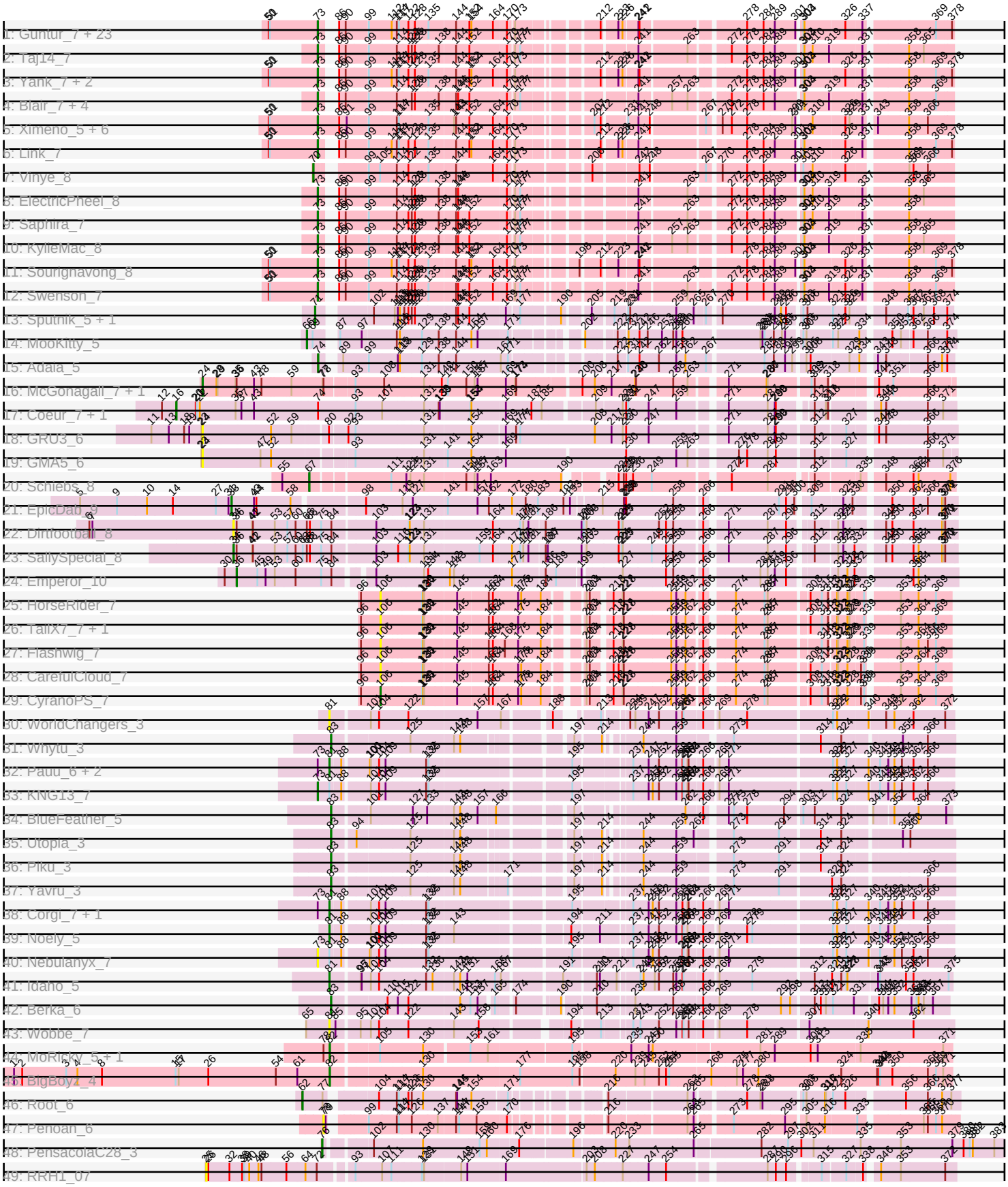
Pham 345605


1: Guntur_7 + 23
2: Taj14_7
3: Yank_7 + 2
4: Blair_7 + 4
5: Ximeno_5 + 6
6: Link_7
7: Vinye_8
8: ElectricPheel_8
9: Saphira_7
10: KylieMac_8
11: Sourighavong_8
12: Swenson_7
13: Sputnik_5 + 1
14: MooKitty_5
15: Adala_5
16: McGonagall_7 + 1
17: Coeur_7 + 1
18: GRU3_6
19: GMA5_6
20: Schiebs_8
21: EpicDad_9
22: Dirtfootball_8
23: SallySpecial_8
24: Emperor_10
25: HorseRider_7
26: TallX7_7 + 1
27: Flashwig_7
28: CarefulCloud_7
29: CyranoPS_7
30: WorldChangers_3
31: Whytu_3
32: Patu_6 + 2
33: KING13_7
34: BlueFeather_5
35: Utopia_3
36: Piku_3
37: Yavru_3
38: Corgi_7 + 1
39: Noely_5
40: Nebulanyx_7
41: Idaho_5
42: Berka_6
43: Wobbe_7
44: MoRicky_5 + 1
45: BigBoyZ_4
46: Root_6
47: Penoan_6
48: PensacolaC28_3
49: RRH1_07

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 345605 Report

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

Pham number 345605 has 92 members, 14 are drafts.

Phages represented in each track:
• Track 1 : Guntur_7, TymAbreu_7, Copper_7, Courtney3_7, Maggie_7, Jessica_8, Stratus_7, CGermain_7, Inspire2_7, Sandman_7, Toulouse_6, Seume_7, Arby_7, Azathoth_7, Mariposa_7, LouisXIV_7, Moloch_7, Chestnut_7, Hunnie_7, Massimo_7, TinoCrisci_7, Ronnie_7, Prospero_7, Dewayne_7
• Track 2 : Taj14_7
• Track 3 : Yank_7, Muttlie_7, Decurro_7
• Track 4 : Blair_7, Elkhorn_7, Laila_8, Lore_7, StewieGriff_7
• Track 5 : Ximeno_5, FirePit_5, SerialPhiller_5, Eyoseyas_5, StrawberryLem_5, Kels_5, Arielagos_5
• Track 6 : Link_7
• Track 7 : Vinye_8
• Track 8 : ElectricPheel_8
• Track 9 : Saphira_7
• Track 10 : KylieMac_8
• Track 11 : Sourignavong_8
• Track 12 : Swenson_7
• Track 13 : Sputnik_5, Atraxa_5
• Track 14 : MooKitty_5
• Track 15 : Adaia_5
• Track 16 : McGonagall_7, Jeanie_7
• Track 17 : Coeur_7, Rahul_7
• Track 18 : GRU3_6
• Track 19 : GMA5_6
• Track 20 : Schiebs_8
• Track 21 : EpicDab_9
• Track 22 : Dirtfootball_8
• Track 23 : SallySpecial_8
• Track 24 : Emperor_10
• Track 25 : HorseRider_7
• Track 26 : TailX7_7, Jalloh_7
• Track 27 : Flashwig_7
• Track 28 : CarefulCloud_7
• Track 29 : CyranoPS_7
• Track 30 : WorldChangers_3
• Track 31 : Whytu_3
• Track 32 : Pauu_6, LauKoruNamu_6, CabbageMan_5
• Track 33 : KNG13_7

• Track 34 : BlueFeather_5
• Track 35 : Utopia_3
• Track 36 : Piku_3
• Track 37 : Yavru_3
• Track 38 : Corgi_7, CheeseDanish_7
• Track 39 : Noely_5
• Track 40 : Nebulanyx_7
• Track 41 : Idaho_5
• Track 42 : Berka_6
• Track 43 : Wobbe_7
• Track 44 : MoRicky_5, Smilerella_5
• Track 45 : BigBoyz_4
• Track 46 : Root_6
• Track 47 : Penoan_6
• Track 48 : PensacolaC28_3
• Track 49 : RRH1_07

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

The start number called the most often in the published annotations is 73, it was called in 46 of the 78 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arby_7, Arielagos_5, Azathoth_7, Blair_7, CGermain_7, Chestnut_7, Copper_7, Courtney3_7, Decurro_7, Dewayne_7, ElectricPheel_8, Elkhorn_7, Eyoseyas_5, FirePit_5, Guntur_7, Hunnie_7, Inspire2_7, Jessica_8, KNG13_7, Kels_5, KylieMac_8, Laila_8, Link_7, Lore_7, LouisXIV_7, Maggie_7, Mariposa_7, Massimo_7, Moloch_7, Muttlie_7, Nebulanyx_7, Prospero_7, Ronnie_7, Sandman_7, Saphira_7, SerialPhiller_5, Seume_7, Sourignavong_8, StewieGriff_7, Stratus_7, StrawberryLem_5, Swenson_7, Taj14_7, TinoCrisci_7, Toulouse_6, TymAbreu_7, Ximeno_5, Yank_7,

Genes that have the "Most Annotated" start but do not call it:
• CabbageMan_5, CheeseDanish_7, Corgi_7, LauKoruNamu_6, Pauu_6,

Genes that do not have the "Most Annotated" start:
• Adaia_5, Atraxa_5, Berka_6, BigBoyz_4, BlueFeather_5, CarefulCloud_7, Coeur_7, CyranoPS_7, Dirtfootball_8, Emperor_10, EpicDab_9, Flashwig_7, GMA5_6, GRU3_6, HorseRider_7, Idaho_5, Jalloh_7, Jeanie_7, McGonagall_7, MoRicky_5, MooKitty_5, Noely_5, Penoan_6, PensacolaC28_3, Piku_3, RRH1_07, Rahul_7, Root_6, SallySpecial_8, Schiebs_8, Smilerella_5, Sputnik_5, TailX7_7, Utopia_3, Vinye_8, Whytu_3, Wobbe_7, WorldChangers_3, Yavru_3,

Summary by start number:

Start 16:
• Found in 2 of 92 (2.2%) of genes in pham
• Manual Annotations of this start: 2 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Coeur_7 (CW2), Rahul_7 (CW2),

Start 24:
• Found in 4 of 92 (4.3%) of genes in pham
• Manual Annotations of this start: 2 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA5_6 (CW2), GRU3_6 (CW2), Jeanie_7 (CW1), McGonagall_7 (CW1),

Start 25:
• Found in 1 of 92 (1.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RRH1_07 (singleton),

Start 33:
• Found in 1 of 92 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EpicDab_9 (DM),

Start 34:
• Found in 2 of 92 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dirtfootball_8 (DM), SallySpecial_8 (DM),

Start 36:
• Found in 5 of 92 (5.4%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Emperor_10 (DM),

Start 62:
• Found in 1 of 92 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Root_6 (JC),

Start 66:
• Found in 3 of 92 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 33.3% of time when present
• Phage (with cluster) where this start called: MooKitty_5 (AX),

Start 67:
• Found in 1 of 92 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schiebs_8 (CW3),

Start 70:
• Found in 1 of 92 (1.1%) of genes in pham

• Manual Annotations of this start: 1 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Vinye_8 (AN),

Start 71:
• Found in 2 of 92 (2.2%) of genes in pham
• Manual Annotations of this start: 2 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atraxa_5 (AX), Sputnik_5 (AX),

Start 73:
• Found in 53 of 92 (57.6%) of genes in pham
• Manual Annotations of this start: 46 of 78
• Called 90.6% of time when present
• Phage (with cluster) where this start called: Arby_7 (AN), Arielagos_5 (AN), Azathoth_7 (AN), Blair_7 (AN), CGermain_7 (AN), Chestnut_7 (AN), Copper_7 (AN), Courtney3_7 (AN), Decurro_7 (AN), Dewayne_7 (AN), ElectricPheel_8 (AN), Elkhorn_7 (AN), Eyoseyas_5 (AN), FirePit_5 (AN), Guntur_7 (AN), Hunnie_7 (AN), Inspire2_7 (AN), Jessica_8 (AN), KNG13_7 (FE), Kels_5 (AN), KylieMac_8 (AN), Laila_8 (AN), Link_7 (AN), Lore_7 (AN), LouisXIV_7 (AN), Maggie_7 (AN), Mariposa_7 (AN), Massimo_7 (AN), Moloch_7 (AN), Muttlie_7 (AN), Nebulanyx_7 (FE), Prospero_7 (AN), Ronnie_7 (AN), Sandman_7 (AN), Saphira_7 (AN), SerialPhiller_5 (AN), Seume_7 (AN), Sourignavong_8 (AN), StewieGriff_7 (AN), Stratus_7 (AN), StrawberryLem_5 (AN), Swenson_7 (AN), Taj14_7 (AN), TinoCrisci_7 (AN), Toulouse_6 (AN), TymAbreu_7 (AN), Ximeno_5 (AN), Yank_7 (AN),

Start 74:
• Found in 3 of 92 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Adaia_5 (AX),

Start 76:
• Found in 1 of 92 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PensacolaC28_3 (singleton),

Start 78:
• Found in 5 of 92 (5.4%) of genes in pham
• No Manual Annotations of this start.
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Penoan_6 (UNK),

Start 81:
• Found in 11 of 92 (12.0%) of genes in pham
• Manual Annotations of this start: 7 of 78
• Called 81.8% of time when present
• Phage (with cluster) where this start called: CabbageMan_5 (FE), CheeseDanish_7 (FE), Corgi_7 (FE), Idaho_5 (FE), LauKoruNamu_6 (FE), Noely_5 (FE), Pauu_6 (FE), Wobbe_7 (FE), WorldChangers_3 (FE),

Start 82:
• Found in 3 of 92 (3.3%) of genes in pham
• Manual Annotations of this start: 3 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BigBoyz_4 (GH), MoRicky_5 (GH), Smilerella_5 (GH),

Start 83:
• Found in 6 of 92 (6.5%) of genes in pham
• Manual Annotations of this start: 6 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Berka_6 (FE), BlueFeather_5 (FE), Piku_3 (FE), Utopia_3 (FE), Whytu_3 (FE), Yavru_3 (FE),

Start 106:
• Found in 6 of 92 (6.5%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CarefulCloud_7 (ER), CyranoPS_7 (ER), Flashwig_7 (ER), HorseRider_7 (ER), Jalloh_7 (ER), TailX7_7 (ER),

Summary by clusters:

There are 12 clusters represented in this pham: UNK, singleton, DM, JC, CW1, CW3, CW2, AN, FE, AX, ER, GH,

Info for manual annotations of cluster AN:
•Start number 70 was manually annotated 1 time for cluster AN.
•Start number 73 was manually annotated 45 times for cluster AN.

Info for manual annotations of cluster AX:
•Start number 66 was manually annotated 1 time for cluster AX.
•Start number 71 was manually annotated 2 times for cluster AX.
•Start number 74 was manually annotated 1 time for cluster AX.

Info for manual annotations of cluster CW1:
•Start number 24 was manually annotated 2 times for cluster CW1.

Info for manual annotations of cluster CW2:
•Start number 16 was manually annotated 2 times for cluster CW2.

Info for manual annotations of cluster CW3:
•Start number 67 was manually annotated 1 time for cluster CW3.

Info for manual annotations of cluster DM:
•Start number 33 was manually annotated 1 time for cluster DM.
•Start number 34 was manually annotated 1 time for cluster DM.
•Start number 36 was manually annotated 1 time for cluster DM.

Info for manual annotations of cluster ER:
•Start number 106 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster FE:

•Start number 73 was manually annotated 1 time for cluster FE.
•Start number 81 was manually annotated 7 times for cluster FE.
•Start number 83 was manually annotated 6 times for cluster FE.

Info for manual annotations of cluster GH:
•Start number 82 was manually annotated 3 times for cluster GH.

Info for manual annotations of cluster JC:
•Start number 62 was manually annotated 1 time for cluster JC.

Gene Information:

Gene: Adaia_5 Start: 3183, Stop: 4784, Start Num: 74
Candidate Starts for Adaia_5:
(Start: 74 @3183 has 1 MA's), (89, 3213), (99, 3279), (115, 3360), (118, 3366), (129, 3426), (138, 3474), (144, 3519), (167, 3645), (171, 3666), (222, 3900), (231, 3924), (242, 3954), (252, 4008), (259, 4059), (262, 4083), (267, 4143), (285, 4296), (288, 4320), (295, 4353), (299, 4374), (305, 4398), (308, 4410), (329, 4518), (334, 4542), (343, 4572), (348, 4596), (366, 4707), (370, 4749), (374, 4764),

Gene: Arby_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Arby_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Arielagos_5 Start: 3317, Stop: 4945, Start Num: 73
Candidate Starts for Arielagos_5:
(50, 3173), (51, 3176), (Start: 73 @3317 has 46 MA's), (86, 3380), (91, 3401), (99, 3458), (114, 3536), (117, 3542), (135, 3623), (143, 3692), (144, 3698), (152, 3737), (164, 3806), (170, 3842), (207, 4031), (212, 4046), (231, 4106), (241, 4133), (248, 4166), (267, 4304), (270, 4334), (272, 4358), (278, 4403), (299, 4532), (301, 4541), (310, 4577), (326, 4667), (329, 4679), (337, 4712), (343, 4733), (358, 4820), (366, 4874),

Gene: Atraxa_5 Start: 3237, Stop: 4853, Start Num: 71
Candidate Starts for Atraxa_5:
(Start: 71 @3237 has 2 MA's), (102, 3363), (113, 3420), (115, 3429), (118, 3435), (120, 3444), (122, 3456), (126, 3465), (128, 3474), (144, 3588), (146, 3594), (152, 3627), (169, 3729), (177, 3759), (190, 3861), (205, 3921), (219, 3972), (231, 4005), (234, 4011), (259, 4140), (265, 4191), (267, 4215), (270, 4245), (289, 4395), (292, 4413), (296, 4428), (303, 4461), (306, 4473), (321, 4542), (326, 4578), (329, 4590), (348, 4668), (357, 4728), (362, 4737), (365, 4767), (368, 4797), (374, 4836),

Gene: Azathoth_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Azathoth_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Berka_6 Start: 3518, Stop: 5104, Start Num: 83
Candidate Starts for Berka_6:
(Start: 83 @3518 has 6 MA's), (110, 3653), (115, 3680), (122, 3710), (148, 3854), (153, 3884), (157, 3905), (165, 3938), (174, 3980), (190, 4085), (210, 4166), (239, 4256), (258, 4364), (266, 4442), (269, 4490), (292, 4664), (298, 4685), (312, 4742), (314, 4760), (317, 4775), (321, 4793), (331, 4850), (344, 4904), (347, 4916), (349, 4931), (352, 4949), (361, 4997), (363, 5012), (364, 5018), (365, 5033), (367, 5060),

Gene: BigBoyz_4 Start: 3006, Stop: 4730, Start Num: 82
Candidate Starts for BigBoyz_4:
(1, 2085), (2, 2109), (3, 2238), (4, 2271), (8, 2343), (15, 2559), (17, 2568), (26, 2655), (54, 2853), (61, 2916), (Start: 82 @3006 has 3 MA's), (130, 3243), (177, 3519), (195, 3669), (198, 3690), (220, 3783), (239, 3834), (245, 3858), (252, 3897), (254, 3918), (255, 3927), (268, 4035), (275, 4107), (277, 4125), (280, 4170), (324, 4407), (342, 4512), (344, 4518), (345, 4521), (350, 4557), (366, 4659), (369, 4683), (371, 4704),

Gene: Blair_7 Start: 3706, Stop: 5289, Start Num: 73
Candidate Starts for Blair_7:
(Start: 73 @3706 has 46 MA's), (86, 3721), (90, 3739), (99, 3799), (114, 3877), (126, 3916), (128, 3925), (138, 3994), (144, 4039), (146, 4045), (152, 4078), (170, 4183), (173, 4198), (177, 4213), (241, 4477), (257, 4564), (263, 4609), (272, 4702), (278, 4747), (284, 4795), (289, 4825), (303, 4894), (304, 4897), (319, 4969), (337, 5056), (358, 5164), (369, 5242),

Gene: BlueFeather_5 Start: 3473, Stop: 5023, Start Num: 83
Candidate Starts for BlueFeather_5:
(Start: 83 @3473 has 6 MA's), (101, 3566), (127, 3683), (133, 3725), (143, 3797), (148, 3815), (157, 3866), (166, 3914), (197, 4082), (262, 4343), (266, 4388), (271, 4433), (273, 4448), (278, 4487), (294, 4592), (303, 4634), (312, 4667), (324, 4742), (341, 4811), (352, 4859), (364, 4925), (373, 5006),

Gene: CGermain_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for CGermain_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: CabbageMan_5 Start: 3627, Stop: 5267, Start Num: 81
Candidate Starts for CabbageMan_5:
(Start: 73 @3597 has 46 MA's), (Start: 81 @3627 has 7 MA's), (88, 3651), (100, 3717), (101, 3720), (104, 3744), (109, 3759), (132, 3873), (135, 3879), (195, 4254), (237, 4398), (247, 4440), (252, 4470), (259, 4521), (260, 4536), (261, 4539), (263, 4551), (264, 4554), (266, 4590), (269, 4626), (271, 4650), (321, 4929), (322, 4941), (327, 4968), (340, 5028), (345, 5055), (349, 5079), (352, 5097), (354, 5118), (362, 5151), (366, 5193),

Gene: CarefulCloud_7 Start: 4073, Stop: 5506, Start Num: 106
Candidate Starts for CarefulCloud_7:
(96, 4019), (Start: 106 @4073 has 1 MA's), (129, 4187), (130, 4190), (131, 4193), (145, 4280), (162, 4367), (164, 4379), (175, 4448), (178, 4457), (184, 4508), (203, 4586), (204, 4595), (218, 4643), (224, 4658), (227, 4670), (228, 4673), (256, 4808), (259, 4823), (262, 4847), (266, 4886), (274, 4952), (285, 5036), (287, 5045), (308, 5141), (315, 5174), (322, 5210), (323, 5213), (328, 5240), (336, 5273), (339, 5282), (353, 5360), (364, 5411), (369, 5462),

Gene: CheeseDanish_7 Start: 3794, Stop: 5434, Start Num: 81
Candidate Starts for CheeseDanish_7:
(Start: 73 @3764 has 46 MA's), (Start: 81 @3794 has 7 MA's), (88, 3818), (101, 3887), (104, 3911), (109, 3926), (132, 4040), (135, 4046), (195, 4421), (237, 4565), (247, 4607), (250, 4619), (252, 4637), (259, 4688), (260, 4703), (263, 4718), (264, 4721), (266, 4757), (269, 4793), (271, 4817), (321, 5096), (322, 5108), (327, 5135), (340, 5195), (345, 5222), (349, 5246), (352, 5264), (354, 5285), (362, 5318), (366, 5360),

Gene: Chestnut_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Chestnut_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Coeur_7 Start: 4142, Stop: 6193, Start Num: 16
Candidate Starts for Coeur_7:
(12, 4100), (Start: 16 @4142 has 2 MA's), (20, 4199), (21, 4202), (22, 4211), (35, 4313), (37, 4322), (43, 4355), (Start: 74 @4535 has 1 MA's), (93, 4643), (107, 4718), (131, 4835), (138, 4877), (139, 4880), (153, 4964), (154, 4967), (169, 5060), (182, 5135), (185, 5165), (209, 5288), (227, 5357), (230, 5366), (231, 5372), (247, 5429), (259, 5507), (271, 5615), (287, 5729), (289, 5747), (290, 5750), (312, 5828), (317, 5861), (318, 5867), (346, 5981), (348, 5996), (366, 6113), (371, 6158),

Gene: Copper_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Copper_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Corgi_7 Start: 3794, Stop: 5434, Start Num: 81
Candidate Starts for Corgi_7:
(Start: 73 @3764 has 46 MA's), (Start: 81 @3794 has 7 MA's), (88, 3818), (101, 3887), (104, 3911), (109, 3926), (132, 4040), (135, 4046), (195, 4421), (237, 4565), (247, 4607), (250, 4619), (252, 4637), (259, 4688), (260, 4703), (263, 4718), (264, 4721), (266, 4757), (269, 4793), (271, 4817), (321, 5096), (322, 5108), (327, 5135), (340, 5195), (345, 5222), (349, 5246), (352, 5264), (354, 5285), (362, 5318), (366, 5360),

Gene: Courtney3_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Courtney3_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: CyranoPS_7 Start: 4071, Stop: 5504, Start Num: 106
Candidate Starts for CyranoPS_7:
(96, 4017), (Start: 106 @4071 has 1 MA's), (129, 4185), (130, 4188), (131, 4191), (145, 4278), (162, 4365), (164, 4377), (175, 4446), (178, 4455), (184, 4506), (203, 4584), (204, 4593), (218, 4641), (227,

4668), (228, 4671), (256, 4806), (259, 4821), (262, 4845), (266, 4884), (274, 4950), (285, 5034), (287, 5043), (308, 5139), (315, 5172), (318, 5190), (322, 5208), (323, 5211), (328, 5238), (336, 5271), (339, 5280), (353, 5358), (364, 5409), (369, 5460),

Gene: Decurro_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Decurro_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (358, 5162), (369, 5240), (378, 5282),

Gene: Dewayne_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Dewayne_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Dirtfootball_8 Start: 4441, Stop: 6354, Start Num: 34
Candidate Starts for Dirtfootball_8:
(6, 4030), (7, 4039), (Start: 34 @4441 has 1 MA's), (Start: 36 @4450 has 1 MA's), (41, 4495), (42, 4498), (53, 4561), (57, 4597), (60, 4621), (Start: 66 @4654 has 1 MA's), (68, 4663), (75, 4696), (84, 4726), (103, 4840), (123, 4921), (124, 4924), (131, 4963), (164, 5155), (177, 5227), (179, 5236), (181, 5251), (186, 5290), (199, 5395), (201, 5401), (203, 5410), (224, 5500), (225, 5509), (227, 5512), (252, 5611), (254, 5632), (258, 5653), (266, 5725), (271, 5770), (287, 5884), (296, 5935), (312, 5983), (323, 6043), (325, 6058), (348, 6151), (350, 6166), (362, 6226), (370, 6310), (371, 6313), (372, 6319),

Gene: ElectricPheel_8 Start: 3780, Stop: 5363, Start Num: 73
Candidate Starts for ElectricPheel_8:
(Start: 73 @3780 has 46 MA's), (86, 3795), (90, 3813), (99, 3873), (114, 3951), (126, 3990), (128, 3999), (138, 4068), (144, 4113), (146, 4119), (170, 4257), (173, 4272), (177, 4287), (241, 4551), (263, 4683), (272, 4776), (278, 4821), (284, 4869), (289, 4899), (303, 4968), (304, 4971), (310, 4995), (319, 5043), (337, 5130), (358, 5238), (365, 5280),

Gene: Elkhorn_7 Start: 3706, Stop: 5289, Start Num: 73
Candidate Starts for Elkhorn_7:
(Start: 73 @3706 has 46 MA's), (86, 3721), (90, 3739), (99, 3799), (114, 3877), (126, 3916), (128, 3925), (138, 3994), (144, 4039), (146, 4045), (152, 4078), (170, 4183), (173, 4198), (177, 4213), (241, 4477), (257, 4564), (263, 4609), (272, 4702), (278, 4747), (284, 4795), (289, 4825), (303, 4894), (304, 4897), (319, 4969), (337, 5056), (358, 5164), (369, 5242),

Gene: Emperor_10 Start: 5562, Stop: 7421, Start Num: 36
Candidate Starts for Emperor_10:
(30, 5541), (Start: 36 @5562 has 1 MA's), (45, 5622), (49, 5646), (53, 5673), (60, 5733), (75, 5808), (84, 5838), (103, 5922), (131, 6048), (134, 6060), (142, 6114), (143, 6126), (172, 6288), (186, 6375), (189, 6405), (199, 6471), (227, 6576), (254, 6696), (258, 6717), (266, 6789), (281, 6927), (287, 6948), (289, 6966), (296, 6999), (323, 7107), (328, 7134), (332, 7155), (362, 7290), (364, 7305),

Gene: EpicDab_9 Start: 5522, Stop: 7408, Start Num: 33
Candidate Starts for EpicDab_9:

(5, 5081), (9, 5189), (10, 5276), (14, 5351), (27, 5477), (31, 5513), (Start: 33 @5522 has 1 MA's), (43, 5588), (44, 5594), (58, 5693), (98, 5870), (119, 5972), (127, 6002), (141, 6095), (157, 6179), (162, 6212), (172, 6275), (180, 6314), (183, 6347), (192, 6413), (193, 6431), (215, 6503), (228, 6560), (229, 6563), (230, 6566), (258, 6698), (266, 6770), (291, 6959), (296, 6980), (300, 7004), (309, 7028), (325, 7115), (330, 7142), (350, 7223), (362, 7283), (366, 7325), (370, 7367), (371, 7370), (372, 7376),

Gene: Eyoseyas_5 Start: 3317, Stop: 4945, Start Num: 73
Candidate Starts for Eyoseyas_5:
(50, 3173), (51, 3176), (Start: 73 @3317 has 46 MA's), (86, 3380), (91, 3401), (99, 3458), (114, 3536), (117, 3542), (135, 3623), (143, 3692), (144, 3698), (152, 3737), (164, 3806), (170, 3842), (207, 4031), (212, 4046), (231, 4106), (241, 4133), (248, 4166), (267, 4304), (270, 4334), (272, 4358), (278, 4403), (299, 4532), (301, 4541), (310, 4577), (326, 4667), (329, 4679), (337, 4712), (343, 4733), (358, 4820), (366, 4874),

Gene: FirePit_5 Start: 3317, Stop: 4945, Start Num: 73
Candidate Starts for FirePit_5:
(50, 3173), (51, 3176), (Start: 73 @3317 has 46 MA's), (86, 3380), (91, 3401), (99, 3458), (114, 3536), (117, 3542), (135, 3623), (143, 3692), (144, 3698), (152, 3737), (164, 3806), (170, 3842), (207, 4031), (212, 4046), (231, 4106), (241, 4133), (248, 4166), (267, 4304), (270, 4334), (272, 4358), (278, 4403), (299, 4532), (301, 4541), (310, 4577), (326, 4667), (329, 4679), (337, 4712), (343, 4733), (358, 4820), (366, 4874),

Gene: Flashwig_7 Start: 4073, Stop: 5506, Start Num: 106
Candidate Starts for Flashwig_7:
(96, 4019), (Start: 106 @4073 has 1 MA's), (129, 4187), (130, 4190), (131, 4193), (145, 4280), (162, 4367), (164, 4379), (168, 4409), (175, 4448), (184, 4508), (203, 4586), (204, 4595), (218, 4643), (227, 4670), (228, 4673), (256, 4808), (259, 4823), (262, 4847), (266, 4886), (274, 4952), (285, 5036), (287, 5045), (315, 5174), (318, 5192), (322, 5210), (323, 5213), (328, 5240), (329, 5246), (339, 5282), (353, 5360), (364, 5411), (366, 5438), (369, 5462),

Gene: GMA5_6 Start: 4085, Stop: 6046, Start Num: 24
Candidate Starts for GMA5_6:
(23, 4082), (Start: 24 @4085 has 2 MA's), (47, 4241), (52, 4271), (93, 4460), (131, 4652), (141, 4715), (154, 4784), (169, 4877), (230, 5201), (259, 5342), (263, 5372), (276, 5480), (278, 5504), (287, 5564), (290, 5585), (312, 5681), (327, 5765), (366, 5966), (371, 6011),

Gene: GRU3_6 Start: 4133, Stop: 6103, Start Num: 24
Candidate Starts for GRU3_6:
(11, 3983), (13, 4034), (18, 4079), (19, 4094), (23, 4130), (Start: 24 @4133 has 2 MA's), (52, 4319), (59, 4367), (80, 4448), (92, 4481), (93, 4502), (131, 4694), (154, 4826), (169, 4916), (174, 4946), (177, 4958), (208, 5168), (217, 5210), (227, 5243), (230, 5252), (247, 5315), (271, 5501), (287, 5615), (289, 5633), (290, 5636), (312, 5732), (327, 5816), (344, 5879), (348, 5900), (366, 6017),

Gene: Guntur_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Guntur_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: HorseRider_7 Start: 4073, Stop: 5506, Start Num: 106
Candidate Starts for HorseRider_7:

(96, 4019), (Start: 106 @4073 has 1 MA's), (129, 4187), (130, 4190), (131, 4193), (145, 4280), (162, 4367), (164, 4379), (175, 4448), (178, 4457), (184, 4508), (203, 4586), (204, 4595), (218, 4643), (227, 4670), (228, 4673), (256, 4808), (259, 4823), (262, 4847), (266, 4886), (274, 4952), (285, 5036), (287, 5045), (308, 5141), (315, 5174), (318, 5192), (322, 5210), (323, 5213), (328, 5240), (329, 5246), (339, 5282), (353, 5360), (364, 5411), (369, 5462),

Gene: Hunnie_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Hunnie_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Idaho_5 Start: 3606, Stop: 5234, Start Num: 81
Candidate Starts for Idaho_5:
(Start: 81 @3606 has 7 MA's), (95, 3678), (97, 3681), (101, 3708), (104, 3732), (132, 3861), (136, 3879), (143, 3936), (148, 3954), (151, 3975), (165, 4053), (167, 4065), (191, 4206), (210, 4290), (211, 4299), (221, 4341), (243, 4392), (244, 4401), (251, 4434), (252, 4446), (258, 4488), (259, 4497), (260, 4512), (261, 4515), (266, 4566), (269, 4599), (279, 4692), (312, 4851), (320, 4899), (324, 4926), (327, 4941), (328, 4944), (343, 5022), (345, 5028), (356, 5103), (362, 5124), (375, 5223),

Gene: Inspire2_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Inspire2_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Jalloh_7 Start: 4072, Stop: 5514, Start Num: 106
Candidate Starts for Jalloh_7:
(96, 4018), (Start: 106 @4072 has 1 MA's), (129, 4186), (130, 4189), (131, 4192), (145, 4279), (162, 4366), (164, 4378), (175, 4447), (184, 4507), (203, 4582), (204, 4591), (218, 4639), (227, 4666), (228, 4669), (256, 4804), (259, 4819), (262, 4843), (266, 4882), (274, 4948), (285, 5032), (287, 5041), (308, 5137), (315, 5170), (318, 5188), (322, 5206), (323, 5209), (328, 5236), (329, 5242), (339, 5278), (353, 5356), (364, 5407), (369, 5458),

Gene: Jeanie_7 Start: 4056, Stop: 6029, Start Num: 24
Candidate Starts for Jeanie_7:
(Start: 24 @4056 has 2 MA's), (28, 4095), (29, 4098), (35, 4149), (Start: 36 @4152 has 1 MA's), (43, 4194), (48, 4215), (59, 4290), (77, 4377), (78, 4380), (93, 4458), (108, 4539), (131, 4650), (140, 4701), (141, 4713), (150, 4767), (155, 4791), (157, 4800), (169, 4881), (173, 4908), (174, 4911), (200, 5073), (208, 5109), (217, 5151), (238, 5214), (240, 5217), (258, 5322), (263, 5361), (271, 5439), (286, 5550), (287, 5553), (309, 5661), (312, 5670), (318, 5709), (344, 5817), (351, 5856), (366, 5955),

Gene: Jessica_8 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Jessica_8:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: KNG13_7 Start: 3764, Stop: 5431, Start Num: 73
Candidate Starts for KNG13_7:
(Start: 73 @3764 has 46 MA's), (Start: 81 @3794 has 7 MA's), (88, 3818), (101, 3887), (104, 3911), (109, 3926), (132, 4040), (135, 4046), (195, 4418), (237, 4562), (247, 4604), (250, 4616), (252, 4634), (259, 4685), (260, 4700), (261, 4703), (263, 4715), (264, 4718), (266, 4754), (269, 4790), (271, 4814), (321, 5093), (322, 5105), (327, 5132), (340, 5192), (345, 5219), (349, 5243), (352, 5261), (354, 5282), (362, 5315), (366, 5357),

Gene: Kels_5 Start: 3242, Stop: 4870, Start Num: 73
Candidate Starts for Kels_5:
(50, 3098), (51, 3101), (Start: 73 @3242 has 46 MA's), (86, 3305), (91, 3326), (99, 3383), (114, 3461), (117, 3467), (135, 3548), (143, 3617), (144, 3623), (152, 3662), (164, 3731), (170, 3767), (207, 3956), (212, 3971), (231, 4031), (241, 4058), (248, 4091), (267, 4229), (270, 4259), (272, 4283), (278, 4328), (299, 4457), (301, 4466), (310, 4502), (326, 4592), (329, 4604), (337, 4637), (343, 4658), (358, 4745), (366, 4799),

Gene: KylieMac_8 Start: 3693, Stop: 5276, Start Num: 73
Candidate Starts for KylieMac_8:
(Start: 73 @3693 has 46 MA's), (86, 3708), (90, 3726), (99, 3786), (114, 3864), (126, 3903), (128, 3912), (138, 3981), (144, 4026), (146, 4032), (152, 4065), (170, 4170), (173, 4185), (177, 4200), (241, 4464), (257, 4551), (263, 4596), (272, 4689), (278, 4734), (284, 4782), (289, 4812), (303, 4881), (304, 4884), (319, 4956), (337, 5043), (358, 5151), (365, 5193),

Gene: Laila_8 Start: 3706, Stop: 5289, Start Num: 73
Candidate Starts for Laila_8:
(Start: 73 @3706 has 46 MA's), (86, 3721), (90, 3739), (99, 3799), (114, 3877), (126, 3916), (128, 3925), (138, 3994), (144, 4039), (146, 4045), (152, 4078), (170, 4183), (173, 4198), (177, 4213), (241, 4477), (257, 4564), (263, 4609), (272, 4702), (278, 4747), (284, 4795), (289, 4825), (303, 4894), (304, 4897), (319, 4969), (337, 5056), (358, 5164), (369, 5242),

Gene: LauKoruNamu_6 Start: 3627, Stop: 5267, Start Num: 81
Candidate Starts for LauKoruNamu_6:
(Start: 73 @3597 has 46 MA's), (Start: 81 @3627 has 7 MA's), (88, 3651), (100, 3717), (101, 3720), (104, 3744), (109, 3759), (132, 3873), (135, 3879), (195, 4254), (237, 4398), (247, 4440), (252, 4470), (259, 4521), (260, 4536), (261, 4539), (263, 4551), (264, 4554), (266, 4590), (269, 4626), (271, 4650), (321, 4929), (322, 4941), (327, 4968), (340, 5028), (345, 5055), (349, 5079), (352, 5097), (354, 5118), (362, 5151), (366, 5193),

Gene: Link_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Link_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (358, 5162), (369, 5240), (378, 5282),

Gene: Lore_7 Start: 3706, Stop: 5289, Start Num: 73
Candidate Starts for Lore_7:
(Start: 73 @3706 has 46 MA's), (86, 3721), (90, 3739), (99, 3799), (114, 3877), (126, 3916), (128, 3925), (138, 3994), (144, 4039), (146, 4045), (152, 4078), (170, 4183), (173, 4198), (177, 4213), (241, 4477), (257, 4564), (263, 4609), (272, 4702), (278, 4747), (284, 4795), (289, 4825), (303, 4894), (304, 4897), (319, 4969), (337, 5056), (358, 5164), (369, 5242),

Gene: LouisXIV_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for LouisXIV_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Maggie_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Maggie_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Mariposa_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Mariposa_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Massimo_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Massimo_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: McGonagall_7 Start: 4056, Stop: 6029, Start Num: 24
Candidate Starts for McGonagall_7:
(Start: 24 @4056 has 2 MA's), (28, 4095), (29, 4098), (35, 4149), (Start: 36 @4152 has 1 MA's), (43, 4194), (48, 4215), (59, 4290), (77, 4377), (78, 4380), (93, 4458), (108, 4539), (131, 4650), (140, 4701), (141, 4713), (150, 4767), (155, 4791), (157, 4800), (169, 4881), (173, 4908), (174, 4911), (200, 5073), (208, 5109), (217, 5151), (238, 5214), (240, 5217), (258, 5322), (263, 5361), (271, 5439), (286, 5550), (287, 5553), (309, 5661), (312, 5670), (318, 5709), (344, 5817), (351, 5856), (366, 5955),

Gene: MoRicky_5 Start: 3164, Stop: 4867, Start Num: 82
Candidate Starts for MoRicky_5:
(78, 3149), (Start: 82 @3164 has 3 MA's), (105, 3284), (130, 3401), (153, 3521), (161, 3572), (195, 3803), (235, 3959), (247, 4010), (250, 4022), (281, 4316), (289, 4358), (308, 4463), (313, 4484), (335, 4604), (371, 4841),

Gene: Moloch_7 Start: 3778, Stop: 5361, Start Num: 73
Candidate Starts for Moloch_7:
(50, 3634), (51, 3637), (Start: 73 @3778 has 46 MA's), (86, 3793), (90, 3811), (99, 3871), (112, 3934), (114, 3949), (117, 3955), (122, 3979), (128, 3997), (135, 4036), (144, 4111), (152, 4150), (154, 4156), (164, 4219), (170, 4255), (173, 4270), (212, 4462), (223, 4501), (226, 4513), (241, 4549), (242, 4552), (278, 4819), (284, 4867), (289, 4897), (301, 4957), (303, 4966), (304, 4969), (326, 5083), (337, 5128),

(369, 5314), (378, 5356),

Gene: MooKitty_5 Start: 3200, Stop: 4792, Start Num: 66
Candidate Starts for MooKitty_5:
(Start: 66 @3200 has 1 MA's), (69, 3215), (87, 3248), (97, 3311), (114, 3404), (118, 3413), (129, 3473), (138, 3521), (144, 3566), (154, 3611), (157, 3629), (171, 3713), (202, 3848), (222, 3911), (232, 3935), (242, 3959), (246, 3983), (253, 4019), (258, 4052), (259, 4061), (260, 4076), (281, 4286), (283, 4292), (285, 4298), (288, 4322), (293, 4346), (295, 4355), (303, 4391), (305, 4400), (321, 4472), (323, 4487), (334, 4544), (350, 4613), (353, 4637), (362, 4667), (366, 4709), (374, 4766),

Gene: Muttlie_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Muttlie_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (358, 5162), (369, 5240), (378, 5282),

Gene: Nebulanyx_7 Start: 3764, Stop: 5431, Start Num: 73
Candidate Starts for Nebulanyx_7:
(Start: 73 @3764 has 46 MA's), (Start: 81 @3794 has 7 MA's), (88, 3818), (100, 3884), (101, 3887), (104, 3911), (109, 3926), (132, 4040), (135, 4046), (195, 4418), (237, 4562), (247, 4604), (250, 4616), (252, 4634), (260, 4700), (261, 4703), (263, 4715), (264, 4718), (266, 4754), (269, 4790), (271, 4814), (321, 5093), (322, 5105), (327, 5132), (340, 5192), (345, 5219), (352, 5261), (354, 5282), (362, 5315), (366, 5357),

Gene: Noely_5 Start: 3768, Stop: 5399, Start Num: 81
Candidate Starts for Noely_5:
(Start: 81 @3768 has 7 MA's), (88, 3792), (101, 3861), (104, 3885), (109, 3900), (132, 4014), (135, 4020), (143, 4089), (194, 4380), (211, 4455), (237, 4533), (247, 4575), (252, 4605), (259, 4656), (260, 4671), (261, 4674), (263, 4686), (266, 4725), (269, 4758), (278, 4836), (279, 4851), (321, 5061), (322, 5073), (327, 5100), (340, 5160), (345, 5187), (349, 5211), (352, 5229), (366, 5325),

Gene: Pauu_6 Start: 3627, Stop: 5267, Start Num: 81
Candidate Starts for Pauu_6:
(Start: 73 @3597 has 46 MA's), (Start: 81 @3627 has 7 MA's), (88, 3651), (100, 3717), (101, 3720), (104, 3744), (109, 3759), (132, 3873), (135, 3879), (195, 4254), (237, 4398), (247, 4440), (252, 4470), (259, 4521), (260, 4536), (261, 4539), (263, 4551), (264, 4554), (266, 4590), (269, 4626), (271, 4650), (321, 4929), (322, 4941), (327, 4968), (340, 5028), (345, 5055), (349, 5079), (352, 5097), (354, 5118), (362, 5151), (366, 5193),

Gene: Penoan_6 Start: 4053, Stop: 5618, Start Num: 78
Candidate Starts for Penoan_6:
(78, 4053), (79, 4059), (99, 4140), (114, 4221), (117, 4227), (126, 4263), (137, 4338), (144, 4386), (147, 4395), (156, 4446), (170, 4530), (216, 4725), (263, 4929), (265, 4947), (273, 5025), (295, 5172), (305, 5220), (316, 5274), (333, 5358), (365, 5520), (366, 5532), (369, 5556), (370, 5574),

Gene: PensacolaC28_3 Start: 2779, Stop: 4665, Start Num: 76
Candidate Starts for PensacolaC28_3:
(Start: 76 @2779 has 1 MA's), (102, 2887), (130, 3022), (159, 3184), (160, 3205), (176, 3283), (196, 3424), (220, 3535), (233, 3568), (265, 3754), (282, 3934), (297, 4012), (302, 4051), (311, 4087), (335, 4219), (353, 4333), (379, 4483), (380, 4516), (381, 4534), (382, 4543), (383, 4606),

Gene: Piku_3 Start: 3193, Stop: 4737, Start Num: 83
Candidate Starts for Piku_3:
(Start: 83 @3193 has 6 MA's), (125, 3388), (143, 3502), (148, 3520), (197, 3778), (214, 3844), (244, 3919), (259, 4015), (273, 4144), (291, 4273), (314, 4381), (324, 4438),

Gene: Prospero_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Prospero_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: RRH1_07 Start: 4439, Stop: 6424, Start Num: 25
Candidate Starts for RRH1_07:
(25, 4439), (26, 4445), (32, 4505), (38, 4541), (39, 4547), (40, 4562), (46, 4589), (48, 4598), (56, 4670), (64, 4724), (72, 4757), (93, 4838), (107, 4913), (111, 4940), (129, 5024), (131, 5030), (149, 5132), (151, 5150), (169, 5258), (203, 5480), (208, 5504), (227, 5582), (247, 5654), (254, 5702), (287, 5954), (290, 5975), (296, 6005), (315, 6077), (327, 6140), (338, 6182), (346, 6209), (353, 6263), (372, 6392),

Gene: Rahul_7 Start: 4139, Stop: 6208, Start Num: 16
Candidate Starts for Rahul_7:
(12, 4097), (Start: 16 @4139 has 2 MA's), (20, 4196), (21, 4199), (22, 4208), (35, 4310), (37, 4319), (43, 4352), (Start: 74 @4532 has 1 MA's), (93, 4640), (107, 4715), (131, 4832), (138, 4874), (139, 4877), (153, 4961), (154, 4964), (169, 5057), (182, 5132), (185, 5162), (209, 5303), (227, 5372), (230, 5381), (231, 5387), (247, 5444), (259, 5522), (271, 5630), (287, 5744), (289, 5762), (290, 5765), (312, 5843), (317, 5876), (318, 5882), (346, 5996), (348, 6011), (366, 6128), (371, 6173),

Gene: Ronnie_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Ronnie_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Root_6 Start: 4083, Stop: 5702, Start Num: 62
Candidate Starts for Root_6:
(Start: 62 @4083 has 1 MA's), (77, 4140), (104, 4263), (114, 4311), (117, 4317), (122, 4344), (126, 4353), (130, 4386), (144, 4476), (145, 4479), (154, 4521), (171, 4614), (216, 4797), (263, 5004), (265, 5022), (278, 5139), (281, 5178), (283, 5184), (303, 5286), (305, 5295), (316, 5349), (317, 5352), (321, 5367), (326, 5403), (356, 5547), (366, 5607), (370, 5649), (377, 5676),

Gene: SallySpecial_8 Start: 4444, Stop: 6351, Start Num: 34
Candidate Starts for SallySpecial_8:
(Start: 34 @4444 has 1 MA's), (Start: 36 @4453 has 1 MA's), (41, 4498), (42, 4501), (53, 4564), (57, 4600), (60, 4624), (63, 4645), (Start: 66 @4657 has 1 MA's), (68, 4666), (75, 4699), (84, 4729), (103, 4843), (116, 4897), (123, 4924), (124, 4927), (131, 4966), (159, 5119), (164, 5158), (172, 5206), (177, 5230), (179, 5239), (181, 5254), (186, 5293), (187, 5299), (199, 5398), (203, 5407), (224, 5497), (225, 5506), (227, 5509), (249, 5590), (254, 5629), (258, 5650), (266, 5722), (271, 5767), (287, 5881), (296, 5932), (312, 5980), (323, 6040), (325, 6055), (332, 6088), (348, 6148), (350, 6163), (362, 6223), (364, 6238), (370, 6307), (371, 6310), (372, 6316),

Gene: Sandman_7 Start: 3778, Stop: 5361, Start Num: 73
Candidate Starts for Sandman_7:
(50, 3634), (51, 3637), (Start: 73 @3778 has 46 MA's), (86, 3793), (90, 3811), (99, 3871), (112, 3934), (114, 3949), (117, 3955), (122, 3979), (128, 3997), (135, 4036), (144, 4111), (152, 4150), (154, 4156), (164, 4219), (170, 4255), (173, 4270), (212, 4462), (223, 4501), (226, 4513), (241, 4549), (242, 4552), (278, 4819), (284, 4867), (289, 4897), (301, 4957), (303, 4966), (304, 4969), (326, 5083), (337, 5128), (369, 5314), (378, 5356),

Gene: Saphira_7 Start: 3706, Stop: 5289, Start Num: 73
Candidate Starts for Saphira_7:
(Start: 73 @3706 has 46 MA's), (86, 3721), (90, 3739), (99, 3799), (114, 3877), (122, 3907), (126, 3916), (128, 3925), (138, 3994), (144, 4039), (146, 4045), (152, 4078), (170, 4183), (173, 4198), (177, 4213), (241, 4477), (263, 4609), (272, 4702), (278, 4747), (284, 4795), (289, 4825), (303, 4894), (304, 4897), (310, 4921), (319, 4969), (337, 5056), (358, 5164),

Gene: Schiebs_8 Start: 4177, Stop: 5796, Start Num: 67
Candidate Starts for Schiebs_8:
(55, 4114), (Start: 67 @4177 has 1 MA's), (111, 4381), (121, 4423), (125, 4435), (131, 4474), (150, 4591), (155, 4615), (157, 4624), (163, 4663), (190, 4852), (224, 4945), (228, 4960), (230, 4966), (236, 4984), (249, 5038), (272, 5224), (287, 5329), (312, 5431), (335, 5551), (348, 5602), (362, 5677), (364, 5692), (376, 5785),

Gene: SerialPhiller_5 Start: 3317, Stop: 4945, Start Num: 73
Candidate Starts for SerialPhiller_5:
(50, 3173), (51, 3176), (Start: 73 @3317 has 46 MA's), (86, 3380), (91, 3401), (99, 3458), (114, 3536), (117, 3542), (135, 3623), (143, 3692), (144, 3698), (152, 3737), (164, 3806), (170, 3842), (207, 4031), (212, 4046), (231, 4106), (241, 4133), (248, 4166), (267, 4304), (270, 4334), (272, 4358), (278, 4403), (299, 4532), (301, 4541), (310, 4577), (326, 4667), (329, 4679), (337, 4712), (343, 4733), (358, 4820), (366, 4874),

Gene: Seume_7 Start: 3500, Stop: 5083, Start Num: 73
Candidate Starts for Seume_7:
(50, 3356), (51, 3359), (Start: 73 @3500 has 46 MA's), (86, 3515), (90, 3533), (99, 3593), (112, 3656), (114, 3671), (117, 3677), (122, 3701), (128, 3719), (135, 3758), (144, 3833), (152, 3872), (154, 3878), (164, 3941), (170, 3977), (173, 3992), (212, 4184), (223, 4223), (226, 4235), (241, 4271), (242, 4274), (278, 4541), (284, 4589), (289, 4619), (301, 4679), (303, 4688), (304, 4691), (326, 4805), (337, 4850), (369, 5036), (378, 5078),

Gene: Smilerella_5 Start: 3164, Stop: 4867, Start Num: 82
Candidate Starts for Smilerella_5:
(78, 3149), (Start: 82 @3164 has 3 MA's), (105, 3284), (130, 3401), (153, 3521), (161, 3572), (195, 3803), (235, 3959), (247, 4010), (250, 4022), (281, 4316), (289, 4358), (308, 4463), (313, 4484), (335, 4604), (371, 4841),

Gene: Sourignavong_8 Start: 3805, Stop: 5388, Start Num: 73
Candidate Starts for Sourignavong_8:
(50, 3661), (51, 3664), (Start: 73 @3805 has 46 MA's), (86, 3820), (90, 3838), (99, 3898), (112, 3961), (114, 3976), (117, 3982), (122, 4006), (128, 4024), (135, 4063), (144, 4138), (152, 4177), (154, 4183), (164, 4246), (170, 4282), (173, 4297), (198, 4441), (212, 4489), (223, 4528), (241, 4576), (242, 4579), (278, 4846), (284, 4894), (289, 4924), (301, 4984), (303, 4993), (304, 4996), (326, 5110), (337, 5155), (358, 5263), (369, 5341), (378, 5383),

Gene: Sputnik_5 Start: 3237, Stop: 4853, Start Num: 71

Candidate Starts for Sputnik_5:
(Start: 71 @3237 has 2 MA's), (102, 3363), (113, 3420), (115, 3429), (118, 3435), (120, 3444), (122, 3456), (126, 3465), (128, 3474), (144, 3588), (146, 3594), (152, 3627), (169, 3729), (177, 3759), (190, 3861), (205, 3921), (219, 3972), (231, 4005), (234, 4011), (259, 4140), (265, 4191), (267, 4215), (270, 4245), (289, 4395), (292, 4413), (296, 4428), (303, 4461), (306, 4473), (321, 4542), (326, 4578), (329, 4590), (348, 4668), (357, 4728), (362, 4737), (365, 4767), (368, 4797), (374, 4836),

Gene: StewieGriff_7 Start: 3706, Stop: 5289, Start Num: 73
Candidate Starts for StewieGriff_7:
(Start: 73 @3706 has 46 MA's), (86, 3721), (90, 3739), (99, 3799), (114, 3877), (126, 3916), (128, 3925), (138, 3994), (144, 4039), (146, 4045), (152, 4078), (170, 4183), (173, 4198), (177, 4213), (241, 4477), (257, 4564), (263, 4609), (272, 4702), (278, 4747), (284, 4795), (289, 4825), (303, 4894), (304, 4897), (319, 4969), (337, 5056), (358, 5164), (369, 5242),

Gene: Stratus_7 Start: 3778, Stop: 5361, Start Num: 73
Candidate Starts for Stratus_7:
(50, 3634), (51, 3637), (Start: 73 @3778 has 46 MA's), (86, 3793), (90, 3811), (99, 3871), (112, 3934), (114, 3949), (117, 3955), (122, 3979), (128, 3997), (135, 4036), (144, 4111), (152, 4150), (154, 4156), (164, 4219), (170, 4255), (173, 4270), (212, 4462), (223, 4501), (226, 4513), (241, 4549), (242, 4552), (278, 4819), (284, 4867), (289, 4897), (301, 4957), (303, 4966), (304, 4969), (326, 5083), (337, 5128), (369, 5314), (378, 5356),

Gene: StrawberryLem_5 Start: 3242, Stop: 4870, Start Num: 73
Candidate Starts for StrawberryLem_5:
(50, 3098), (51, 3101), (Start: 73 @3242 has 46 MA's), (86, 3305), (91, 3326), (99, 3383), (114, 3461), (117, 3467), (135, 3548), (143, 3617), (144, 3623), (152, 3662), (164, 3731), (170, 3767), (207, 3956), (212, 3971), (231, 4031), (241, 4058), (248, 4091), (267, 4229), (270, 4259), (272, 4283), (278, 4328), (299, 4457), (301, 4466), (310, 4502), (326, 4592), (329, 4604), (337, 4637), (343, 4658), (358, 4745), (366, 4799),

Gene: Swenson_7 Start: 3829, Stop: 5412, Start Num: 73
Candidate Starts for Swenson_7:
(50, 3685), (51, 3688), (Start: 73 @3829 has 46 MA's), (86, 3844), (90, 3862), (99, 3922), (114, 4000), (122, 4030), (126, 4039), (128, 4048), (135, 4087), (144, 4162), (146, 4168), (152, 4201), (164, 4270), (170, 4306), (173, 4321), (177, 4336), (241, 4600), (263, 4732), (272, 4825), (278, 4870), (284, 4918), (289, 4948), (303, 5017), (304, 5020), (319, 5092), (326, 5134), (337, 5179), (358, 5287), (369, 5365),

Gene: TailX7_7 Start: 4073, Stop: 5503, Start Num: 106
Candidate Starts for TailX7_7:
(96, 4019), (Start: 106 @4073 has 1 MA's), (129, 4187), (130, 4190), (131, 4193), (145, 4280), (162, 4367), (164, 4379), (175, 4448), (184, 4508), (203, 4583), (204, 4592), (218, 4640), (227, 4667), (228, 4670), (256, 4805), (259, 4820), (262, 4844), (266, 4883), (274, 4949), (285, 5033), (287, 5042), (308, 5138), (315, 5171), (318, 5189), (322, 5207), (323, 5210), (328, 5237), (329, 5243), (339, 5279), (353, 5357), (364, 5408), (369, 5459),

Gene: Taj14_7 Start: 3685, Stop: 5268, Start Num: 73
Candidate Starts for Taj14_7:
(Start: 73 @3685 has 46 MA's), (86, 3700), (90, 3718), (99, 3778), (114, 3856), (122, 3886), (126, 3895), (128, 3904), (138, 3973), (144, 4018), (152, 4057), (170, 4162), (173, 4177), (177, 4192), (241, 4456), (263, 4588), (272, 4681), (278, 4726), (284, 4774), (289, 4804), (303, 4873), (304, 4876), (310, 4900), (319, 4948), (337, 5035), (358, 5143), (365, 5185),

Gene: TinoCrisci_7 Start: 3704, Stop: 5287, Start Num: 73

Candidate Starts for TinoCrisci_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Toulouse_6 Start: 3500, Stop: 5083, Start Num: 73
Candidate Starts for Toulouse_6:
(50, 3356), (51, 3359), (Start: 73 @3500 has 46 MA's), (86, 3515), (90, 3533), (99, 3593), (112, 3656), (114, 3671), (117, 3677), (122, 3701), (128, 3719), (135, 3758), (144, 3833), (152, 3872), (154, 3878), (164, 3941), (170, 3977), (173, 3992), (212, 4184), (223, 4223), (226, 4235), (241, 4271), (242, 4274), (278, 4541), (284, 4589), (289, 4619), (301, 4679), (303, 4688), (304, 4691), (326, 4805), (337, 4850), (369, 5036), (378, 5078),

Gene: TymAbreu_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for TymAbreu_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (369, 5240), (378, 5282),

Gene: Utopia_3 Start: 3190, Stop: 4737, Start Num: 83
Candidate Starts for Utopia_3:
(Start: 83 @3190 has 6 MA's), (94, 3244), (125, 3385), (143, 3499), (148, 3517), (197, 3775), (214, 3844), (244, 3919), (259, 4015), (265, 4063), (273, 4144), (291, 4273), (314, 4381), (324, 4438), (355, 4588), (360, 4606),

Gene: Vinye_8 Start: 3698, Stop: 5314, Start Num: 70
Candidate Starts for Vinye_8:
(Start: 70 @3698 has 1 MA's), (99, 3803), (105, 3836), (114, 3884), (122, 3914), (135, 3971), (144, 4046), (164, 4154), (170, 4190), (173, 4205), (206, 4391), (242, 4505), (248, 4535), (267, 4673), (270, 4703), (278, 4772), (284, 4820), (301, 4910), (303, 4919), (310, 4946), (326, 5036), (359, 5189), (362, 5201), (366, 5243),

Gene: Whytu_3 Start: 3156, Stop: 4703, Start Num: 83
Candidate Starts for Whytu_3:
(Start: 83 @3156 has 6 MA's), (125, 3351), (143, 3465), (148, 3483), (197, 3741), (214, 3810), (244, 3885), (259, 3981), (273, 4110), (314, 4347), (324, 4404), (355, 4554), (366, 4623),

Gene: Wobbe_7 Start: 3734, Stop: 5353, Start Num: 81
Candidate Starts for Wobbe_7:
(65, 3671), (Start: 81 @3734 has 7 MA's), (85, 3749), (95, 3803), (101, 3833), (104, 3857), (122, 3935), (143, 4061), (158, 4133), (194, 4337), (213, 4412), (237, 4481), (243, 4499), (252, 4553), (259, 4604), (260, 4619), (261, 4622), (264, 4637), (266, 4673), (269, 4709), (278, 4787), (307, 4946), (340, 5111), (362, 5234),

Gene: WorldChangers_3 Start: 3264, Stop: 4838, Start Num: 81
Candidate Starts for WorldChangers_3:
(Start: 81 @3264 has 7 MA's), (101, 3360), (104, 3384), (122, 3462), (157, 3657), (167, 3717), (188, 3828), (213, 3909), (234, 3963), (239, 3978), (247, 4014), (252, 4044), (259, 4095), (260, 4110), (261, 4113), (266, 4164), (269, 4197), (278, 4275), (321, 4500), (322, 4512), (340, 4599), (348, 4644), (352,

4668), (362, 4722), (372, 4815),

Gene: Ximeno_5 Start: 3317, Stop: 4945, Start Num: 73
Candidate Starts for Ximeno_5:
(50, 3173), (51, 3176), (Start: 73 @3317 has 46 MA's), (86, 3380), (91, 3401), (99, 3458), (114, 3536), (117, 3542), (135, 3623), (143, 3692), (144, 3698), (152, 3737), (164, 3806), (170, 3842), (207, 4031), (212, 4046), (231, 4106), (241, 4133), (248, 4166), (267, 4304), (270, 4334), (272, 4358), (278, 4403), (299, 4532), (301, 4541), (310, 4577), (326, 4667), (329, 4679), (337, 4712), (343, 4733), (358, 4820), (366, 4874),

Gene: Yank_7 Start: 3704, Stop: 5287, Start Num: 73
Candidate Starts for Yank_7:
(50, 3560), (51, 3563), (Start: 73 @3704 has 46 MA's), (86, 3719), (90, 3737), (99, 3797), (112, 3860), (114, 3875), (117, 3881), (122, 3905), (128, 3923), (135, 3962), (144, 4037), (152, 4076), (154, 4082), (164, 4145), (170, 4181), (173, 4196), (212, 4388), (223, 4427), (226, 4439), (241, 4475), (242, 4478), (278, 4745), (284, 4793), (289, 4823), (301, 4883), (303, 4892), (304, 4895), (326, 5009), (337, 5054), (358, 5162), (369, 5240), (378, 5282),

Gene: Yavru_3 Start: 3200, Stop: 4753, Start Num: 83
Candidate Starts for Yavru_3:
(Start: 83 @3200 has 6 MA's), (125, 3395), (143, 3509), (148, 3527), (171, 3647), (197, 3788), (214, 3860), (244, 3935), (259, 4031), (273, 4160), (291, 4289), (320, 4427), (324, 4454), (366, 4673),