wamburgrxpress_73 + 10
36: UPIE_72 + 6
37: CicholasNave_70
38: Miley16_75 + 9
39: Gabriela_74
40: ZhongYanYuan_72
41: Finemlucis_75
42: Lewan_76 + 1
43: Claus_76
44: Gardann_74 + 8
45: Bazzle_74
46: Crossroads_75
47: Archie_73
48: LilDestine_75
49: Tourach_75
50: Rumpelstiltskin_74

Pham 943



51: Baoshan_73
52: Finnry_75 + 1
53: Moostard_73 + 1
54: MiniLon_79 + 1
55: Clautastrophe_73 + 7
56: MiniMac_73
57: Whirlwind_75
58: Krypton555_76
59: DuncansLen_75
60: Elison_74
61: Chasen_72
62: Bromden_75
63: Douge_74
64: DyoEdatus_78
65: Baudelaire_82 + 1

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 943 Report

This analysis was run 04/12/24 on database version 558.

Pham number 943 has 114 members, 17 are drafts.

Phages represented in each track:
• Track 1 : Myrna_263
• Track 2 : ScoobyDoobyDoo_257
• Track 3 : Phabba_273
• Track 4 : Greely_271
• Track 5 : Peregrin_167
• Track 6 : Weasels2_172
• Track 7 : Grayson_169
• Track 8 : Trina_26
• Track 9 : NiceHouse_21
• Track 10 : OneUp_101
• Track 11 : BrutonGaster_94
• Track 12 : SpeedDemon_50
• Track 13 : Mollymur_6
• Track 14 : DatBoi_6
• Track 15 : Bantam_4
• Track 16 : Octobien14_91
• Track 17 : Kudefre_93
• Track 18 : Sephiroth_90
• Track 19 : Syleon_93
• Track 20 : Neville_83, Trax_86
• Track 21 : Rabbitrun_88
• Track 22 : Talia1610_74, Racecar_71, Mimi_77, Bloom_74
• Track 23 : SJReid_76
• Track 24 : Atuin_66
• Track 25 : DunneganBoMo_62
• Track 26 : Patbob_70
• Track 27 : PauloDiaboli_253
• Track 28 : A3Wally_253
• Track 29 : Big4_238
• Track 30 : Zooman_221
• Track 31 : Cece_224
• Track 32 : Pumpernickel_211
• Track 33 : Thibault_116
• Track 34 : Constella_124
• Track 35 : Wamburgrxpress_73, Acquire49_73, Halena_71, JoeDirt_73, Silverleaf_73, AvadaKedavra_73, Rose5_73, Tyson_74, LeBron_72, MAckerman_70, Wyatt2_74

• Track 36 : UPIE_72, Enceladus_70, Appletree2_72, Calm_75, DirkDirk_70, OhShagHennessy_71, Zaria_74
• Track 37 : CicholasNage_70
• Track 38 : Miley16_75, DrSeegs_75, Winky_75, BobsGarage_75, Zakai_76, Itos_74, Breezona_75, Netyap_76, BigCheese_75, Faith1_75
• Track 39 : Gabriela_74
• Track 40 : ZhongYanYuan_73
• Track 41 : Finemlucis_75
• Track 42 : Lewan_76, GuuelaD_73
• Track 43 : Claus_76
• Track 44 : Gardann_76, Wigglewiggle_75, Wilder_76, Nicholasp3_75, MkaliMitinis3_76, Kahlid_75, Hafay_77, Vetrix_75, Loadrie_74
• Track 45 : Bazzle_74
• Track 46 : Crossroads_75
• Track 47 : Archie_73
• Track 48 : LilDestine_75
• Track 49 : Tourach_75
• Track 50 : Rumpelstiltskin_74
• Track 51 : Baoshan_73
• Track 52 : Finnry_75, Samty_74
• Track 53 : Moostard_73, Bellis_73
• Track 54 : MiniLon_79, Lolly9_74
• Track 55 : Clautastrophe_73, Jobypre_76, Kingsolomon_73, MsGreen_75, Nicholas_73, Lumos_76, Snenia_74, Jubie_74
• Track 56 : MiniMac_79
• Track 57 : Whirlwind_75
• Track 58 : Krypton555_76
• Track 59 : DuncansLeg_75
• Track 60 : Ellson_74
• Track 61 : Chaser_72
• Track 62 : Bromden_75
• Track 63 : Douge_74
• Track 64 : DyoEdafos_79
• Track 65 : Baudelaire_82, Aegeus_82

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

The start number called the most often in the published annotations is 17, it was called in 61 of the 97 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acquire49_73, Appletree2_72, Archie_73, AvadaKedavra_73, Baoshan_73, Bazzle_74, Bellis_73, BigCheese_75, BobsGarage_75, Breezona_75, Calm_75, CicholasNage_70, Claus_76, Clautastrophe_73, Crossroads_75, DirkDirk_70, DrSeegs_75, DuncansLeg_75, Ellson_74, Enceladus_70, Faith1_75, Finemlucis_75, Finnry_75, Gardann_76, GuuelaD_73, Hafay_77, Halena_71, Itos_74, Jobypre_76, JoeDirt_73, Jubie_74, Kahlid_75, Kingsolomon_73, Krypton555_76, LeBron_72, Lewan_76, LilDestine_75, Loadrie_74, Lolly9_74, Lumos_76, MAckerman_70, Miley16_75, MiniLon_79, MiniMac_79, MkaliMitinis3_76, Moostard_73, MsGreen_75, Netyap_76, Nicholas_73, Nicholasp3_75, OhShagHennessy_71, Rose5_73,

Rumpelstiltskin_74, Samty_74, Silverleaf_73, Snenia_74, Tourach_75, Tyson_74, UPIE_72, Vetrix_75, Wamburgrxpress_73, Whirlwind_75, Wigglewiggle_75, Wilder_76, Winky_75, Wyatt2_74, Zakai_76, Zaria_74, ZhongYanYuan_73,

Genes that have the "Most Annotated" start but do not call it:
• Bromden_75, Douge_74,

Genes that do not have the "Most Annotated" start:
• A3Wally_253, Aegeus_82, Atuin_66, Bantam_4, Baudelaire_82, Big4_238, Bloom_74, BrutonGaster_94, Cece_224, Chaser_72, Constella_124, DatBoi_6, DunneganBoMo_62, DyoEdafos_79, Gabriela_74, Grayson_169, Greely_271, Kudefre_93, Mimi_77, Mollymur_6, Myrna_263, Neville_83, NiceHouse_21, Octobien14_91, OneUp_101, Patbob_70, PauloDiaboli_253, Peregrin_167, Phabba_273, Pumpernickel_211, Rabbitrun_88, Racecar_71, SJReid_76, ScoobyDoobyDoo_257, Sephiroth_90, SpeedDemon_50, Syleon_93, Talia1610_74, Thibault_116, Trax_86, Trina_26, Weasels2_172, Zooman_221,

Summary by start number:

Start 5:
• Found in 2 of 114 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 97
• Called 50.0% of time when present
• Phage (with cluster) where this start called: A3Wally_253 (GD1),

Start 12:
• Found in 5 of 114 (4.4%) of genes in pham
• Manual Annotations of this start: 1 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bloom_74 (FC), Mimi_77 (FC), Patbob_70 (FC), Racecar_71 (FC), Talia1610_74 (FC),

Start 14:
• Found in 3 of 114 (2.6%) of genes in pham
• Manual Annotations of this start: 2 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Greely_271 (C2), Myrna_263 (C2), Phabba_273 (C2),

Start 15:
• Found in 3 of 114 (2.6%) of genes in pham
• Manual Annotations of this start: 3 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Neville_83 (DU2), Rabbitrun_88 (DU2), Trax_86 (DU2),

Start 16:
• Found in 1 of 114 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pumpernickel_211 (GD4),

Start 17:

• Found in 71 of 114 (62.3%) of genes in pham
• Manual Annotations of this start: 61 of 97
• Called 97.2% of time when present
• Phage (with cluster) where this start called: Acquire49_73 (L1), Appletree2_72 (L1), Archie_73 (L2), AvadaKedavra_73 (L1), Baoshan_73 (L2), Bazzle_74 (L2), Bellis_73 (L3), BigCheese_75 (L2), BobsGarage_75 (L2), Breezona_75 (L2), Calm_75 (L1), CicholasNage_70 (L1), Claus_76 (L2), Clautastrophe_73 (L3), Crossroads_75 (L2), DirkDirk_70 (L1), DrSeegs_75 (L2), DuncansLeg_75 (L3), Ellson_74 (L3), Enceladus_70 (L1), Faith1_75 (L2), Finemlucis_75 (L2), Finnry_75 (L3), Gardann_76 (L2), GuuelaD_73 (L2), Hafay_77 (L2), Halena_71 (L1), Itos_74 (L2), Jobypre_76 (L3), JoeDirt_73 (L1), Jubie_74 (L3), Kahlid_75 (L2), Kingsolomon_73 (L3), Krypton555_76 (L3), LeBron_72 (L1), Lewan_76 (L2), LilDestine_75 (L2), Loadrie_74 (L2), Lolly9_74 (L3), Lumos_76 (L3), MAckerman_70 (L1), Miley16_75 (L2), MiniLon_79 (L3), MiniMac_79 (L3), MkaliMitinis3_76 (L2), Moostard_73 (L3), MsGreen_75 (L3), Netyap_76 (L2), Nicholas_73 (L3), Nicholasp3_75 (L2), OhShagHennessy_71 (L1), Rose5_73 (L1), Rumpelstiltskin_74 (L2), Samty_74 (L3), Silverleaf_73 (L1), Snenia_74 (L3), Tourach_75 (L2), Tyson_74 (L1), UPIE_72 (L1), Vetrix_75 (L2), Wamburgrxpress_73 (L1), Whirlwind_75 (L3), Wigglewiggle_75 (L2), Wilder_76 (L2), Winky_75 (L2), Wyatt2_74 (L1), Zakai_76 (L2), Zaria_74 (L1), ZhongYanYuan_73 (L2),

Start 18:
• Found in 5 of 114 (4.4%) of genes in pham
• Manual Annotations of this start: 4 of 97
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Big4_238 (GD2), Cece_224 (GD3), PauloDiaboli_253 (GD1), Zooman_221 (GD2),

Start 19:
• Found in 20 of 114 (17.5%) of genes in pham
• Manual Annotations of this start: 19 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aegeus_82 (L5), Bantam_4 (DL), Baudelaire_82 (L5), Bromden_75 (L4), BrutonGaster_94 (CQ2), Chaser_72 (L4), Constella_124 (J), DatBoi_6 (DL), Douge_74 (L4), DyoEdafos_79 (L4), Gabriela_74 (L2), Kudefre_93 (DU1), Mollymur_6 (DL), Octobien14_91 (DU1), OneUp_101 (CQ2), ScoobyDoobyDoo_257 (C2), Sephiroth_90 (DU1), SpeedDemon_50 (DL), Syleon_93 (DU1), Thibault_116 (J),

Start 20:
• Found in 1 of 114 (0.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DunneganBoMo_62 (FC),

Start 21:
• Found in 1 of 114 (0.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SJReid_76 (FC),

Start 22:
• Found in 4 of 114 (3.5%) of genes in pham

• Manual Annotations of this start: 4 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Grayson_169 (CB), NiceHouse_21 (CE), Peregrin_167 (CB), Weasels2_172 (CB),

Start 23:
• Found in 1 of 114 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 97
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Trina_26 (CE),

Start 29:
• Found in 6 of 114 (5.3%) of genes in pham
• No Manual Annotations of this start.
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Atuin_66 (FC),

Summary by clusters:

There are 18 clusters represented in this pham: GD1, DL, GD3, GD4, CQ2, L5, CB, J, DU1, CE, L4, FC, L2, L3, L1, C2, GD2, DU2,

Info for manual annotations of cluster C2:
•Start number 14 was manually annotated 2 times for cluster C2.
•Start number 19 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CB:
•Start number 22 was manually annotated 3 times for cluster CB.

Info for manual annotations of cluster CE:
•Start number 22 was manually annotated 1 time for cluster CE.
•Start number 23 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CQ2:
•Start number 19 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DL:
•Start number 19 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster DU1:
•Start number 19 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:
•Start number 15 was manually annotated 3 times for cluster DU2.

Info for manual annotations of cluster FC:
•Start number 12 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster GD1:
•Start number 5 was manually annotated 1 time for cluster GD1.
•Start number 18 was manually annotated 1 time for cluster GD1.

Info for manual annotations of cluster GD2:

•Start number 18 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 18 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 16 was manually annotated 1 time for cluster GD4.

Info for manual annotations of cluster J:
•Start number 19 was manually annotated 2 times for cluster J.

Info for manual annotations of cluster L1:
•Start number 17 was manually annotated 18 times for cluster L1.

Info for manual annotations of cluster L2:
•Start number 17 was manually annotated 27 times for cluster L2.
•Start number 19 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:
•Start number 17 was manually annotated 16 times for cluster L3.

Info for manual annotations of cluster L4:
•Start number 19 was manually annotated 3 times for cluster L4.

Info for manual annotations of cluster L5:
•Start number 19 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: A3Wally_253 Start: 140743, Stop: 142374, Start Num: 5
Candidate Starts for A3Wally_253:
(Start: 5 @140743 has 1 MA's), (Start: 18 @140806 has 4 MA's), (29, 140875), (33, 140941), (64, 141256), (76, 141397), (111, 141700), (114, 141748), (126, 141883), (133, 141937), (139, 142003), (142, 142042), (148, 142105), (156, 142207), (159, 142216), (175, 142300),

Gene: Acquire49_73 Start: 48690, Stop: 50165, Start Num: 17
Candidate Starts for Acquire49_73:
(Start: 17 @48690 has 61 MA's), (28, 48744), (31, 48780), (32, 48789), (40, 48882), (43, 48921), (47, 48948), (55, 49053), (56, 49056), (58, 49068), (65, 49149), (68, 49197), (76, 49278), (84, 49350), (91, 49404), (92, 49425), (93, 49428), (95, 49449), (105, 49539), (113, 49599), (124, 49677), (125, 49683), (136, 49761), (140, 49815), (142, 49845), (143, 49848), (148, 49908), (154, 49965), (163, 50037), (174, 50082), (178, 50112), (181, 50148),

Gene: Aegeus_82 Start: 51402, Stop: 52886, Start Num: 19
Candidate Starts for Aegeus_82:
(13, 51381), (Start: 19 @51402 has 19 MA's), (24, 51420), (28, 51453), (33, 51540), (34, 51549), (37, 51564), (39, 51588), (48, 51666), (53, 51741), (58, 51786), (60, 51801), (61, 51831), (69, 51918), (74, 51960), (76, 51996), (82, 52041), (84, 52068), (92, 52143), (93, 52146), (100, 52203), (102, 52227), (105, 52257), (109, 52281), (112, 52314), (125, 52401), (127, 52410), (140, 52533), (142, 52563), (143, 52566), (144, 52575), (148, 52626), (151, 52662), (164, 52758), (174, 52800), (175, 52809), (179, 52854), (181, 52866),

Gene: Appletree2_72 Start: 48306, Stop: 49781, Start Num: 17
Candidate Starts for Appletree2_72:
(Start: 17 @48306 has 61 MA's), (40, 48498), (43, 48537), (47, 48564), (55, 48669), (56, 48672), (58, 48684), (65, 48765), (68, 48813), (76, 48894), (84, 48966), (91, 49020), (92, 49041), (93, 49044), (95, 49065), (105, 49155), (113, 49215), (124, 49293), (125, 49299), (136, 49377), (140, 49431), (142, 49461), (143, 49464), (148, 49524), (154, 49581), (163, 49653), (174, 49698), (178, 49728), (181, 49764),

Gene: Archie_73 Start: 50093, Stop: 51577, Start Num: 17
Candidate Starts for Archie_73:
(Start: 17 @50093 has 61 MA's), (31, 50183), (32, 50192), (35, 50246), (37, 50258), (40, 50285), (50, 50411), (54, 50450), (56, 50468), (58, 50480), (60, 50495), (68, 50609), (71, 50627), (76, 50690), (82, 50735), (84, 50762), (88, 50804), (92, 50837), (93, 50840), (103, 50924), (105, 50951), (111, 50990), (124, 51089), (135, 51167), (136, 51173), (140, 51227), (142, 51257), (143, 51260), (148, 51320), (154, 51377), (155, 51416), (156, 51422), (157, 51425), (173, 51491),

Gene: Atuin_66 Start: 27200, Stop: 28657, Start Num: 29
Candidate Starts for Atuin_66:
(29, 27200), (85, 27809), (92, 27884), (93, 27887), (137, 28241), (145, 28340),

Gene: AvadaKedavra_73 Start: 48763, Stop: 50238, Start Num: 17
Candidate Starts for AvadaKedavra_73:
(Start: 17 @48763 has 61 MA's), (28, 48817), (31, 48853), (32, 48862), (40, 48955), (43, 48994), (47, 49021), (55, 49126), (56, 49129), (58, 49141), (65, 49222), (68, 49270), (76, 49351), (84, 49423), (91, 49477), (92, 49498), (93, 49501), (95, 49522), (105, 49612), (113, 49672), (124, 49750), (125, 49756), (136, 49834), (140, 49888), (142, 49918), (143, 49921), (148, 49981), (154, 50038), (163, 50110), (174, 50155), (178, 50185), (181, 50221),

Gene: Bantam_4 Start: 2415, Stop: 3905, Start Num: 19
Candidate Starts for Bantam_4:
(2, 2301), (10, 2385), (Start: 19 @2415 has 19 MA's), (32, 2511), (40, 2604), (44, 2646), (46, 2661), (58, 2790), (74, 2964), (76, 3000), (83, 3069), (91, 3126), (92, 3147), (93, 3150), (105, 3261), (108, 3282), (124, 3396), (126, 3405), (135, 3474), (136, 3480), (141, 3543), (148, 3627), (150, 3648), (151, 3663), (156, 3729), (165, 3762), (171, 3783), (178, 3831), (179, 3855), (181, 3867),

Gene: Baoshan_73 Start: 50407, Stop: 51891, Start Num: 17
Candidate Starts for Baoshan_73:
(Start: 17 @50407 has 61 MA's), (31, 50497), (32, 50506), (35, 50560), (37, 50572), (40, 50599), (44, 50641), (50, 50725), (54, 50764), (56, 50782), (58, 50794), (60, 50809), (65, 50875), (68, 50923), (76, 51004), (84, 51076), (92, 51151), (93, 51154), (105, 51265), (106, 51268), (111, 51304), (124, 51403), (125, 51409), (135, 51481), (136, 51487), (140, 51541), (142, 51571), (143, 51574), (144, 51583), (148, 51634), (152, 51676), (154, 51691), (155, 51730), (156, 51736), (157, 51739), (173, 51805),

Gene: Baudelaire_82 Start: 51402, Stop: 52886, Start Num: 19
Candidate Starts for Baudelaire_82:
(13, 51381), (Start: 19 @51402 has 19 MA's), (24, 51420), (28, 51453), (33, 51540), (34, 51549), (37, 51564), (39, 51588), (48, 51666), (53, 51741), (58, 51786), (60, 51801), (61, 51831), (69, 51918), (74, 51960), (76, 51996), (82, 52041), (84, 52068), (92, 52143), (93, 52146), (100, 52203), (102, 52227), (105, 52257), (109, 52281), (112, 52314), (125, 52401), (127, 52410), (140, 52533), (142, 52563), (143, 52566), (144, 52575), (148, 52626), (151, 52662), (164, 52758), (174, 52800), (175, 52809), (179, 52854), (181, 52866),

Gene: Bazzle_74 Start: 50473, Stop: 51957, Start Num: 17
Candidate Starts for Bazzle_74:
(Start: 17 @50473 has 61 MA's), (31, 50563), (32, 50572), (35, 50626), (37, 50638), (40, 50665), (50, 50791), (54, 50830), (56, 50848), (58, 50860), (60, 50875), (65, 50941), (68, 50989), (71, 51007), (76, 51070), (82, 51115), (84, 51142), (88, 51184), (92, 51217), (93, 51220), (103, 51304), (105, 51331), (111, 51370), (124, 51469), (136, 51553), (140, 51607), (142, 51637), (143, 51640), (144, 51649), (148, 51700), (154, 51757), (155, 51796), (156, 51802), (157, 51805), (173, 51871),

Gene: Bellis_73 Start: 50753, Stop: 52228, Start Num: 17
Candidate Starts for Bellis_73:
(Start: 17 @50753 has 61 MA's), (24, 50774), (31, 50843), (37, 50918), (40, 50945), (54, 51101), (55, 51116), (58, 51131), (60, 51146), (63, 51188), (65, 51212), (68, 51260), (69, 51263), (70, 51266), (76, 51341), (79, 51365), (82, 51386), (84, 51413), (91, 51467), (92, 51488), (93, 51491), (95, 51512), (99, 51542), (105, 51602), (106, 51605), (109, 51626), (111, 51641), (113, 51662), (125, 51746), (140, 51878), (142, 51908), (143, 51911), (144, 51920), (148, 51971), (156, 52073), (163, 52100), (170, 52124), (180, 52208),

Gene: Big4_238 Start: 136583, Stop: 138142, Start Num: 18
Candidate Starts for Big4_238:
(Start: 18 @136583 has 4 MA's), (29, 136649), (33, 136715), (45, 136811), (64, 137021), (76, 137162), (98, 137363), (114, 137513), (126, 137615), (133, 137669), (139, 137735), (142, 137774), (143, 137777), (147, 137828), (148, 137837), (155, 137933), (165, 137972), (166, 137987),

Gene: BigCheese_75 Start: 50364, Stop: 51848, Start Num: 17
Candidate Starts for BigCheese_75:
(Start: 17 @50364 has 61 MA's), (31, 50454), (32, 50463), (35, 50517), (37, 50529), (40, 50556), (44, 50598), (50, 50682), (51, 50691), (54, 50721), (56, 50739), (58, 50751), (60, 50766), (65, 50832), (68, 50880), (71, 50898), (76, 50961), (92, 51108), (93, 51111), (105, 51222), (111, 51261), (117, 51342), (124, 51360), (135, 51438), (136, 51444), (140, 51498), (142, 51528), (143, 51531), (144, 51540), (148, 51591), (154, 51648), (155, 51687), (156, 51693), (157, 51696), (173, 51762),

Gene: Bloom_74 Start: 30492, Stop: 32045, Start Num: 12
Candidate Starts for Bloom_74:
(Start: 12 @30492 has 1 MA's), (78, 31107), (82, 31131), (86, 31173), (92, 31239), (93, 31242), (99, 31290), (111, 31389), (137, 31629),

Gene: BobsGarage_75 Start: 50364, Stop: 51848, Start Num: 17
Candidate Starts for BobsGarage_75:
(Start: 17 @50364 has 61 MA's), (31, 50454), (32, 50463), (35, 50517), (37, 50529), (40, 50556), (44, 50598), (50, 50682), (51, 50691), (54, 50721), (56, 50739), (58, 50751), (60, 50766), (65, 50832), (68, 50880), (71, 50898), (76, 50961), (92, 51108), (93, 51111), (105, 51222), (111, 51261), (117, 51342), (124, 51360), (135, 51438), (136, 51444), (140, 51498), (142, 51528), (143, 51531), (144, 51540), (148, 51591), (154, 51648), (155, 51687), (156, 51693), (157, 51696), (173, 51762),

Gene: Breezona_75 Start: 50364, Stop: 51848, Start Num: 17
Candidate Starts for Breezona_75:
(Start: 17 @50364 has 61 MA's), (31, 50454), (32, 50463), (35, 50517), (37, 50529), (40, 50556), (44, 50598), (50, 50682), (51, 50691), (54, 50721), (56, 50739), (58, 50751), (60, 50766), (65, 50832), (68, 50880), (71, 50898), (76, 50961), (92, 51108), (93, 51111), (105, 51222), (111, 51261), (117, 51342), (124, 51360), (135, 51438), (136, 51444), (140, 51498), (142, 51528), (143, 51531), (144, 51540), (148, 51591), (154, 51648), (155, 51687), (156, 51693), (157, 51696), (173, 51762),

Gene: Bromden_75 Start: 50153, Stop: 51637, Start Num: 19

Candidate Starts for Bromden_75:
(3, 50084), (4, 50087), (6, 50102), (Start: 17 @50150 has 61 MA's), (Start: 19 @50153 has 19 MA's), (34, 50300), (37, 50315), (40, 50342), (56, 50528), (58, 50540), (60, 50555), (65, 50621), (68, 50669), (76, 50750), (82, 50795), (84, 50822), (91, 50876), (92, 50897), (93, 50900), (105, 51011), (111, 51050), (127, 51164), (135, 51227), (138, 51257), (140, 51287), (142, 51317), (143, 51320), (148, 51380), (154, 51437), (156, 51482), (163, 51509),

Gene: BrutonGaster_94 Start: 61189, Stop: 62658, Start Num: 19
Candidate Starts for BrutonGaster_94:
(Start: 19 @61189 has 19 MA's), (34, 61336), (44, 61420), (58, 61564), (60, 61579), (64, 61633), (65, 61645), (76, 61774), (79, 61798), (91, 61900), (92, 61921), (93, 61924), (105, 62035), (113, 62095), (125, 62179), (126, 62182), (129, 62197), (132, 62215), (134, 62239), (141, 62320), (143, 62344), (148, 62404), (182, 62644),

Gene: Calm_75 Start: 49017, Stop: 50492, Start Num: 17
Candidate Starts for Calm_75:
(Start: 17 @49017 has 61 MA's), (40, 49209), (43, 49248), (47, 49275), (55, 49380), (56, 49383), (58, 49395), (65, 49476), (68, 49524), (76, 49605), (84, 49677), (91, 49731), (92, 49752), (93, 49755), (95, 49776), (105, 49866), (113, 49926), (124, 50004), (125, 50010), (136, 50088), (140, 50142), (142, 50172), (143, 50175), (148, 50235), (154, 50292), (163, 50364), (174, 50409), (178, 50439), (181, 50475),

Gene: Cece_224 Start: 135692, Stop: 137197, Start Num: 18
Candidate Starts for Cece_224:
(Start: 18 @135692 has 4 MA's), (29, 135758), (58, 136058), (64, 136127), (68, 136187), (76, 136268), (77, 136277), (86, 136355), (91, 136400), (111, 136571), (123, 136679), (126, 136703), (130, 136721), (139, 136823), (142, 136862), (147, 136916), (148, 136925), (150, 136946), (165, 137057), (169, 137090),

Gene: Chaser_72 Start: 49179, Stop: 50663, Start Num: 19
Candidate Starts for Chaser_72:
(3, 49110), (4, 49113), (6, 49128), (Start: 19 @49179 has 19 MA's), (31, 49266), (33, 49317), (34, 49326), (37, 49341), (39, 49365), (40, 49368), (54, 49536), (58, 49566), (60, 49581), (63, 49623), (65, 49647), (68, 49695), (76, 49776), (82, 49821), (84, 49848), (91, 49902), (92, 49923), (93, 49926), (99, 49977), (105, 50037), (111, 50076), (112, 50094), (135, 50253), (138, 50283), (140, 50313), (143, 50346), (148, 50406), (154, 50463), (156, 50508), (163, 50535),

Gene: CicholasNage_70 Start: 48354, Stop: 49829, Start Num: 17
Candidate Starts for CicholasNage_70:
(Start: 17 @48354 has 61 MA's), (24, 48375), (31, 48444), (37, 48519), (40, 48546), (41, 48558), (43, 48585), (55, 48717), (56, 48720), (58, 48732), (65, 48813), (68, 48861), (76, 48942), (84, 49014), (91, 49068), (92, 49089), (93, 49092), (95, 49113), (105, 49203), (113, 49263), (124, 49341), (125, 49347), (136, 49425), (140, 49479), (142, 49509), (143, 49512), (148, 49572), (154, 49629), (163, 49701), (174, 49746), (178, 49776), (181, 49812),

Gene: Claus_76 Start: 50473, Stop: 51957, Start Num: 17
Candidate Starts for Claus_76:
(Start: 17 @50473 has 61 MA's), (31, 50563), (32, 50572), (35, 50626), (37, 50638), (40, 50665), (44, 50707), (50, 50791), (54, 50830), (56, 50848), (58, 50860), (60, 50875), (65, 50941), (68, 50989), (71, 51007), (76, 51070), (84, 51142), (92, 51217), (93, 51220), (105, 51331), (106, 51334), (111, 51370), (113, 51391), (124, 51469), (125, 51475), (136, 51553), (140, 51607), (142, 51637), (143, 51640), (144, 51649), (148, 51700), (154, 51757), (155, 51796), (156, 51802), (157, 51805), (173, 51871),

Gene: Clautastrophe_73 Start: 50750, Stop: 52225, Start Num: 17
Candidate Starts for Clautastrophe_73:
(Start: 17 @50750 has 61 MA's), (24, 50771), (31, 50840), (37, 50915), (40, 50942), (54, 51098), (55, 51113), (58, 51128), (60, 51143), (63, 51185), (65, 51209), (68, 51257), (69, 51260), (70, 51263), (76, 51338), (82, 51383), (84, 51410), (91, 51464), (92, 51485), (93, 51488), (99, 51539), (105, 51599), (109, 51623), (111, 51638), (113, 51659), (125, 51743), (140, 51875), (142, 51905), (143, 51908), (144, 51917), (148, 51968), (156, 52070), (170, 52121), (180, 52205),

Gene: Constella_124 Start: 70090, Stop: 71562, Start Num: 19
Candidate Starts for Constella_124:
(Start: 19 @70090 has 19 MA's), (40, 70279), (44, 70321), (47, 70345), (48, 70354), (54, 70435), (64, 70534), (74, 70639), (76, 70675), (84, 70747), (85, 70753), (92, 70822), (93, 70825), (102, 70906), (103, 70909), (105, 70936), (135, 71149), (138, 71179), (144, 71251), (145, 71272), (148, 71302), (151, 71338), (156, 71404), (162, 71431), (175, 71488), (176, 71494), (181, 71545),

Gene: Crossroads_75 Start: 50439, Stop: 51923, Start Num: 17
Candidate Starts for Crossroads_75:
(Start: 17 @50439 has 61 MA's), (31, 50529), (32, 50538), (35, 50592), (37, 50604), (40, 50631), (44, 50673), (50, 50757), (54, 50796), (56, 50814), (60, 50841), (65, 50907), (68, 50955), (71, 50973), (76, 51036), (92, 51183), (93, 51186), (105, 51297), (111, 51336), (117, 51417), (124, 51435), (135, 51513), (136, 51519), (140, 51573), (142, 51603), (143, 51606), (144, 51615), (148, 51666), (154, 51723), (155, 51762), (156, 51768), (157, 51771), (173, 51837),

Gene: DatBoi_6 Start: 3208, Stop: 4704, Start Num: 19
Candidate Starts for DatBoi_6:
(10, 3178), (Start: 19 @3208 has 19 MA's), (31, 3295), (35, 3358), (40, 3397), (58, 3583), (74, 3757), (76, 3793), (91, 3919), (92, 3940), (93, 3943), (96, 3973), (102, 4024), (103, 4027), (105, 4054), (113, 4114), (125, 4198), (131, 4222), (135, 4273), (141, 4342), (143, 4366), (148, 4426), (152, 4468), (162, 4552), (168, 4573),

Gene: DirkDirk_70 Start: 47892, Stop: 49367, Start Num: 17
Candidate Starts for DirkDirk_70:
(Start: 17 @47892 has 61 MA's), (40, 48084), (43, 48123), (47, 48150), (55, 48255), (56, 48258), (58, 48270), (65, 48351), (68, 48399), (76, 48480), (84, 48552), (91, 48606), (92, 48627), (93, 48630), (95, 48651), (105, 48741), (113, 48801), (124, 48879), (125, 48885), (136, 48963), (140, 49017), (142, 49047), (143, 49050), (148, 49110), (154, 49167), (163, 49239), (174, 49284), (178, 49314), (181, 49350),

Gene: Douge_74 Start: 49218, Stop: 50702, Start Num: 19
Candidate Starts for Douge_74:
(4, 49152), (6, 49167), (Start: 17 @49215 has 61 MA's), (Start: 19 @49218 has 19 MA's), (31, 49305), (34, 49365), (37, 49380), (40, 49407), (56, 49593), (58, 49605), (60, 49620), (63, 49662), (65, 49686), (68, 49734), (76, 49815), (82, 49860), (84, 49887), (91, 49941), (92, 49962), (93, 49965), (105, 50076), (111, 50115), (127, 50229), (135, 50292), (138, 50322), (140, 50352), (142, 50382), (143, 50385), (144, 50394), (148, 50445), (154, 50502), (156, 50547), (163, 50574),

Gene: DrSeegs_75 Start: 50364, Stop: 51848, Start Num: 17
Candidate Starts for DrSeegs_75:
(Start: 17 @50364 has 61 MA's), (31, 50454), (32, 50463), (35, 50517), (37, 50529), (40, 50556), (44, 50598), (50, 50682), (51, 50691), (54, 50721), (56, 50739), (58, 50751), (60, 50766), (65, 50832), (68, 50880), (71, 50898), (76, 50961), (92, 51108), (93, 51111), (105, 51222), (111, 51261), (117, 51342), (124, 51360), (135, 51438), (136, 51444), (140, 51498), (142, 51528), (143, 51531), (144, 51540), (148, 51591), (154, 51648), (155, 51687), (156, 51693), (157, 51696), (173, 51762),

Gene: DuncansLeg_75 Start: 50723, Stop: 52198, Start Num: 17
Candidate Starts for DuncansLeg_75:
(Start: 17 @50723 has 61 MA's), (31, 50813), (37, 50888), (40, 50915), (50, 51032), (54, 51071), (55, 51086), (58, 51101), (60, 51116), (63, 51158), (65, 51182), (69, 51233), (76, 51311), (79, 51335), (82, 51356), (84, 51383), (91, 51437), (92, 51458), (93, 51461), (95, 51482), (99, 51512), (105, 51572), (109, 51596), (111, 51611), (113, 51632), (125, 51716), (140, 51848), (142, 51878), (143, 51881), (144, 51890), (148, 51941), (156, 52043), (163, 52070), (170, 52094), (180, 52178),

Gene: DunneganBoMo_62 Start: 24517, Stop: 26040, Start Num: 20
Candidate Starts for DunneganBoMo_62:
(20, 24517), (78, 25102), (91, 25216), (92, 25237), (93, 25240), (111, 25387), (137, 25627), (160, 25870), (179, 25984),

Gene: DyoEdafos_79 Start: 50072, Stop: 51556, Start Num: 19
Candidate Starts for DyoEdafos_79:
(8, 50033), (Start: 19 @50072 has 19 MA's), (31, 50159), (33, 50210), (34, 50219), (37, 50234), (39, 50258), (40, 50261), (54, 50429), (56, 50447), (58, 50459), (60, 50474), (63, 50516), (65, 50540), (68, 50588), (76, 50669), (82, 50714), (84, 50741), (92, 50816), (93, 50819), (105, 50930), (107, 50945), (111, 50969), (138, 51176), (140, 51206), (142, 51236), (143, 51239), (148, 51299), (154, 51356), (156, 51401), (163, 51428),

Gene: Ellson_74 Start: 51038, Stop: 52513, Start Num: 17
Candidate Starts for Ellson_74:
(Start: 17 @51038 has 61 MA's), (31, 51128), (37, 51203), (40, 51230), (50, 51347), (54, 51386), (55, 51401), (58, 51416), (60, 51431), (65, 51497), (69, 51548), (76, 51626), (82, 51671), (84, 51698), (91, 51752), (92, 51773), (93, 51776), (95, 51797), (99, 51827), (105, 51887), (109, 51911), (111, 51926), (113, 51947), (125, 52031), (140, 52163), (142, 52193), (143, 52196), (144, 52205), (148, 52256), (156, 52358), (163, 52385), (170, 52409), (180, 52493),

Gene: Enceladus_70 Start: 48649, Stop: 50124, Start Num: 17
Candidate Starts for Enceladus_70:
(Start: 17 @48649 has 61 MA's), (40, 48841), (43, 48880), (47, 48907), (55, 49012), (56, 49015), (58, 49027), (65, 49108), (68, 49156), (76, 49237), (84, 49309), (91, 49363), (92, 49384), (93, 49387), (95, 49408), (105, 49498), (113, 49558), (124, 49636), (125, 49642), (136, 49720), (140, 49774), (142, 49804), (143, 49807), (148, 49867), (154, 49924), (163, 49996), (174, 50041), (178, 50071), (181, 50107),

Gene: Faith1_75 Start: 50364, Stop: 51848, Start Num: 17
Candidate Starts for Faith1_75:
(Start: 17 @50364 has 61 MA's), (31, 50454), (32, 50463), (35, 50517), (37, 50529), (40, 50556), (44, 50598), (50, 50682), (51, 50691), (54, 50721), (56, 50739), (58, 50751), (60, 50766), (65, 50832), (68, 50880), (71, 50898), (76, 50961), (92, 51108), (93, 51111), (105, 51222), (111, 51261), (117, 51342), (124, 51360), (135, 51438), (136, 51444), (140, 51498), (142, 51528), (143, 51531), (144, 51540), (148, 51591), (154, 51648), (155, 51687), (156, 51693), (157, 51696), (173, 51762),

Gene: Finemlucis_75 Start: 50901, Stop: 52385, Start Num: 17
Candidate Starts for Finemlucis_75:
(Start: 17 @50901 has 61 MA's), (31, 50991), (35, 51054), (37, 51066), (40, 51093), (50, 51219), (54, 51258), (56, 51276), (58, 51288), (60, 51303), (65, 51369), (68, 51417), (71, 51435), (76, 51498), (84, 51570), (88, 51612), (93, 51648), (105, 51759), (109, 51783), (111, 51798), (117, 51879), (124, 51897), (126, 51906), (135, 51975), (136, 51981), (140, 52035), (142, 52065), (143, 52068), (148, 52128), (154, 52185), (156, 52230), (173, 52299), (177, 52326),

Gene: Finnry_75 Start: 51002, Stop: 52477, Start Num: 17
Candidate Starts for Finnry_75:
(Start: 17 @51002 has 61 MA's), (31, 51092), (37, 51167), (40, 51194), (54, 51350), (55, 51365), (58, 51380), (60, 51395), (63, 51437), (65, 51461), (68, 51509), (69, 51512), (70, 51515), (76, 51590), (82, 51635), (84, 51662), (91, 51716), (92, 51737), (93, 51740), (99, 51791), (105, 51851), (109, 51875), (111, 51890), (113, 51911), (125, 51995), (140, 52127), (142, 52157), (143, 52160), (144, 52169), (148, 52220), (156, 52322), (163, 52349), (170, 52373), (180, 52457),

Gene: Gabriela_74 Start: 49713, Stop: 51194, Start Num: 19
Candidate Starts for Gabriela_74:
(13, 49692), (Start: 19 @49713 has 19 MA's), (31, 49800), (35, 49863), (37, 49875), (40, 49902), (50, 50028), (54, 50067), (56, 50085), (58, 50097), (60, 50112), (64, 50166), (65, 50178), (68, 50226), (71, 50244), (76, 50307), (81, 50349), (84, 50379), (88, 50421), (92, 50454), (93, 50457), (105, 50568), (111, 50607), (117, 50688), (124, 50706), (135, 50784), (136, 50790), (140, 50844), (142, 50874), (143, 50877), (144, 50886), (148, 50937), (154, 50994), (155, 51033), (156, 51039), (157, 51042), (173, 51108),

Gene: Gardann_76 Start: 50397, Stop: 51881, Start Num: 17
Candidate Starts for Gardann_76:
(Start: 17 @50397 has 61 MA's), (31, 50487), (32, 50496), (35, 50550), (37, 50562), (40, 50589), (44, 50631), (50, 50715), (54, 50754), (56, 50772), (58, 50784), (60, 50799), (65, 50865), (68, 50913), (71, 50931), (76, 50994), (92, 51141), (93, 51144), (105, 51255), (111, 51294), (117, 51375), (124, 51393), (135, 51471), (136, 51477), (140, 51531), (142, 51561), (143, 51564), (144, 51573), (148, 51624), (154, 51681), (155, 51720), (156, 51726), (157, 51729), (173, 51795),

Gene: Grayson_169 Start: 90455, Stop: 91948, Start Num: 22
Candidate Starts for Grayson_169:
(Start: 22 @90455 has 4 MA's), (52, 90758), (54, 90779), (59, 90815), (93, 91175), (113, 91343), (119, 91427), (122, 91439), (142, 91619), (148, 91682), (176, 91886),

Gene: Greely_271 Start: 160442, Stop: 161986, Start Num: 14
Candidate Starts for Greely_271:
(Start: 14 @160442 has 2 MA's), (31, 160544), (32, 160553), (34, 160604), (35, 160607), (47, 160709), (53, 160793), (54, 160808), (56, 160826), (58, 160838), (60, 160853), (76, 161048), (90, 161168), (93, 161198), (94, 161213), (103, 161321), (105, 161348), (111, 161387), (143, 161654), (144, 161663), (148, 161714), (150, 161735), (151, 161750), (180, 161951),

Gene: GuuelaD_73 Start: 50479, Stop: 51963, Start Num: 17
Candidate Starts for GuuelaD_73:
(Start: 17 @50479 has 61 MA's), (31, 50569), (32, 50578), (37, 50644), (40, 50671), (44, 50713), (50, 50797), (54, 50836), (56, 50854), (58, 50866), (60, 50881), (65, 50947), (68, 50995), (71, 51013), (76, 51076), (92, 51223), (93, 51226), (105, 51337), (111, 51376), (117, 51457), (124, 51475), (135, 51553), (136, 51559), (140, 51613), (142, 51643), (143, 51646), (144, 51655), (148, 51706), (154, 51763), (155, 51802), (156, 51808), (157, 51811), (173, 51877),

Gene: Hafay_77 Start: 50468, Stop: 51952, Start Num: 17
Candidate Starts for Hafay_77:
(Start: 17 @50468 has 61 MA's), (31, 50558), (32, 50567), (35, 50621), (37, 50633), (40, 50660), (44, 50702), (50, 50786), (54, 50825), (56, 50843), (58, 50855), (60, 50870), (65, 50936), (68, 50984), (71, 51002), (76, 51065), (92, 51212), (93, 51215), (105, 51326), (111, 51365), (117, 51446), (124, 51464), (135, 51542), (136, 51548), (140, 51602), (142, 51632), (143, 51635), (144, 51644), (148, 51695), (154, 51752), (155, 51791), (156, 51797), (157, 51800), (173, 51866),

Gene: Halena_71 Start: 47928, Stop: 49403, Start Num: 17
Candidate Starts for Halena_71:
(Start: 17 @47928 has 61 MA's), (28, 47982), (31, 48018), (32, 48027), (40, 48120), (43, 48159), (47, 48186), (55, 48291), (56, 48294), (58, 48306), (65, 48387), (68, 48435), (76, 48516), (84, 48588), (91, 48642), (92, 48663), (93, 48666), (95, 48687), (105, 48777), (113, 48837), (124, 48915), (125, 48921), (136, 48999), (140, 49053), (142, 49083), (143, 49086), (148, 49146), (154, 49203), (163, 49275), (174, 49320), (178, 49350), (181, 49386),

Gene: Itos_74 Start: 49270, Stop: 50754, Start Num: 17
Candidate Starts for Itos_74:
(Start: 17 @49270 has 61 MA's), (31, 49360), (32, 49369), (35, 49423), (37, 49435), (40, 49462), (44, 49504), (50, 49588), (51, 49597), (54, 49627), (56, 49645), (58, 49657), (60, 49672), (65, 49738), (68, 49786), (71, 49804), (76, 49867), (92, 50014), (93, 50017), (105, 50128), (111, 50167), (117, 50248), (124, 50266), (135, 50344), (136, 50350), (140, 50404), (142, 50434), (143, 50437), (144, 50446), (148, 50497), (154, 50554), (155, 50593), (156, 50599), (157, 50602), (173, 50668),

Gene: Jobypre_76 Start: 50750, Stop: 52225, Start Num: 17
Candidate Starts for Jobypre_76:
(Start: 17 @50750 has 61 MA's), (24, 50771), (31, 50840), (37, 50915), (40, 50942), (54, 51098), (55, 51113), (58, 51128), (60, 51143), (63, 51185), (65, 51209), (68, 51257), (69, 51260), (70, 51263), (76, 51338), (82, 51383), (84, 51410), (91, 51464), (92, 51485), (93, 51488), (99, 51539), (105, 51599), (109, 51623), (111, 51638), (113, 51659), (125, 51743), (140, 51875), (142, 51905), (143, 51908), (144, 51917), (148, 51968), (156, 52070), (170, 52121), (180, 52205),

Gene: JoeDirt_73 Start: 49081, Stop: 50556, Start Num: 17
Candidate Starts for JoeDirt_73:
(Start: 17 @49081 has 61 MA's), (28, 49135), (31, 49171), (32, 49180), (40, 49273), (43, 49312), (47, 49339), (55, 49444), (56, 49447), (58, 49459), (65, 49540), (68, 49588), (76, 49669), (84, 49741), (91, 49795), (92, 49816), (93, 49819), (95, 49840), (105, 49930), (113, 49990), (124, 50068), (125, 50074), (136, 50152), (140, 50206), (142, 50236), (143, 50239), (148, 50299), (154, 50356), (163, 50428), (174, 50473), (178, 50503), (181, 50539),

Gene: Jubie_74 Start: 50885, Stop: 52360, Start Num: 17
Candidate Starts for Jubie_74:
(Start: 17 @50885 has 61 MA's), (24, 50906), (31, 50975), (37, 51050), (40, 51077), (54, 51233), (55, 51248), (58, 51263), (60, 51278), (63, 51320), (65, 51344), (68, 51392), (69, 51395), (70, 51398), (76, 51473), (82, 51518), (84, 51545), (91, 51599), (92, 51620), (93, 51623), (99, 51674), (105, 51734), (109, 51758), (111, 51773), (113, 51794), (125, 51878), (140, 52010), (142, 52040), (143, 52043), (144, 52052), (148, 52103), (156, 52205), (170, 52256), (180, 52340),

Gene: Kahlid_75 Start: 50370, Stop: 51854, Start Num: 17
Candidate Starts for Kahlid_75:
(Start: 17 @50370 has 61 MA's), (31, 50460), (32, 50469), (35, 50523), (37, 50535), (40, 50562), (44, 50604), (50, 50688), (54, 50727), (56, 50745), (58, 50757), (60, 50772), (65, 50838), (68, 50886), (71, 50904), (76, 50967), (92, 51114), (93, 51117), (105, 51228), (111, 51267), (117, 51348), (124, 51366), (135, 51444), (136, 51450), (140, 51504), (142, 51534), (143, 51537), (144, 51546), (148, 51597), (154, 51654), (155, 51693), (156, 51699), (157, 51702), (173, 51768),

Gene: Kingsolomon_73 Start: 50757, Stop: 52232, Start Num: 17
Candidate Starts for Kingsolomon_73:
(Start: 17 @50757 has 61 MA's), (24, 50778), (31, 50847), (37, 50922), (40, 50949), (54, 51105), (55, 51120), (58, 51135), (60, 51150), (63, 51192), (65, 51216), (68, 51264), (69, 51267), (70, 51270), (76,

51345), (82, 51390), (84, 51417), (91, 51471), (92, 51492), (93, 51495), (99, 51546), (105, 51606), (109, 51630), (111, 51645), (113, 51666), (125, 51750), (140, 51882), (142, 51912), (143, 51915), (144, 51924), (148, 51975), (156, 52077), (170, 52128), (180, 52212),

Gene: Krypton555_76 Start: 50964, Stop: 52439, Start Num: 17
Candidate Starts for Krypton555_76:
(Start: 17 @50964 has 61 MA's), (31, 51054), (37, 51129), (40, 51156), (54, 51312), (55, 51327), (58, 51342), (60, 51357), (63, 51399), (65, 51423), (68, 51471), (69, 51474), (70, 51477), (76, 51552), (79, 51576), (82, 51597), (84, 51624), (92, 51699), (93, 51702), (95, 51723), (99, 51753), (105, 51813), (109, 51837), (113, 51873), (125, 51957), (140, 52089), (142, 52119), (143, 52122), (144, 52131), (148, 52182), (156, 52284), (164, 52314), (170, 52335), (180, 52419),

Gene: Kudefre_93 Start: 54870, Stop: 56351, Start Num: 19
Candidate Starts for Kudefre_93:
(7, 54819), (10, 54840), (Start: 19 @54870 has 19 MA's), (30, 54945), (35, 55020), (37, 55032), (40, 55059), (44, 55101), (50, 55176), (73, 55413), (76, 55455), (93, 55608), (113, 55779), (129, 55881), (134, 55923), (135, 55935), (141, 56004), (143, 56028), (148, 56088),

Gene: LeBron_72 Start: 47932, Stop: 49407, Start Num: 17
Candidate Starts for LeBron_72:
(Start: 17 @47932 has 61 MA's), (28, 47986), (31, 48022), (32, 48031), (40, 48124), (43, 48163), (47, 48190), (55, 48295), (56, 48298), (58, 48310), (65, 48391), (68, 48439), (76, 48520), (84, 48592), (91, 48646), (92, 48667), (93, 48670), (95, 48691), (105, 48781), (113, 48841), (124, 48919), (125, 48925), (136, 49003), (140, 49057), (142, 49087), (143, 49090), (148, 49150), (154, 49207), (163, 49279), (174, 49324), (178, 49354), (181, 49390),

Gene: Lewan_76 Start: 50421, Stop: 51905, Start Num: 17
Candidate Starts for Lewan_76:
(Start: 17 @50421 has 61 MA's), (31, 50511), (32, 50520), (37, 50586), (40, 50613), (44, 50655), (50, 50739), (54, 50778), (56, 50796), (58, 50808), (60, 50823), (65, 50889), (68, 50937), (71, 50955), (76, 51018), (92, 51165), (93, 51168), (105, 51279), (111, 51318), (117, 51399), (124, 51417), (135, 51495), (136, 51501), (140, 51555), (142, 51585), (143, 51588), (144, 51597), (148, 51648), (154, 51705), (155, 51744), (156, 51750), (157, 51753), (173, 51819),

Gene: LilDestine_75 Start: 50397, Stop: 51881, Start Num: 17
Candidate Starts for LilDestine_75:
(Start: 17 @50397 has 61 MA's), (31, 50487), (32, 50496), (35, 50550), (37, 50562), (40, 50589), (47, 50655), (49, 50679), (51, 50724), (54, 50754), (56, 50772), (58, 50784), (60, 50799), (65, 50865), (68, 50913), (76, 50994), (84, 51066), (93, 51144), (105, 51255), (111, 51294), (117, 51375), (124, 51393), (135, 51471), (136, 51477), (140, 51531), (142, 51561), (143, 51564), (144, 51573), (148, 51624), (154, 51681), (155, 51720), (156, 51726), (157, 51729), (173, 51795),

Gene: Loadrie_74 Start: 50449, Stop: 51933, Start Num: 17
Candidate Starts for Loadrie_74:
(Start: 17 @50449 has 61 MA's), (31, 50539), (32, 50548), (35, 50602), (37, 50614), (40, 50641), (44, 50683), (50, 50767), (54, 50806), (56, 50824), (58, 50836), (60, 50851), (65, 50917), (68, 50965), (71, 50983), (76, 51046), (92, 51193), (93, 51196), (105, 51307), (111, 51346), (117, 51427), (124, 51445), (135, 51523), (136, 51529), (140, 51583), (142, 51613), (143, 51616), (144, 51625), (148, 51676), (154, 51733), (155, 51772), (156, 51778), (157, 51781), (173, 51847),

Gene: Lolly9_74 Start: 50858, Stop: 52333, Start Num: 17
Candidate Starts for Lolly9_74:

(Start: 17 @50858 has 61 MA's), (31, 50948), (37, 51023), (40, 51050), (52, 51185), (54, 51206), (55, 51221), (58, 51236), (60, 51251), (63, 51293), (65, 51317), (68, 51365), (69, 51368), (70, 51371), (76, 51446), (82, 51491), (84, 51518), (91, 51572), (92, 51593), (93, 51596), (105, 51707), (111, 51746), (113, 51767), (125, 51851), (140, 51983), (142, 52013), (143, 52016), (144, 52025), (148, 52076), (156, 52178), (163, 52205), (170, 52229), (180, 52313),

Gene: Lumos_76 Start: 50747, Stop: 52222, Start Num: 17
Candidate Starts for Lumos_76:
(Start: 17 @50747 has 61 MA's), (24, 50768), (31, 50837), (37, 50912), (40, 50939), (54, 51095), (55, 51110), (58, 51125), (60, 51140), (63, 51182), (65, 51206), (68, 51254), (69, 51257), (70, 51260), (76, 51335), (82, 51380), (84, 51407), (91, 51461), (92, 51482), (93, 51485), (99, 51536), (105, 51596), (109, 51620), (111, 51635), (113, 51656), (125, 51740), (140, 51872), (142, 51902), (143, 51905), (144, 51914), (148, 51965), (156, 52067), (170, 52118), (180, 52202),

Gene: MAckerman_70 Start: 47921, Stop: 49396, Start Num: 17
Candidate Starts for MAckerman_70:
(Start: 17 @47921 has 61 MA's), (28, 47975), (31, 48011), (32, 48020), (40, 48113), (43, 48152), (47, 48179), (55, 48284), (56, 48287), (58, 48299), (65, 48380), (68, 48428), (76, 48509), (84, 48581), (91, 48635), (92, 48656), (93, 48659), (95, 48680), (105, 48770), (113, 48830), (124, 48908), (125, 48914), (136, 48992), (140, 49046), (142, 49076), (143, 49079), (148, 49139), (154, 49196), (163, 49268), (174, 49313), (178, 49343), (181, 49379),

Gene: Miley16_75 Start: 50364, Stop: 51848, Start Num: 17
Candidate Starts for Miley16_75:
(Start: 17 @50364 has 61 MA's), (31, 50454), (32, 50463), (35, 50517), (37, 50529), (40, 50556), (44, 50598), (50, 50682), (51, 50691), (54, 50721), (56, 50739), (58, 50751), (60, 50766), (65, 50832), (68, 50880), (71, 50898), (76, 50961), (92, 51108), (93, 51111), (105, 51222), (111, 51261), (117, 51342), (124, 51360), (135, 51438), (136, 51444), (140, 51498), (142, 51528), (143, 51531), (144, 51540), (148, 51591), (154, 51648), (155, 51687), (156, 51693), (157, 51696), (173, 51762),

Gene: Mimi_77 Start: 29839, Stop: 31392, Start Num: 12
Candidate Starts for Mimi_77:
(Start: 12 @29839 has 1 MA's), (78, 30454), (82, 30478), (86, 30520), (92, 30586), (93, 30589), (99, 30637), (111, 30736), (137, 30976),

Gene: MiniLon_79 Start: 50859, Stop: 52334, Start Num: 17
Candidate Starts for MiniLon_79:
(Start: 17 @50859 has 61 MA's), (31, 50949), (37, 51024), (40, 51051), (52, 51186), (54, 51207), (55, 51222), (58, 51237), (60, 51252), (63, 51294), (65, 51318), (68, 51366), (69, 51369), (70, 51372), (76, 51447), (82, 51492), (84, 51519), (91, 51573), (92, 51594), (93, 51597), (105, 51708), (111, 51747), (113, 51768), (125, 51852), (140, 51984), (142, 52014), (143, 52017), (144, 52026), (148, 52077), (156, 52179), (163, 52206), (170, 52230), (180, 52314),

Gene: MiniMac_79 Start: 50857, Stop: 52332, Start Num: 17
Candidate Starts for MiniMac_79:
(Start: 17 @50857 has 61 MA's), (31, 50947), (37, 51022), (40, 51049), (54, 51205), (55, 51220), (58, 51235), (60, 51250), (63, 51292), (65, 51316), (68, 51364), (69, 51367), (70, 51370), (76, 51445), (82, 51490), (84, 51517), (91, 51571), (92, 51592), (93, 51595), (105, 51706), (111, 51745), (113, 51766), (125, 51850), (140, 51982), (142, 52012), (143, 52015), (144, 52024), (148, 52075), (156, 52177), (163, 52204), (170, 52228), (180, 52312),

Gene: MkaliMitinis3_76 Start: 50433, Stop: 51917, Start Num: 17
Candidate Starts for MkaliMitinis3_76:

(Start: 17 @50433 has 61 MA's), (31, 50523), (32, 50532), (35, 50586), (37, 50598), (40, 50625), (44, 50667), (50, 50751), (54, 50790), (56, 50808), (58, 50820), (60, 50835), (65, 50901), (68, 50949), (71, 50967), (76, 51030), (92, 51177), (93, 51180), (105, 51291), (111, 51330), (117, 51411), (124, 51429), (135, 51507), (136, 51513), (140, 51567), (142, 51597), (143, 51600), (144, 51609), (148, 51660), (154, 51717), (155, 51756), (156, 51762), (157, 51765), (173, 51831),

Gene: Mollymur_6 Start: 2985, Stop: 4478, Start Num: 19
Candidate Starts for Mollymur_6:
(2, 2871), (10, 2955), (Start: 19 @2985 has 19 MA's), (24, 3003), (31, 3072), (33, 3123), (35, 3135), (44, 3216), (50, 3291), (56, 3348), (76, 3570), (91, 3696), (92, 3717), (93, 3720), (95, 3741), (99, 3771), (102, 3801), (105, 3831), (111, 3870), (113, 3891), (115, 3942), (138, 4077), (141, 4116), (148, 4200), (153, 4245), (165, 4335), (179, 4428),

Gene: Moostard_73 Start: 50753, Stop: 52228, Start Num: 17
Candidate Starts for Moostard_73:
(Start: 17 @50753 has 61 MA's), (24, 50774), (31, 50843), (37, 50918), (40, 50945), (54, 51101), (55, 51116), (58, 51131), (60, 51146), (63, 51188), (65, 51212), (68, 51260), (69, 51263), (70, 51266), (76, 51341), (79, 51365), (82, 51386), (84, 51413), (91, 51467), (92, 51488), (93, 51491), (95, 51512), (99, 51542), (105, 51602), (106, 51605), (109, 51626), (111, 51641), (113, 51662), (125, 51746), (140, 51878), (142, 51908), (143, 51911), (144, 51920), (148, 51971), (156, 52073), (163, 52100), (170, 52124), (180, 52208),

Gene: MsGreen_75 Start: 50750, Stop: 52225, Start Num: 17
Candidate Starts for MsGreen_75:
(Start: 17 @50750 has 61 MA's), (24, 50771), (31, 50840), (37, 50915), (40, 50942), (54, 51098), (55, 51113), (58, 51128), (60, 51143), (63, 51185), (65, 51209), (68, 51257), (69, 51260), (70, 51263), (76, 51338), (82, 51383), (84, 51410), (91, 51464), (92, 51485), (93, 51488), (99, 51539), (105, 51599), (109, 51623), (111, 51638), (113, 51659), (125, 51743), (140, 51875), (142, 51905), (143, 51908), (144, 51917), (148, 51968), (156, 52070), (170, 52121), (180, 52205),

Gene: Myrna_263 Start: 160915, Stop: 162441, Start Num: 14
Candidate Starts for Myrna_263:
(Start: 14 @160915 has 2 MA's), (31, 161017), (32, 161026), (33, 161068), (34, 161077), (35, 161080), (47, 161182), (53, 161266), (56, 161299), (58, 161311), (60, 161326), (65, 161392), (76, 161521), (91, 161647), (93, 161671), (94, 161686), (103, 161776), (105, 161803), (110, 161839), (111, 161842), (118, 161926), (143, 162109), (144, 162118), (148, 162169), (151, 162205), (155, 162265), (165, 162304), (180, 162406),

Gene: Netyap_76 Start: 50365, Stop: 51849, Start Num: 17
Candidate Starts for Netyap_76:
(Start: 17 @50365 has 61 MA's), (31, 50455), (32, 50464), (35, 50518), (37, 50530), (40, 50557), (44, 50599), (50, 50683), (51, 50692), (54, 50722), (56, 50740), (58, 50752), (60, 50767), (65, 50833), (68, 50881), (71, 50899), (76, 50962), (92, 51109), (93, 51112), (105, 51223), (111, 51262), (117, 51343), (124, 51361), (135, 51439), (136, 51445), (140, 51499), (142, 51529), (143, 51532), (144, 51541), (148, 51592), (154, 51649), (155, 51688), (156, 51694), (157, 51697), (173, 51763),

Gene: Neville_83 Start: 52798, Stop: 54285, Start Num: 15
Candidate Starts for Neville_83:
(Start: 15 @52798 has 3 MA's), (40, 52999), (43, 53038), (56, 53173), (60, 53200), (65, 53266), (76, 53395), (93, 53548), (97, 53584), (103, 53632), (125, 53803), (138, 53905), (142, 53965), (143, 53968), (148, 54028), (150, 54049), (158, 54136), (161, 54145), (179, 54256),

Gene: NiceHouse_21 Start: 10062, Stop: 8587, Start Num: 22

Candidate Starts for NiceHouse_21:
(Start: 22 @10062 has 4 MA's), (27, 10041), (36, 9924), (60, 9690), (61, 9660), (64, 9636), (66, 9618), (67, 9585), (76, 9495), (90, 9372), (92, 9345), (93, 9342), (99, 9288), (101, 9264), (102, 9258), (104, 9237), (111, 9189), (143, 8910), (148, 8850), (155, 8754), (157, 8745), (181, 8601),

Gene: Nicholas_73 Start: 50757, Stop: 52232, Start Num: 17
Candidate Starts for Nicholas_73:
(Start: 17 @50757 has 61 MA's), (24, 50778), (31, 50847), (37, 50922), (40, 50949), (54, 51105), (55, 51120), (58, 51135), (60, 51150), (63, 51192), (65, 51216), (68, 51264), (69, 51267), (70, 51270), (76, 51345), (82, 51390), (84, 51417), (91, 51471), (92, 51492), (93, 51495), (99, 51546), (105, 51606), (109, 51630), (111, 51645), (113, 51666), (125, 51750), (140, 51882), (142, 51912), (143, 51915), (144, 51924), (148, 51975), (156, 52077), (170, 52128), (180, 52212),

Gene: Nicholasp3_75 Start: 50397, Stop: 51881, Start Num: 17
Candidate Starts for Nicholasp3_75:
(Start: 17 @50397 has 61 MA's), (31, 50487), (32, 50496), (35, 50550), (37, 50562), (40, 50589), (44, 50631), (50, 50715), (54, 50754), (56, 50772), (58, 50784), (60, 50799), (65, 50865), (68, 50913), (71, 50931), (76, 50994), (92, 51141), (93, 51144), (105, 51255), (111, 51294), (117, 51375), (124, 51393), (135, 51471), (136, 51477), (140, 51531), (142, 51561), (143, 51564), (144, 51573), (148, 51624), (154, 51681), (155, 51720), (156, 51726), (157, 51729), (173, 51795),

Gene: Octobien14_91 Start: 54167, Stop: 55645, Start Num: 19
Candidate Starts for Octobien14_91:
(7, 54116), (10, 54137), (Start: 19 @54167 has 19 MA's), (26, 54197), (30, 54242), (35, 54317), (37, 54329), (40, 54356), (44, 54398), (50, 54473), (60, 54557), (63, 54599), (65, 54623), (76, 54752), (84, 54824), (85, 54830), (92, 54899), (93, 54902), (95, 54923), (97, 54938), (102, 54983), (103, 54986), (113, 55073), (129, 55175), (134, 55217), (141, 55298), (143, 55322), (148, 55382),

Gene: OhShagHennessy_71 Start: 47798, Stop: 49273, Start Num: 17
Candidate Starts for OhShagHennessy_71:
(Start: 17 @47798 has 61 MA's), (40, 47990), (43, 48029), (47, 48056), (55, 48161), (56, 48164), (58, 48176), (65, 48257), (68, 48305), (76, 48386), (84, 48458), (91, 48512), (92, 48533), (93, 48536), (95, 48557), (105, 48647), (113, 48707), (124, 48785), (125, 48791), (136, 48869), (140, 48923), (142, 48953), (143, 48956), (148, 49016), (154, 49073), (163, 49145), (174, 49190), (178, 49220), (181, 49256),

Gene: OneUp_101 Start: 63701, Stop: 65173, Start Num: 19
Candidate Starts for OneUp_101:
(1, 63545), (2, 63587), (10, 63671), (Start: 19 @63701 has 19 MA's), (32, 63797), (58, 64076), (60, 64091), (65, 64157), (72, 64241), (76, 64286), (81, 64328), (91, 64412), (93, 64436), (105, 64547), (113, 64607), (125, 64691), (126, 64694), (129, 64709), (132, 64727), (134, 64751), (141, 64832), (143, 64856), (148, 64916), (155, 65012), (172, 65075), (179, 65141),

Gene: Patbob_70 Start: 30115, Stop: 31671, Start Num: 12
Candidate Starts for Patbob_70:
(Start: 12 @30115 has 1 MA's), (32, 30226), (78, 30730), (82, 30754), (86, 30796), (91, 30844), (92, 30865), (93, 30868), (99, 30916), (111, 31015), (137, 31255), (178, 31588),

Gene: PauloDiaboli_253 Start: 138006, Stop: 139577, Start Num: 18
Candidate Starts for PauloDiaboli_253:
(Start: 5 @137943 has 1 MA's), (Start: 18 @138006 has 4 MA's), (29, 138075), (33, 138141), (35, 138153), (64, 138456), (76, 138597), (111, 138900), (114, 138948), (116, 138990), (126, 139086), (133, 139140), (139, 139206), (148, 139308), (156, 139410), (159, 139419), (175, 139503),

Gene: Peregrin_167 Start: 89886, Stop: 91379, Start Num: 22
Candidate Starts for Peregrin_167:
(9, 89844), (11, 89850), (Start: 22 @89886 has 4 MA's), (56, 90228), (59, 90246), (93, 90606), (113, 90774), (120, 90858), (121, 90864), (148, 91113), (176, 91317),

Gene: Phabba_273 Start: 159832, Stop: 161376, Start Num: 14
Candidate Starts for Phabba_273:
(Start: 14 @159832 has 2 MA's), (31, 159934), (32, 159943), (34, 159994), (35, 159997), (47, 160099), (53, 160183), (54, 160198), (56, 160216), (58, 160228), (60, 160243), (65, 160309), (76, 160438), (90, 160558), (92, 160585), (93, 160588), (94, 160603), (103, 160711), (105, 160738), (111, 160777), (143, 161044), (144, 161053), (148, 161104), (150, 161125), (151, 161140),

Gene: Pumpernickel_211 Start: 120194, Stop: 121771, Start Num: 16
Candidate Starts for Pumpernickel_211:
(Start: 16 @120194 has 1 MA's), (35, 120344), (39, 120380), (44, 120425), (58, 120569), (62, 120617), (64, 120638), (76, 120779), (92, 120932), (93, 120935), (100, 121016), (101, 121034), (102, 121040), (103, 121043), (111, 121109), (114, 121157), (139, 121385), (149, 121502), (167, 121637), (173, 121682),

Gene: Rabbitrun_88 Start: 53694, Stop: 55169, Start Num: 15
Candidate Starts for Rabbitrun_88:
(Start: 15 @53694 has 3 MA's), (34, 53841), (35, 53844), (40, 53883), (56, 54057), (60, 54084), (64, 54138), (65, 54150), (76, 54279), (93, 54432), (97, 54468), (101, 54507), (113, 54603), (125, 54687), (130, 54708), (142, 54849), (143, 54852), (144, 54861), (150, 54933), (151, 54948), (158, 55020), (175, 55095), (179, 55140),

Gene: Racecar_71 Start: 30492, Stop: 32045, Start Num: 12
Candidate Starts for Racecar_71:
(Start: 12 @30492 has 1 MA's), (78, 31107), (82, 31131), (86, 31173), (92, 31239), (93, 31242), (99, 31290), (111, 31389), (137, 31629),

Gene: Rose5_73 Start: 49101, Stop: 50576, Start Num: 17
Candidate Starts for Rose5_73:
(Start: 17 @49101 has 61 MA's), (28, 49155), (31, 49191), (32, 49200), (40, 49293), (43, 49332), (47, 49359), (55, 49464), (56, 49467), (58, 49479), (65, 49560), (68, 49608), (76, 49689), (84, 49761), (91, 49815), (92, 49836), (93, 49839), (95, 49860), (105, 49950), (113, 50010), (124, 50088), (125, 50094), (136, 50172), (140, 50226), (142, 50256), (143, 50259), (148, 50319), (154, 50376), (163, 50448), (174, 50493), (178, 50523), (181, 50559),

Gene: Rumpelstiltskin_74 Start: 50190, Stop: 51674, Start Num: 17
Candidate Starts for Rumpelstiltskin_74:
(Start: 17 @50190 has 61 MA's), (31, 50280), (32, 50289), (35, 50343), (37, 50355), (39, 50379), (40, 50382), (50, 50508), (54, 50547), (56, 50565), (58, 50577), (60, 50592), (65, 50658), (68, 50706), (71, 50724), (76, 50787), (84, 50859), (88, 50901), (92, 50934), (93, 50937), (105, 51048), (111, 51087), (117, 51168), (124, 51186), (135, 51264), (136, 51270), (140, 51324), (142, 51354), (143, 51357), (144, 51366), (148, 51417), (154, 51474), (155, 51513), (156, 51519), (157, 51522), (173, 51588),

Gene: SJReid_76 Start: 31714, Stop: 33258, Start Num: 21
Candidate Starts for SJReid_76:
(21, 31714), (42, 31900), (45, 31930), (78, 32299), (85, 32356), (86, 32365), (91, 32410), (92, 32431), (93, 32434), (111, 32581), (137, 32842), (145, 32941), (148, 32971), (173, 33142),

Gene: Samty_74 Start: 50746, Stop: 52221, Start Num: 17
Candidate Starts for Samty_74:
(Start: 17 @50746 has 61 MA's), (31, 50836), (37, 50911), (40, 50938), (54, 51094), (55, 51109), (58, 51124), (60, 51139), (63, 51181), (65, 51205), (68, 51253), (69, 51256), (70, 51259), (76, 51334), (82, 51379), (84, 51406), (91, 51460), (92, 51481), (93, 51484), (99, 51535), (105, 51595), (109, 51619), (111, 51634), (113, 51655), (125, 51739), (140, 51871), (142, 51901), (143, 51904), (144, 51913), (148, 51964), (156, 52066), (163, 52093), (170, 52117), (180, 52201),

Gene: ScoobyDoobyDoo_257 Start: 155721, Stop: 157226, Start Num: 19
Candidate Starts for ScoobyDoobyDoo_257:
(Start: 19 @155721 has 19 MA's), (34, 155865), (35, 155868), (44, 155946), (47, 155970), (54, 156069), (58, 156099), (60, 156114), (65, 156180), (76, 156309), (90, 156429), (92, 156456), (93, 156459), (94, 156474), (97, 156513), (99, 156528), (105, 156588), (110, 156624), (113, 156648), (125, 156729), (143, 156894), (144, 156903), (148, 156954), (150, 156975), (151, 156990), (156, 157056), (165, 157089), (175, 157137), (179, 157182), (180, 157191),

Gene: Sephiroth_90 Start: 54839, Stop: 56320, Start Num: 19
Candidate Starts for Sephiroth_90:
(Start: 19 @54839 has 19 MA's), (30, 54914), (35, 54989), (37, 55001), (40, 55028), (44, 55070), (50, 55145), (65, 55295), (76, 55424), (93, 55577), (113, 55748), (129, 55850), (134, 55892), (135, 55904), (141, 55973), (143, 55997), (148, 56057),

Gene: Silverleaf_73 Start: 48551, Stop: 50026, Start Num: 17
Candidate Starts for Silverleaf_73:
(Start: 17 @48551 has 61 MA's), (28, 48605), (31, 48641), (32, 48650), (40, 48743), (43, 48782), (47, 48809), (55, 48914), (56, 48917), (58, 48929), (65, 49010), (68, 49058), (76, 49139), (84, 49211), (91, 49265), (92, 49286), (93, 49289), (95, 49310), (105, 49400), (113, 49460), (124, 49538), (125, 49544), (136, 49622), (140, 49676), (142, 49706), (143, 49709), (148, 49769), (154, 49826), (163, 49898), (174, 49943), (178, 49973), (181, 50009),

Gene: Snenia_74 Start: 50751, Stop: 52226, Start Num: 17
Candidate Starts for Snenia_74:
(Start: 17 @50751 has 61 MA's), (24, 50772), (31, 50841), (37, 50916), (40, 50943), (54, 51099), (55, 51114), (58, 51129), (60, 51144), (63, 51186), (65, 51210), (68, 51258), (69, 51261), (70, 51264), (76, 51339), (82, 51384), (84, 51411), (91, 51465), (92, 51486), (93, 51489), (99, 51540), (105, 51600), (109, 51624), (111, 51639), (113, 51660), (125, 51744), (140, 51876), (142, 51906), (143, 51909), (144, 51918), (148, 51969), (156, 52071), (170, 52122), (180, 52206),

Gene: SpeedDemon_50 Start: 2357, Stop: 3850, Start Num: 19
Candidate Starts for SpeedDemon_50:
(2, 2243), (10, 2327), (Start: 19 @2357 has 19 MA's), (32, 2453), (46, 2603), (58, 2732), (74, 2906), (76, 2942), (91, 3068), (92, 3089), (93, 3092), (105, 3203), (113, 3263), (135, 3419), (136, 3425), (141, 3488), (148, 3572), (150, 3593), (151, 3608), (156, 3674), (165, 3707), (171, 3728), (178, 3776), (179, 3800),

Gene: Syleon_93 Start: 54789, Stop: 56270, Start Num: 19
Candidate Starts for Syleon_93:
(1, 54630), (Start: 19 @54789 has 19 MA's), (30, 54864), (35, 54939), (37, 54951), (40, 54978), (44, 55020), (50, 55095), (65, 55245), (76, 55374), (93, 55527), (112, 55695), (113, 55698), (129, 55800), (134, 55842), (135, 55854), (141, 55923), (143, 55947), (148, 56007),

Gene: Talia1610_74 Start: 29857, Stop: 31410, Start Num: 12
Candidate Starts for Talia1610_74:

(Start: 12 @29857 has 1 MA's), (78, 30472), (82, 30496), (86, 30538), (92, 30604), (93, 30607), (99, 30655), (111, 30754), (137, 30994),

Gene: Thibault_116 Start: 68299, Stop: 69771, Start Num: 19
Candidate Starts for Thibault_116:
(Start: 19 @68299 has 19 MA's), (40, 68488), (44, 68530), (47, 68554), (48, 68563), (54, 68644), (64, 68743), (74, 68848), (76, 68884), (84, 68956), (85, 68962), (92, 69031), (93, 69034), (102, 69115), (103, 69118), (105, 69145), (135, 69358), (138, 69388), (144, 69460), (145, 69481), (148, 69511), (151, 69547), (162, 69640), (175, 69697), (176, 69703), (181, 69754),

Gene: Tourach_75 Start: 50658, Stop: 52142, Start Num: 17
Candidate Starts for Tourach_75:
(Start: 17 @50658 has 61 MA's), (31, 50748), (32, 50757), (35, 50811), (37, 50823), (40, 50850), (50, 50976), (54, 51015), (56, 51033), (58, 51045), (60, 51060), (65, 51126), (68, 51174), (71, 51192), (76, 51255), (84, 51327), (88, 51369), (93, 51405), (105, 51516), (109, 51540), (111, 51555), (124, 51654), (125, 51660), (136, 51738), (140, 51792), (143, 51825), (144, 51834), (148, 51885), (154, 51942), (155, 51981), (156, 51987), (157, 51990), (173, 52056),

Gene: Trax_86 Start: 53793, Stop: 55280, Start Num: 15
Candidate Starts for Trax_86:
(Start: 15 @53793 has 3 MA's), (40, 53994), (43, 54033), (56, 54168), (60, 54195), (65, 54261), (76, 54390), (93, 54543), (97, 54579), (103, 54627), (125, 54798), (138, 54900), (142, 54960), (143, 54963), (148, 55023), (150, 55044), (158, 55131), (161, 55140), (179, 55251),

Gene: Trina_26 Start: 9695, Stop: 8184, Start Num: 23
Candidate Starts for Trina_26:
(Start: 23 @9695 has 1 MA's), (25, 9683), (37, 9554), (38, 9542), (57, 9350), (59, 9338), (62, 9296), (67, 9224), (68, 9215), (70, 9209), (75, 9158), (82, 9089), (88, 9002), (89, 8999), (90, 8996), (93, 8966), (98, 8915), (104, 8861), (105, 8852), (111, 8813), (144, 8507), (146, 8483), (148, 8456), (157, 8351), (160, 8339),

Gene: Tyson_74 Start: 49027, Stop: 50502, Start Num: 17
Candidate Starts for Tyson_74:
(Start: 17 @49027 has 61 MA's), (28, 49081), (31, 49117), (32, 49126), (40, 49219), (43, 49258), (47, 49285), (55, 49390), (56, 49393), (58, 49405), (65, 49486), (68, 49534), (76, 49615), (84, 49687), (91, 49741), (92, 49762), (93, 49765), (95, 49786), (105, 49876), (113, 49936), (124, 50014), (125, 50020), (136, 50098), (140, 50152), (142, 50182), (143, 50185), (148, 50245), (154, 50302), (163, 50374), (174, 50419), (178, 50449), (181, 50485),

Gene: UPIE_72 Start: 48628, Stop: 50103, Start Num: 17
Candidate Starts for UPIE_72:
(Start: 17 @48628 has 61 MA's), (40, 48820), (43, 48859), (47, 48886), (55, 48991), (56, 48994), (58, 49006), (65, 49087), (68, 49135), (76, 49216), (84, 49288), (91, 49342), (92, 49363), (93, 49366), (95, 49387), (105, 49477), (113, 49537), (124, 49615), (125, 49621), (136, 49699), (140, 49753), (142, 49783), (143, 49786), (148, 49846), (154, 49903), (163, 49975), (174, 50020), (178, 50050), (181, 50086),

Gene: Vetrix_75 Start: 50404, Stop: 51888, Start Num: 17
Candidate Starts for Vetrix_75:
(Start: 17 @50404 has 61 MA's), (31, 50494), (32, 50503), (35, 50557), (37, 50569), (40, 50596), (44, 50638), (50, 50722), (54, 50761), (56, 50779), (58, 50791), (60, 50806), (65, 50872), (68, 50920), (71, 50938), (76, 51001), (92, 51148), (93, 51151), (105, 51262), (111, 51301), (117, 51382), (124, 51400), (135, 51478), (136, 51484), (140, 51538), (142, 51568), (143, 51571), (144, 51580), (148, 51631),

(154, 51688), (155, 51727), (156, 51733), (157, 51736), (173, 51802),

Gene: Wamburgrxpress_73 Start: 49062, Stop: 50537, Start Num: 17
Candidate Starts for Wamburgrxpress_73:
(Start: 17 @49062 has 61 MA's), (28, 49116), (31, 49152), (32, 49161), (40, 49254), (43, 49293), (47, 49320), (55, 49425), (56, 49428), (58, 49440), (65, 49521), (68, 49569), (76, 49650), (84, 49722), (91, 49776), (92, 49797), (93, 49800), (95, 49821), (105, 49911), (113, 49971), (124, 50049), (125, 50055), (136, 50133), (140, 50187), (142, 50217), (143, 50220), (148, 50280), (154, 50337), (163, 50409), (174, 50454), (178, 50484), (181, 50520),

Gene: Weasels2_172 Start: 93923, Stop: 95416, Start Num: 22
Candidate Starts for Weasels2_172:
(Start: 22 @93923 has 4 MA's), (59, 94283), (93, 94643), (128, 94937), (142, 95087), (148, 95150),

Gene: Whirlwind_75 Start: 50844, Stop: 52319, Start Num: 17
Candidate Starts for Whirlwind_75:
(Start: 17 @50844 has 61 MA's), (25, 50874), (31, 50934), (37, 51009), (40, 51036), (54, 51192), (55, 51207), (58, 51222), (60, 51237), (68, 51351), (69, 51354), (70, 51357), (76, 51432), (82, 51477), (84, 51504), (92, 51579), (93, 51582), (95, 51603), (99, 51633), (109, 51717), (113, 51753), (125, 51837), (140, 51969), (142, 51999), (143, 52002), (144, 52011), (148, 52062), (156, 52164), (164, 52194), (170, 52215), (180, 52299),

Gene: Wigglewiggle_75 Start: 50421, Stop: 51905, Start Num: 17
Candidate Starts for Wigglewiggle_75:
(Start: 17 @50421 has 61 MA's), (31, 50511), (32, 50520), (35, 50574), (37, 50586), (40, 50613), (44, 50655), (50, 50739), (54, 50778), (56, 50796), (58, 50808), (60, 50823), (65, 50889), (68, 50937), (71, 50955), (76, 51018), (92, 51165), (93, 51168), (105, 51279), (111, 51318), (117, 51399), (124, 51417), (135, 51495), (136, 51501), (140, 51555), (142, 51585), (143, 51588), (144, 51597), (148, 51648), (154, 51705), (155, 51744), (156, 51750), (157, 51753), (173, 51819),

Gene: Wilder_76 Start: 50370, Stop: 51854, Start Num: 17
Candidate Starts for Wilder_76:
(Start: 17 @50370 has 61 MA's), (31, 50460), (32, 50469), (35, 50523), (37, 50535), (40, 50562), (44, 50604), (50, 50688), (54, 50727), (56, 50745), (58, 50757), (60, 50772), (65, 50838), (68, 50886), (71, 50904), (76, 50967), (92, 51114), (93, 51117), (105, 51228), (111, 51267), (117, 51348), (124, 51366), (135, 51444), (136, 51450), (140, 51504), (142, 51534), (143, 51537), (144, 51546), (148, 51597), (154, 51654), (155, 51693), (156, 51699), (157, 51702), (173, 51768),

Gene: Winky_75 Start: 50364, Stop: 51848, Start Num: 17
Candidate Starts for Winky_75:
(Start: 17 @50364 has 61 MA's), (31, 50454), (32, 50463), (35, 50517), (37, 50529), (40, 50556), (44, 50598), (50, 50682), (51, 50691), (54, 50721), (56, 50739), (58, 50751), (60, 50766), (65, 50832), (68, 50880), (71, 50898), (76, 50961), (92, 51108), (93, 51111), (105, 51222), (111, 51261), (117, 51342), (124, 51360), (135, 51438), (136, 51444), (140, 51498), (142, 51528), (143, 51531), (144, 51540), (148, 51591), (154, 51648), (155, 51687), (156, 51693), (157, 51696), (173, 51762),

Gene: Wyatt2_74 Start: 49025, Stop: 50500, Start Num: 17
Candidate Starts for Wyatt2_74:
(Start: 17 @49025 has 61 MA's), (28, 49079), (31, 49115), (32, 49124), (40, 49217), (43, 49256), (47, 49283), (55, 49388), (56, 49391), (58, 49403), (65, 49484), (68, 49532), (76, 49613), (84, 49685), (91, 49739), (92, 49760), (93, 49763), (95, 49784), (105, 49874), (113, 49934), (124, 50012), (125, 50018), (136, 50096), (140, 50150), (142, 50180), (143, 50183), (148, 50243), (154, 50300), (163, 50372), (174, 50417), (178, 50447), (181, 50483),

Gene: Zakai_76 Start: 50690, Stop: 52174, Start Num: 17
Candidate Starts for Zakai_76:
(Start: 17 @50690 has 61 MA's), (31, 50780), (32, 50789), (35, 50843), (37, 50855), (40, 50882), (44, 50924), (50, 51008), (51, 51017), (54, 51047), (56, 51065), (58, 51077), (60, 51092), (65, 51158), (68, 51206), (71, 51224), (76, 51287), (92, 51434), (93, 51437), (105, 51548), (111, 51587), (117, 51668), (124, 51686), (135, 51764), (136, 51770), (140, 51824), (142, 51854), (143, 51857), (144, 51866), (148, 51917), (154, 51974), (155, 52013), (156, 52019), (157, 52022), (173, 52088),

Gene: Zaria_74 Start: 48482, Stop: 49957, Start Num: 17
Candidate Starts for Zaria_74:
(Start: 17 @48482 has 61 MA's), (40, 48674), (43, 48713), (47, 48740), (55, 48845), (56, 48848), (58, 48860), (65, 48941), (68, 48989), (76, 49070), (84, 49142), (91, 49196), (92, 49217), (93, 49220), (95, 49241), (105, 49331), (113, 49391), (124, 49469), (125, 49475), (136, 49553), (140, 49607), (142, 49637), (143, 49640), (148, 49700), (154, 49757), (163, 49829), (174, 49874), (178, 49904), (181, 49940),

Gene: ZhongYanYuan_73 Start: 49997, Stop: 51481, Start Num: 17
Candidate Starts for ZhongYanYuan_73:
(Start: 17 @49997 has 61 MA's), (31, 50087), (32, 50096), (35, 50150), (37, 50162), (40, 50189), (47, 50255), (50, 50315), (54, 50354), (56, 50372), (58, 50384), (60, 50399), (65, 50465), (68, 50513), (71, 50531), (76, 50594), (84, 50666), (92, 50741), (93, 50744), (105, 50855), (111, 50894), (117, 50975), (124, 50993), (136, 51077), (140, 51131), (142, 51161), (143, 51164), (144, 51173), (148, 51224), (154, 51281), (155, 51320), (156, 51326), (157, 51329), (173, 51395), (181, 51464),

Gene: Zooman_221 Start: 135199, Stop: 136728, Start Num: 18
Candidate Starts for Zooman_221:
(Start: 18 @135199 has 4 MA's), (26, 135229), (29, 135265), (33, 135331), (45, 135427), (64, 135637), (76, 135778), (80, 135811), (87, 135895), (98, 135979), (114, 136129), (126, 136201), (133, 136255), (139, 136321), (142, 136360), (143, 136363), (147, 136414), (148, 136423), (155, 136519), (165, 136558), (166, 136573),