

	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
61. Akinos_15	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
62. BabyDaisy_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
63. Nicky_62_17	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64. StrongBoli_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
65. GNS_66	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
66. Queens_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
67. Icarus_17	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
68. Kates_16 + 1	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
69. CimFras_15	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
70. Kierap_15	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
71. Seta_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
72. Seta_15	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
73. Doot_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
74. Seta_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
75. Seta_15	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
76. Doot_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
77. Seta_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
78. Seta_15	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
79. Seta_16	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
80. Seta_15	10	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93							

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 330573 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330573 has 149 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Brynnie_16
- Track 2 : Zixiang_16, Niblet_16, Chicken_16
- Track 3 : Amanises_17
- Track 4 : Vulpecula_16
- Track 5 : Eesa_16
- Track 6 : Pelletreau_17, Gravel_17, Toad24_17, KendraB23_17
- Track 7 : Abidatro_16
- Track 8 : Jamun_16
- Track 9 : WileyE_15, Chickaboom_15
- Track 10 : Basilisk_16
- Track 11 : Shen_17
- Track 12 : Ruchi_16
- Track 13 : Westrich_17
- Track 14 : Galaxy_16
- Track 15 : Orcanus_16
- Track 16 : TaylorSipht_16
- Track 17 : Cygnet_16
- Track 18 : OtsoOtso_16, Melons_17, BadWillHunting_17, Pineda_17, Amelia_17, Polka_16, Cote_17, Bedetta_17, PhirstandPhine_17, Lunar_17, Daob_17, Damocles_17, Coral_16, Colusalem_16, Kepler_16, GramZayde_16, Jerole_17
- Track 19 : LittleTokyo_16
- Track 20 : Kuleana_16
- Track 21 : Bibble12_17, HannahPhantana_17
- Track 22 : Antrice_16
- Track 23 : Zhuangyuan_17
- Track 24 : Amphitrite_15
- Track 25 : Fingolfin_15, Juno112_15, DanHam62_15, AdoptaAdorbs_15, Atlantica_15, RedFox_15
- Track 26 : HamCheese_15, PhluffyCoco_15, Camara_15, Laphuphu24k_14
- Track 27 : Glotell_15, Oppalora_15, KHumphrey_15, AmiCi24_15
- Track 28 : Renna12_16
- Track 29 : Rattail_15, Leona_15, Azaz_15
- Track 30 : StuartMinion_15, AlexMinion_15
- Track 31 : Andrew_16
- Track 32 : Babushka_15
- Track 33 : DirtyBubble_16
- Track 34 : AylexOG_17

- Track 35 : Jovita_16
- Track 36 : Jabb_16, MsUbiquitous_16, CupcakePrincess_16
- Track 37 : Swervy_16, SarBear_16
- Track 38 : BAjuniper_16
- Track 39 : Cashington_16
- Track 40 : Albright_16
- Track 41 : Abigail_16
- Track 42 : FlameThrower_15
- Track 43 : Celaena_15
- Track 44 : Arroyo_17
- Track 45 : Burritobowl_16
- Track 46 : DickRichards_16
- Track 47 : Bengal_16
- Track 48 : SirBeanington_16, Albedo_16, BubbaBear_16
- Track 49 : Rona_15, Dismas_15
- Track 50 : PhigPhack_17
- Track 51 : Akino08_15, Loviatar_16
- Track 52 : BabyDaisy_17
- Track 53 : Nicky22_17
- Track 54 : Stromboli_16
- Track 55 : Grist_16
- Track 56 : Quenya_16
- Track 57 : Icarian_17
- Track 58 : Kate33_16, IndyLu_16
- Track 59 : CliffHanger_16
- Track 60 : Kieran_15
- Track 61 : Slay_16
- Track 62 : Squircle_15, Olliecat_15
- Track 63 : Doobus_16
- Track 64 : Softsoap_15
- Track 65 : Buldak_15
- Track 66 : CanFranMach_17
- Track 67 : Johnathan_16
- Track 68 : CroZenni_16, BelmontSKP_17, AnnaLie_17
- Track 69 : Stoor_16, SanaSana_17
- Track 70 : Didgeridoo_17
- Track 71 : PondAmelia_17
- Track 72 : QMacho_17, Pecas_16, Eula_16
- Track 73 : Bachaco_15
- Track 74 : ChiliPepper_15, Kamdara_15, Sharkboy_15
- Track 75 : Phisb_16
- Track 76 : SansAfet_16
- Track 77 : Finalfrontier_17
- Track 78 : WalkingDead_16
- Track 79 : Teagster_15
- Track 80 : LimaBean_16
- Track 81 : Avocadoman_16
- Track 82 : Solea_18, Milomuff_17
- Track 83 : Elva_17
- Track 84 : BabyYoda_16
- Track 85 : Kenzers_16, Lynlen_16
- Track 86 : Shayna_15, SunnyD_15
- Track 87 : Lahqtemish_16

- Track 88 : Katzastrophic_15
- Track 89 : Lilo27_16
- Track 90 : PastaFagioli_16
- Track 91 : TukTuk_16
- Track 92 : AvGardian_16
- Track 93 : Chymera_17

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

The start number called the most often in the published annotations is 10, it was called in 66 of the 128 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_16, Akino08_15, Albedo_16, Albright_16, AnnaLie_17, Arroyo_17, AvGardian_16, Avocadoman_16, AylexOG_17, BAjuniper_16, BabyDaisy_17, BabyYoda_16, Bachaco_15, BelmontSKP_17, Bengal_16, BubbaBear_16, Burritobowl_16, CanFranMach_17, Cashington_16, Celaena_15, ChiliPepper_15, CliffHanger_16, CroZenni_16, CupcakePrincess_16, DickRichards_16, Didgeridoo_17, DirtyBubble_16, Dismas_15, Doobus_16, Elva_17, Eula_16, Finalfrontier_17, FlameThrower_15, Grist_16, Icarian_17, IndyLu_16, Jabb_16, Johnathan_16, Jovita_16, Kamdara_15, Kate33_16, Katzastrophic_15, Kenzers_16, Kieran_15, Lahqtemish_16, Lilo27_16, LimaBean_16, Loviatar_16, Lynlen_16, Milomuff_17, MsUbiquitous_16, Nicky22_17, PastaFagioli_16, Pecas_16, PhigPhack_17, Phisb_16, PondAmelia_17, QMacho_17, Quenya_16, Rona_15, SanaSana_17, SansAfet_16, SarBear_16, Sharkboy_15, SirBeanington_16, Slay_16, Softsoap_15, Solea_18, Stoor_16, Stromboli_16, Swervy_16, TukTuk_16, WalkingDead_16,

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

-

Genes that do not have the "Most Annotated" start:

- Abidatro_16, AdoptaAdorbs_15, AlexMinion_15, Amanises_17, Amelia_17, AmiCi24_15, Amphitrite_15, Andrew_16, Antrice_16, Atlantica_15, Azaz_15, Babushka_15, BadWillHunting_17, Basilisk_16, Bedetta_17, Bibble12_17, Brynnie_16, Buldak_15, Camara_15, Chickaboom_15, Chicken_16, Chymera_17, Colusalem_16, Coral_16, Cote_17, Cygnet_16, Damocles_17, DanHam62_15, Daob_17, Eesa_16, Fingolfin_15, Galaxy_16, Glotell_15, GramZayde_16, Gravel_17, HamCheese_15, HannahPhantana_17, Jamun_16, Jerole_17, Juno112_15, KHumphrey_15, KendraB23_17, Kepler_16, Kuleana_16, Laphuphu24k_14, Leona_15, LittleTokyo_16, Lunar_17, Melons_17, Niblet_16, Olliecat_15, Oppalora_15, Orcanus_16, OtsoOtso_16, Pelletreau_17, PhirstandPhine_17, PhluffyCoco_15, Pineda_17, Polka_16, Rattail_15, RedFox_15, Renna12_16, Ruchi_16, Shayna_15, Shen_17, Squircle_15, StuartMinion_15, SunnyD_15, TaylorSipht_16, Teagster_15, Toad24_17, Vulpecula_16, Westrich_17, WileyE_15, Zhuangyuan_17, Zixiang_16,

Summary by start number:

Start 2:

- Found in 3 of 149 (2.0%) of genes in pham
- Manual Annotations of this start: 3 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Buldak_15 (EB), Olliecat_15 (EB), Squircle_15 (EB),

Start 3:

- Found in 3 of 149 (2.0%) of genes in pham
- Manual Annotations of this start: 3 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shayna_15 (EB), SunnyD_15 (EB), Teagster_15 (EB),

Start 8:

- Found in 67 of 149 (45.0%) of genes in pham
- Manual Annotations of this start: 53 of 128
- Called 98.5% of time when present
- Phage (with cluster) where this start called: Abidatro_16 (AS1), AdoptaAdorbs_15 (AS3), AlexMinion_15 (AS3), Amanises_17 (AS1), Amelia_17 (AS2), AmiCi24_15 (AS3), Amphitrite_15 (AS3), Antrice_16 (AS2), Atlantica_15 (AS3), Azaz_15 (AS3), Babushka_15 (AS3), BadWillHunting_17 (AS2), Basilisk_16 (AS1), Bedetta_17 (AS2), Bibble12_17 (AS2), Brynnie_16 (AS1), Camara_15 (AS3), Chickaboom_15 (AS1), Chicken_16 (AS1), Colusalem_16 (AS2), Coral_16 (AS2), Cote_17 (AS2), Cygnet_16 (AS2), Damocles_17 (AS2), DanHam62_15 (AS3), Daob_17 (AS2), Eesa_16 (AS1), Fingolfin_15 (AS3), Galaxy_16 (AS1), Glotell_15 (AS3), GramZayde_16 (AS2), Gravel_17 (AS1), HamCheese_15 (AS3), HannahPhantana_17 (AS2), Jamun_16 (AS1), Jerole_17 (AS2), Juno112_15 (AS3), KHumphrey_15 (AS3), KendraB23_17 (AS1), Kepler_16 (AS2), Laphuphu24k_14 (AS3), Leona_15 (AS3), LittleTokyo_16 (AS2), Lunar_17 (AS2), Melons_17 (AS2), Niblet_16 (AS1), Oppalora_15 (AS3), Orcanus_16 (AS1), OtsoOtso_16 (AS2), Pelletreau_17 (AS1), PhirstandPhine_17 (AS2), PhiluffyCoco_15 (AS3), Pineda_17 (AS2), Polka_16 (AS2), Rattail_15 (AS3), RedFox_15 (AS3), Renna12_16 (AS3), Ruchi_16 (AS1), StuartMinion_15 (AS3), TaylorSipht_16 (AS1), Toad24_17 (AS1), Vulpecula_16 (AS1), Westrich_17 (AS1), WileyE_15 (AS1), Zhuangyuan_17 (AS2), Zixiang_16 (AS1),

Start 9:

- Found in 2 of 149 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andrew_16 (AS3), Kuleana_16 (AS2),

Start 10:

- Found in 73 of 149 (49.0%) of genes in pham
- Manual Annotations of this start: 66 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abigail_16 (EB), Akino08_15 (EB), Albedo_16 (EB), Albright_16 (EB), AnnaLie_17 (EB), Arroyo_17 (EB), AvGardian_16 (EB), Avocadoman_16 (EB), AylexOG_17 (EB), BAjuniper_16 (EB), BabyDaisy_17 (EB), BabyYoda_16 (EB), Bachaco_15 (EB), BelmontSKP_17 (EB), Bengal_16 (EB), BubbaBear_16 (EB), Burritobowl_16 (EB), CanFranMach_17 (EB), Cashington_16 (EB), Celaena_15 (EB), ChiliPepper_15 (EB), CliffHanger_16 (EB), CroZenni_16 (EB), CupcakePrincess_16 (EB), DickRichards_16 (EB), Didgeridoo_17 (EB), DirtyBubble_16 (EB), Dismas_15 (EB), Doobus_16 (EB), Elva_17 (EB), Eula_16

(EB), Finalfrontier_17 (EB), FlameThrower_15 (EB), Grist_16 (EB), Icarian_17 (EB), IndyLu_16 (EB), Jabb_16 (EB), Johnathan_16 (EB), Jovita_16 (EB), Kamdara_15 (EB), Kate33_16 (EB), Katzastrophic_15 (EB), Kenzers_16 (EB), Kieran_15 (EB), Lahqtemish_16 (EB), Lilo27_16 (EB), LimaBean_16 (EB), Loviatar_16 (EB), Lynlen_16 (EB), Milomuff_17 (EB), MsUbiquitous_16 (EB), Nicky22_17 (EB), PastaFagioli_16 (EB), Pecas_16 (EB), PhigPhack_17 (EB), Phisb_16 (EB), PondAmelia_17 (EB), QMacho_17 (EB), Quenya_16 (EB), Rona_15 (EB), SanaSana_17 (EB), SansAfet_16 (EB), SarBear_16 (EB), Sharkboy_15 (EB), SirBeanington_16 (EB), Slay_16 (EB), Softsoap_15 (EB), Solea_18 (EB), Stoor_16 (EB), Stromboli_16 (EB), Swervy_16 (EB), TukTuk_16 (EB), WalkingDead_16 (EB),

Start 21:

- Found in 8 of 149 (5.4%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Shen_17 (AS1),

Start 22:

- Found in 1 of 149 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chymera_17 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: AS3, AS2, AS1, singleton, EB,

Info for manual annotations of cluster AS1:

- Start number 8 was manually annotated 17 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 8 was manually annotated 18 times for cluster AS2.
- Start number 9 was manually annotated 1 time for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 8 was manually annotated 18 times for cluster AS3.
- Start number 9 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster EB:

- Start number 2 was manually annotated 3 times for cluster EB.
- Start number 3 was manually annotated 3 times for cluster EB.
- Start number 10 was manually annotated 66 times for cluster EB.

Gene Information:

Gene: Abidatro_16 Start: 10475, Stop: 12856, Start Num: 8

Candidate Starts for Abidatro_16:

(Start: 8 @10475 has 53 MA's), (14, 10511), (17, 10529), (36, 10661), (40, 10679), (56, 10784), (76, 10943), (78, 10952), (84, 10973), (86, 10991), (100, 11060), (112, 11135), (114, 11147), (124, 11201), (139, 11279), (166, 11402), (182, 11477), (187, 11498), (193, 11519), (195, 11531), (201, 11561), (208, 11591), (209, 11594), (212, 11606), (216, 11621), (224, 11633), (227, 11651), (237, 11708),

(240, 11726), (244, 11744), (253, 11780), (265, 11837), (267, 11852), (271, 11873), (277, 11915), (280, 11930), (281, 11933), (288, 11969), (295, 11999), (297, 12005), (299, 12020), (303, 12038), (313, 12104), (318, 12116), (321, 12134), (323, 12167), (332, 12236), (333, 12245), (334, 12248), (336, 12269), (350, 12365), (364, 12452), (371, 12494), (386, 12593), (393, 12656), (397, 12668), (411, 12740), (419, 12788),

Gene: Abigail_16 Start: 10507, Stop: 13266, Start Num: 10

Candidate Starts for Abigail_16:

(Start: 10 @10507 has 66 MA's), (27, 10660), (28, 10666), (37, 10705), (67, 10891), (85, 10993), (115, 11164), (127, 11230), (130, 11242), (132, 11251), (136, 11266), (140, 11299), (142, 11308), (145, 11326), (159, 11386), (161, 11392), (163, 11401), (164, 11407), (169, 11431), (171, 11443), (177, 11461), (189, 11524), (217, 11638), (221, 11650), (238, 11746), (246, 11785), (276, 11944), (286, 11995), (289, 12004), (292, 12016), (307, 12094), (315, 12208), (319, 12235), (326, 12319), (345, 12430), (346, 12439), (354, 12505), (366, 12571), (382, 12667), (387, 12712), (390, 12727), (399, 12766), (409, 12835), (413, 12853), (414, 12856), (415, 12868), (418, 12895), (429, 13009), (430, 13021), (433, 13051), (438, 13159),

Gene: AdoptaAdorbs_15 Start: 9788, Stop: 12076, Start Num: 8

Candidate Starts for AdoptaAdorbs_15:

(Start: 8 @9788 has 53 MA's), (11, 9800), (14, 9821), (16, 9830), (17, 9839), (29, 9941), (44, 9983), (62, 10121), (70, 10175), (73, 10205), (94, 10307), (97, 10319), (99, 10337), (105, 10361), (109, 10382), (110, 10403), (126, 10484), (127, 10487), (129, 10496), (133, 10508), (160, 10628), (166, 10658), (177, 10700), (207, 10826), (214, 10850), (224, 10871), (232, 10919), (235, 10931), (237, 10943), (239, 10952), (244, 10979), (253, 11015), (256, 11027), (257, 11030), (259, 11039), (267, 11087), (271, 11108), (302, 11273), (332, 11420), (333, 11429), (341, 11492), (353, 11567), (372, 11690), (383, 11750), (385, 11756), (386, 11777), (398, 11852), (426, 12068),

Gene: Akino08_15 Start: 10420, Stop: 13050, Start Num: 10

Candidate Starts for Akino08_15:

(Start: 10 @10420 has 66 MA's), (20, 10480), (27, 10573), (35, 10609), (37, 10618), (55, 10714), (75, 10867), (85, 10906), (115, 11077), (120, 11113), (128, 11146), (133, 11167), (136, 11179), (138, 11197), (142, 11221), (153, 11272), (159, 11299), (161, 11305), (163, 11314), (166, 11332), (180, 11392), (189, 11437), (238, 11524), (243, 11551), (245, 11560), (260, 11626), (270, 11683), (315, 11986), (316, 11989), (319, 12013), (322, 12037), (335, 12148), (342, 12208), (354, 12292), (366, 12358), (368, 12370), (370, 12385), (377, 12433), (380, 12442), (381, 12445), (387, 12505), (390, 12520), (408, 12604), (415, 12652), (430, 12805), (431, 12820), (433, 12835), (437, 12922), (441, 12964),

Gene: Albedo_16 Start: 10372, Stop: 13134, Start Num: 10

Candidate Starts for Albedo_16:

(Start: 10 @10372 has 66 MA's), (27, 10525), (37, 10570), (67, 10756), (85, 10858), (115, 11029), (127, 11095), (130, 11107), (132, 11116), (140, 11164), (142, 11173), (145, 11191), (161, 11257), (163, 11266), (164, 11272), (169, 11296), (171, 11308), (189, 11389), (210, 11476), (217, 11503), (220, 11512), (238, 11611), (270, 11770), (279, 11824), (292, 11881), (307, 11959), (315, 12073), (319, 12100), (323, 12145), (335, 12235), (338, 12268), (342, 12295), (354, 12373), (359, 12394), (367, 12442), (382, 12535), (387, 12580), (390, 12595), (399, 12634), (409, 12703), (413, 12721), (414, 12724), (415, 12736), (418, 12763), (430, 12889), (431, 12904), (433, 12919), (438, 13027),

Gene: Albright_16 Start: 10286, Stop: 13045, Start Num: 10

Candidate Starts for Albright_16:

(1, 10133), (4, 10214), (Start: 10 @10286 has 66 MA's), (27, 10439), (28, 10445), (37, 10484), (67, 10670), (85, 10772), (115, 10943), (127, 11009), (130, 11021), (132, 11030), (136, 11045), (140, 11078), (142, 11087), (159, 11165), (161, 11171), (163, 11180), (164, 11186), (169, 11210), (171,

11222), (177, 11240), (189, 11303), (217, 11417), (221, 11429), (238, 11525), (246, 11564), (276, 11723), (286, 11774), (289, 11783), (292, 11795), (307, 11873), (315, 11987), (319, 12014), (326, 12098), (341, 12191), (345, 12209), (346, 12218), (354, 12284), (366, 12350), (382, 12446), (387, 12491), (390, 12506), (399, 12545), (409, 12614), (413, 12632), (414, 12635), (415, 12647), (418, 12674), (429, 12788), (430, 12800), (433, 12830), (438, 12938),

Gene: AlexMinion_15 Start: 9820, Stop: 12108, Start Num: 8

Candidate Starts for AlexMinion_15:

(Start: 8 @9820 has 53 MA's), (14, 9853), (16, 9862), (17, 9871), (29, 9973), (44, 10015), (62, 10153), (70, 10207), (97, 10351), (99, 10369), (105, 10393), (110, 10435), (126, 10516), (127, 10519), (129, 10528), (133, 10540), (135, 10549), (160, 10660), (166, 10690), (176, 10729), (207, 10858), (214, 10882), (224, 10903), (237, 10975), (238, 10981), (242, 11005), (256, 11059), (257, 11062), (259, 11071), (267, 11119), (271, 11140), (302, 11305), (341, 11524), (343, 11536), (353, 11599), (371, 11710), (382, 11776), (385, 11788), (386, 11809), (396, 11881), (398, 11884), (416, 11986), (422, 12043), (426, 12097), (427, 12100),

Gene: Amanises_17 Start: 10381, Stop: 12531, Start Num: 8

Candidate Starts for Amanises_17:

(Start: 8 @10381 has 53 MA's), (14, 10417), (17, 10435), (21, 10456), (44, 10576), (51, 10627), (67, 10747), (84, 10843), (97, 10912), (99, 10930), (105, 10954), (110, 10996), (126, 11077), (127, 11080), (129, 11089), (133, 11101), (160, 11221), (166, 11251), (177, 11293), (204, 11407), (207, 11419), (217, 11455), (236, 11533), (238, 11542), (259, 11632), (267, 11680), (271, 11701), (275, 11734), (288, 11794), (328, 11863), (331, 11878), (352, 12019), (371, 12139), (386, 12238), (400, 12325), (416, 12409), (422, 12466), (426, 12520),

Gene: Amelia_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for Amelia_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: AmiCi24_15 Start: 9786, Stop: 12074, Start Num: 8

Candidate Starts for AmiCi24_15:

(Start: 8 @9786 has 53 MA's), (11, 9798), (14, 9819), (16, 9828), (17, 9837), (29, 9939), (44, 9981), (62, 10119), (70, 10173), (73, 10203), (94, 10305), (97, 10317), (99, 10335), (105, 10359), (109, 10380), (110, 10401), (126, 10482), (127, 10485), (129, 10494), (133, 10506), (160, 10626), (166, 10656), (177, 10698), (207, 10824), (214, 10848), (224, 10869), (232, 10917), (235, 10929), (237, 10941), (239, 10950), (244, 10977), (253, 11013), (256, 11025), (257, 11028), (259, 11037), (267, 11085), (271, 11106), (302, 11271), (332, 11418), (333, 11427), (341, 11490), (343, 11502), (353, 11565), (372, 11688), (383, 11748), (385, 11754), (386, 11775), (398, 11850), (426, 12066),

Gene: Amphitrite_15 Start: 9786, Stop: 12074, Start Num: 8

Candidate Starts for Amphitrite_15:

(Start: 8 @9786 has 53 MA's), (11, 9798), (14, 9819), (16, 9828), (17, 9837), (29, 9939), (44, 9981), (62, 10119), (70, 10173), (73, 10203), (94, 10305), (97, 10317), (99, 10335), (105, 10359), (109, 10380), (110, 10401), (126, 10482), (127, 10485), (129, 10494), (133, 10506), (160, 10626), (166, 10656), (177, 10698), (207, 10824), (214, 10848), (224, 10869), (232, 10917), (235, 10929), (237, 10941), (239, 10950), (244, 10977), (253, 11013), (256, 11025), (257, 11028), (259, 11037), (267,

11085), (271, 11106), (302, 11271), (332, 11418), (333, 11427), (341, 11490), (343, 11502), (353, 11565), (362, 11613), (372, 11688), (383, 11748), (385, 11754), (386, 11775), (426, 12066),

Gene: Andrew_16 Start: 10166, Stop: 12529, Start Num: 9

Candidate Starts for Andrew_16:

(Start: 9 @10166 has 2 MA's), (14, 10199), (28, 10328), (35, 10358), (40, 10379), (42, 10385), (48, 10409), (62, 10541), (66, 10565), (69, 10583), (82, 10661), (87, 10694), (94, 10730), (95, 10736), (98, 10751), (99, 10760), (108, 10796), (114, 10850), (115, 10856), (120, 10892), (121, 10901), (125, 10913), (133, 10943), (144, 10997), (154, 11042), (167, 11099), (176, 11135), (181, 11168), (184, 11180), (207, 11279), (211, 11294), (217, 11315), (229, 11363), (244, 11432), (245, 11438), (256, 11480), (259, 11492), (263, 11516), (267, 11540), (272, 11573), (273, 11576), (302, 11726), (332, 11873), (333, 11882), (334, 11885), (336, 11906), (341, 11945), (346, 11966), (352, 12011), (353, 12020), (357, 12044), (371, 12131), (372, 12143), (384, 12206), (386, 12230), (405, 12347), (412, 12389), (416, 12407), (421, 12452), (425, 12497), (426, 12518),

Gene: AnnaLie_17 Start: 10694, Stop: 13453, Start Num: 10

Candidate Starts for AnnaLie_17:

(Start: 10 @10694 has 66 MA's), (27, 10847), (28, 10853), (37, 10892), (67, 11078), (82, 11162), (85, 11180), (105, 11279), (115, 11351), (127, 11417), (130, 11429), (132, 11438), (136, 11453), (140, 11486), (142, 11495), (145, 11513), (159, 11573), (161, 11579), (163, 11588), (164, 11594), (169, 11618), (171, 11630), (189, 11711), (217, 11825), (221, 11837), (238, 11933), (246, 11972), (266, 12068), (270, 12092), (279, 12146), (286, 12182), (289, 12191), (292, 12203), (307, 12281), (315, 12395), (319, 12422), (326, 12506), (345, 12617), (346, 12626), (354, 12692), (366, 12758), (382, 12854), (387, 12899), (390, 12914), (399, 12953), (409, 13022), (413, 13040), (414, 13043), (415, 13055), (418, 13082), (429, 13196), (430, 13208), (433, 13238), (438, 13346),

Gene: Antrice_16 Start: 10127, Stop: 12421, Start Num: 8

Candidate Starts for Antrice_16:

(Start: 8 @10127 has 53 MA's), (14, 10163), (16, 10172), (17, 10181), (40, 10316), (45, 10331), (59, 10442), (70, 10520), (73, 10550), (82, 10583), (94, 10652), (97, 10664), (105, 10706), (110, 10748), (129, 10841), (133, 10853), (134, 10856), (149, 10928), (160, 10973), (166, 11003), (168, 11012), (207, 11171), (215, 11198), (229, 11255), (235, 11276), (239, 11297), (242, 11318), (259, 11384), (262, 11405), (267, 11432), (272, 11465), (273, 11468), (278, 11498), (302, 11618), (327, 11744), (333, 11774), (336, 11798), (341, 11837), (346, 11858), (347, 11873), (355, 11927), (371, 12023), (372, 12035), (382, 12089), (385, 12101), (386, 12122), (393, 12185), (398, 12197), (401, 12212), (402, 12224), (420, 12332), (425, 12389),

Gene: Arroyo_17 Start: 10895, Stop: 13654, Start Num: 10

Candidate Starts for Arroyo_17:

(Start: 10 @10895 has 66 MA's), (27, 11048), (37, 11093), (67, 11279), (82, 11363), (85, 11381), (105, 11480), (115, 11552), (127, 11618), (130, 11630), (132, 11639), (136, 11654), (140, 11687), (142, 11696), (145, 11714), (159, 11774), (161, 11780), (163, 11789), (164, 11795), (169, 11819), (171, 11831), (179, 11861), (189, 11912), (217, 12026), (221, 12038), (238, 12134), (246, 12173), (266, 12269), (270, 12293), (279, 12347), (286, 12383), (289, 12392), (307, 12482), (315, 12596), (319, 12623), (326, 12707), (341, 12800), (345, 12818), (346, 12827), (366, 12959), (382, 13055), (387, 13100), (390, 13115), (399, 13154), (409, 13223), (413, 13241), (414, 13244), (415, 13256), (418, 13283), (429, 13397), (430, 13409), (433, 13439), (438, 13547),

Gene: Atlantica_15 Start: 9788, Stop: 12076, Start Num: 8

Candidate Starts for Atlantica_15:

(Start: 8 @9788 has 53 MA's), (11, 9800), (14, 9821), (16, 9830), (17, 9839), (29, 9941), (44, 9983), (62, 10121), (70, 10175), (73, 10205), (94, 10307), (97, 10319), (99, 10337), (105, 10361), (109, 10382), (110, 10403), (126, 10484), (127, 10487), (129, 10496), (133, 10508), (160, 10628), (166,

10658), (177, 10700), (207, 10826), (214, 10850), (224, 10871), (232, 10919), (235, 10931), (237, 10943), (239, 10952), (244, 10979), (253, 11015), (256, 11027), (257, 11030), (259, 11039), (267, 11087), (271, 11108), (302, 11273), (332, 11420), (333, 11429), (341, 11492), (353, 11567), (372, 11690), (383, 11750), (385, 11756), (386, 11777), (398, 11852), (426, 12068),

Gene: AvGardian_16 Start: 10175, Stop: 12796, Start Num: 10

Candidate Starts for AvGardian_16:

(Start: 10 @10175 has 66 MA's), (27, 10328), (30, 10340), (37, 10373), (44, 10397), (55, 10469), (75, 10622), (85, 10661), (115, 10832), (130, 10910), (137, 10946), (140, 10967), (148, 11006), (163, 11069), (174, 11120), (177, 11129), (180, 11147), (189, 11192), (194, 11210), (238, 11279), (242, 11303), (254, 11351), (260, 11381), (267, 11420), (270, 11438), (282, 11507), (289, 11537), (292, 11549), (315, 11741), (316, 11744), (319, 11768), (326, 11852), (341, 11945), (345, 11963), (346, 11972), (349, 12005), (375, 12167), (379, 12185), (381, 12191), (384, 12209), (387, 12242), (390, 12257), (391, 12266), (392, 12269), (399, 12296), (406, 12344), (414, 12386), (415, 12398), (418, 12425), (430, 12551), (431, 12566), (433, 12581), (437, 12668), (441, 12710),

Gene: Avocadoman_16 Start: 10450, Stop: 13209, Start Num: 10

Candidate Starts for Avocadoman_16:

(Start: 10 @10450 has 66 MA's), (27, 10603), (28, 10609), (37, 10648), (67, 10834), (85, 10936), (115, 11107), (127, 11173), (130, 11185), (132, 11194), (136, 11209), (140, 11242), (142, 11251), (145, 11269), (159, 11329), (161, 11335), (163, 11344), (164, 11350), (169, 11374), (171, 11386), (177, 11404), (189, 11467), (217, 11581), (221, 11593), (225, 11620), (238, 11689), (246, 11728), (276, 11887), (286, 11938), (289, 11947), (292, 11959), (307, 12037), (315, 12151), (319, 12178), (326, 12262), (345, 12373), (346, 12382), (354, 12448), (366, 12514), (382, 12610), (387, 12655), (390, 12670), (399, 12709), (409, 12778), (413, 12796), (414, 12799), (415, 12811), (418, 12838), (429, 12952), (430, 12964), (433, 12994), (438, 13102),

Gene: AylexOG_17 Start: 10706, Stop: 13468, Start Num: 10

Candidate Starts for AylexOG_17:

(Start: 10 @10706 has 66 MA's), (27, 10859), (28, 10865), (35, 10895), (37, 10904), (44, 10928), (55, 11000), (85, 11192), (105, 11291), (115, 11363), (130, 11441), (132, 11450), (133, 11453), (140, 11498), (142, 11507), (161, 11591), (163, 11600), (164, 11606), (169, 11630), (171, 11642), (189, 11723), (210, 11810), (217, 11837), (220, 11846), (238, 11945), (266, 12080), (270, 12104), (279, 12158), (292, 12215), (307, 12293), (315, 12407), (319, 12434), (335, 12569), (342, 12629), (354, 12707), (359, 12728), (367, 12776), (382, 12869), (387, 12914), (390, 12929), (399, 12968), (409, 13037), (414, 13058), (415, 13070), (418, 13097), (430, 13223), (431, 13238), (433, 13253),

Gene: Azaz_15 Start: 9839, Stop: 12127, Start Num: 8

Candidate Starts for Azaz_15:

(Start: 8 @9839 has 53 MA's), (11, 9851), (14, 9872), (16, 9881), (17, 9890), (29, 9992), (44, 10034), (62, 10172), (70, 10226), (73, 10256), (97, 10370), (99, 10388), (105, 10412), (109, 10433), (110, 10454), (126, 10535), (127, 10538), (129, 10547), (133, 10559), (160, 10679), (166, 10709), (177, 10751), (207, 10877), (214, 10901), (224, 10922), (237, 10994), (244, 11030), (253, 11066), (256, 11078), (259, 11090), (262, 11111), (267, 11138), (271, 11159), (302, 11324), (332, 11471), (333, 11480), (341, 11543), (343, 11555), (353, 11618), (372, 11741), (383, 11801), (385, 11807), (386, 11828), (398, 11903), (426, 12119),

Gene: BAjuniper_16 Start: 10103, Stop: 12796, Start Num: 10

Candidate Starts for BAjuniper_16:

(Start: 10 @10103 has 66 MA's), (26, 10244), (44, 10322), (81, 10580), (83, 10583), (107, 10724), (111, 10769), (131, 10880), (137, 10910), (143, 10943), (147, 10955), (173, 11042), (189, 11087), (218, 11183), (231, 11237), (243, 11297), (246, 11309), (252, 11336), (253, 11339), (254, 11342), (259, 11363), (270, 11429), (286, 11519), (289, 11528), (292, 11540), (300, 11582), (310, 11636),

(315, 11732), (316, 11735), (319, 11759), (322, 11783), (323, 11804), (324, 11807), (335, 11894), (342, 11954), (348, 11993), (349, 12005), (350, 12008), (354, 12038), (367, 12107), (370, 12131), (375, 12167), (377, 12179), (380, 12188), (387, 12251), (390, 12266), (399, 12305), (414, 12386), (415, 12398), (431, 12566), (433, 12581), (437, 12668),

Gene: Babushka_15 Start: 9836, Stop: 12124, Start Num: 8

Candidate Starts for Babushka_15:

(Start: 8 @9836 has 53 MA's), (11, 9848), (14, 9869), (16, 9878), (17, 9887), (29, 9989), (44, 10031), (45, 10034), (62, 10169), (65, 10190), (70, 10223), (94, 10355), (97, 10367), (99, 10385), (105, 10409), (109, 10430), (110, 10451), (126, 10532), (127, 10535), (129, 10544), (133, 10556), (160, 10676), (166, 10706), (177, 10748), (207, 10874), (214, 10898), (224, 10919), (232, 10967), (237, 10991), (244, 11027), (253, 11063), (256, 11075), (259, 11087), (262, 11108), (267, 11135), (332, 11468), (333, 11477), (341, 11540), (353, 11615), (386, 11825), (398, 11900), (426, 12116),

Gene: BabyDaisy_17 Start: 10507, Stop: 13269, Start Num: 10

Candidate Starts for BabyDaisy_17:

(Start: 10 @10507 has 66 MA's), (27, 10660), (30, 10672), (44, 10729), (55, 10801), (75, 10954), (85, 10993), (115, 11164), (130, 11242), (133, 11254), (134, 11257), (140, 11299), (157, 11380), (163, 11401), (177, 11461), (180, 11479), (189, 11524), (194, 11542), (202, 11578), (217, 11638), (221, 11650), (225, 11677), (246, 11785), (264, 11869), (270, 11905), (286, 11995), (289, 12004), (292, 12016), (307, 12094), (315, 12208), (319, 12235), (325, 12310), (335, 12370), (342, 12430), (354, 12508), (359, 12529), (367, 12577), (382, 12670), (387, 12715), (390, 12730), (392, 12742), (399, 12769), (409, 12838), (414, 12859), (415, 12871), (418, 12898), (430, 13024), (431, 13039), (433, 13054), (440, 13180), (442, 13255),

Gene: BabyYoda_16 Start: 10507, Stop: 13137, Start Num: 10

Candidate Starts for BabyYoda_16:

(Start: 10 @10507 has 66 MA's), (20, 10567), (27, 10660), (28, 10666), (30, 10672), (37, 10705), (55, 10801), (75, 10954), (85, 10993), (97, 11053), (102, 11080), (115, 11164), (130, 11242), (134, 11257), (137, 11278), (140, 11299), (157, 11380), (163, 11401), (177, 11461), (180, 11479), (189, 11524), (191, 11530), (194, 11542), (243, 11638), (245, 11647), (246, 11650), (254, 11683), (259, 11704), (270, 11770), (315, 12073), (316, 12076), (319, 12100), (322, 12124), (335, 12235), (342, 12295), (354, 12379), (366, 12445), (368, 12457), (370, 12472), (377, 12520), (380, 12529), (381, 12532), (387, 12592), (390, 12607), (408, 12691), (415, 12739), (430, 12892), (431, 12907), (433, 12922), (437, 13009), (441, 13051),

Gene: Bachaco_15 Start: 9893, Stop: 12670, Start Num: 10

Candidate Starts for Bachaco_15:

(Start: 10 @9893 has 66 MA's), (14, 9926), (26, 10034), (44, 10112), (79, 10364), (81, 10370), (83, 10373), (107, 10514), (119, 10622), (125, 10646), (127, 10655), (146, 10754), (156, 10802), (173, 10874), (185, 10922), (186, 10925), (190, 10943), (193, 10952), (197, 10973), (243, 11171), (245, 11180), (246, 11183), (260, 11246), (289, 11402), (291, 11408), (292, 11414), (315, 11606), (319, 11633), (323, 11678), (335, 11768), (337, 11792), (339, 11810), (342, 11828), (350, 11882), (354, 11912), (367, 11981), (370, 12005), (380, 12062), (381, 12065), (387, 12125), (390, 12140), (414, 12260), (415, 12272), (418, 12299), (423, 12341), (430, 12425), (431, 12440), (432, 12443), (442, 12656),

Gene: BadWillHunting_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for BadWillHunting_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236,

11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: Basilisk_16 Start: 10798, Stop: 13203, Start Num: 8

Candidate Starts for Basilisk_16:

(Start: 8 @10798 has 53 MA's), (14, 10834), (17, 10852), (24, 10888), (28, 10963), (42, 11008), (54, 11095), (56, 11107), (76, 11266), (78, 11275), (100, 11383), (101, 11389), (114, 11470), (124, 11524), (134, 11563), (176, 11764), (182, 11800), (195, 11854), (208, 11914), (209, 11917), (216, 11944), (227, 11974), (236, 12028), (244, 12067), (248, 12085), (253, 12103), (263, 12151), (271, 12196), (281, 12256), (283, 12268), (287, 12289), (288, 12292), (296, 12325), (297, 12328), (298, 12334), (299, 12343), (301, 12355), (303, 12361), (305, 12376), (308, 12385), (318, 12439), (321, 12457), (323, 12490), (332, 12559), (333, 12568), (334, 12571), (336, 12592), (340, 12628), (350, 12688), (353, 12706), (386, 12916), (416, 13081), (422, 13138),

Gene: Bedetta_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for Bedetta_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: BelmontSKP_17 Start: 10694, Stop: 13453, Start Num: 10

Candidate Starts for BelmontSKP_17:

(Start: 10 @10694 has 66 MA's), (27, 10847), (28, 10853), (37, 10892), (67, 11078), (82, 11162), (85, 11180), (105, 11279), (115, 11351), (127, 11417), (130, 11429), (132, 11438), (136, 11453), (140, 11486), (142, 11495), (145, 11513), (159, 11573), (161, 11579), (163, 11588), (164, 11594), (169, 11618), (171, 11630), (189, 11711), (217, 11825), (221, 11837), (238, 11933), (246, 11972), (266, 12068), (270, 12092), (279, 12146), (286, 12182), (289, 12191), (292, 12203), (307, 12281), (315, 12395), (319, 12422), (326, 12506), (345, 12617), (346, 12626), (354, 12692), (366, 12758), (382, 12854), (387, 12899), (390, 12914), (399, 12953), (409, 13022), (413, 13040), (414, 13043), (415, 13055), (418, 13082), (429, 13196), (430, 13208), (433, 13238), (438, 13346),

Gene: Bengal_16 Start: 10285, Stop: 13044, Start Num: 10

Candidate Starts for Bengal_16:

(Start: 10 @10285 has 66 MA's), (27, 10438), (28, 10444), (37, 10483), (67, 10669), (85, 10771), (115, 10942), (127, 11008), (130, 11020), (132, 11029), (136, 11044), (140, 11077), (142, 11086), (145, 11104), (159, 11164), (161, 11170), (163, 11179), (164, 11185), (169, 11209), (171, 11221), (177, 11239), (189, 11302), (217, 11416), (221, 11428), (225, 11455), (238, 11524), (246, 11563), (276, 11722), (286, 11773), (289, 11782), (292, 11794), (307, 11872), (315, 11986), (319, 12013), (326, 12097), (341, 12190), (345, 12208), (346, 12217), (354, 12283), (366, 12349), (382, 12445), (387, 12490), (390, 12505), (399, 12544), (409, 12613), (413, 12631), (414, 12634), (415, 12646), (418, 12673), (429, 12787), (430, 12799), (433, 12829), (438, 12937),

Gene: Bibble12_17 Start: 10378, Stop: 12513, Start Num: 8

Candidate Starts for Bibble12_17:

(Start: 8 @10378 has 53 MA's), (14, 10411), (15, 10417), (17, 10429), (35, 10534), (46, 10567), (62, 10699), (65, 10720), (85, 10834), (97, 10897), (105, 10939), (109, 10960), (110, 10981), (126, 11062),

(127, 11065), (129, 11074), (133, 11086), (134, 11089), (160, 11206), (166, 11236), (177, 11278), (178, 11287), (207, 11404), (216, 11437), (226, 11464), (229, 11488), (233, 11500), (235, 11509), (236, 11518), (244, 11557), (253, 11593), (256, 11605), (259, 11617), (262, 11638), (267, 11665), (272, 11698), (274, 11713), (333, 11875), (336, 11899), (341, 11938), (347, 11974), (364, 12082), (372, 12136), (385, 12202), (386, 12223), (416, 12394), (420, 12427), (421, 12439), (425, 12484), (426, 12505),

Gene: Brynnie_16 Start: 10610, Stop: 13015, Start Num: 8

Candidate Starts for Brynnie_16:

(Start: 8 @10610 has 53 MA's), (14, 10646), (17, 10664), (24, 10700), (28, 10775), (42, 10820), (54, 10907), (56, 10919), (76, 11078), (78, 11087), (100, 11195), (101, 11201), (114, 11282), (124, 11336), (134, 11375), (151, 11468), (176, 11576), (182, 11612), (195, 11666), (208, 11726), (209, 11729), (216, 11756), (227, 11786), (236, 11840), (244, 11879), (248, 11897), (253, 11915), (263, 11963), (271, 12008), (280, 12065), (281, 12068), (283, 12080), (287, 12101), (288, 12104), (296, 12137), (297, 12140), (298, 12146), (299, 12155), (301, 12167), (303, 12173), (305, 12188), (308, 12197), (318, 12251), (321, 12269), (323, 12302), (332, 12371), (333, 12380), (334, 12383), (336, 12404), (340, 12440), (350, 12500), (353, 12518), (386, 12728), (416, 12893), (422, 12950),

Gene: BubbaBear_16 Start: 10372, Stop: 13134, Start Num: 10

Candidate Starts for BubbaBear_16:

(Start: 10 @10372 has 66 MA's), (27, 10525), (37, 10570), (67, 10756), (85, 10858), (115, 11029), (127, 11095), (130, 11107), (132, 11116), (140, 11164), (142, 11173), (145, 11191), (161, 11257), (163, 11266), (164, 11272), (169, 11296), (171, 11308), (189, 11389), (210, 11476), (217, 11503), (220, 11512), (238, 11611), (270, 11770), (279, 11824), (292, 11881), (307, 11959), (315, 12073), (319, 12100), (323, 12145), (335, 12235), (338, 12268), (342, 12295), (354, 12373), (359, 12394), (367, 12442), (382, 12535), (387, 12580), (390, 12595), (399, 12634), (409, 12703), (413, 12721), (414, 12724), (415, 12736), (418, 12763), (430, 12889), (431, 12904), (433, 12919), (438, 13027),

Gene: Buldak_15 Start: 10073, Stop: 13042, Start Num: 2

Candidate Starts for Buldak_15:

(Start: 2 @10073 has 3 MA's), (5, 10148), (6, 10163), (18, 10271), (19, 10274), (25, 10340), (31, 10397), (33, 10409), (50, 10493), (55, 10544), (62, 10607), (64, 10625), (71, 10670), (72, 10679), (73, 10691), (91, 10772), (93, 10784), (96, 10799), (108, 10871), (117, 10946), (120, 10976), (122, 10988), (138, 11066), (141, 11087), (147, 11114), (155, 11150), (177, 11240), (183, 11273), (188, 11300), (203, 11366), (208, 11384), (219, 11423), (223, 11438), (239, 11534), (248, 11582), (269, 11678), (272, 11699), (278, 11729), (297, 11810), (310, 11882), (312, 11888), (315, 11978), (323, 12050), (335, 12140), (337, 12164), (342, 12200), (354, 12281), (356, 12290), (363, 12335), (378, 12425), (381, 12434), (387, 12494), (390, 12509), (399, 12548), (405, 12587), (415, 12650), (418, 12677), (428, 12776), (430, 12803), (434, 12848), (436, 12872),

Gene: Burritobowl_16 Start: 10453, Stop: 13212, Start Num: 10

Candidate Starts for Burritobowl_16:

(Start: 10 @10453 has 66 MA's), (27, 10606), (28, 10612), (37, 10651), (67, 10837), (82, 10921), (85, 10939), (105, 11038), (115, 11110), (127, 11176), (130, 11188), (132, 11197), (136, 11212), (140, 11245), (142, 11254), (145, 11272), (159, 11332), (161, 11338), (163, 11347), (164, 11353), (169, 11377), (171, 11389), (177, 11407), (189, 11470), (217, 11584), (221, 11596), (238, 11692), (246, 11731), (266, 11827), (270, 11851), (279, 11905), (286, 11941), (289, 11950), (292, 11962), (307, 12040), (315, 12154), (319, 12181), (326, 12265), (345, 12376), (346, 12385), (354, 12451), (366, 12517), (382, 12613), (387, 12658), (390, 12673), (399, 12712), (405, 12751), (409, 12781), (413, 12799), (414, 12802), (415, 12814), (418, 12841), (429, 12955), (430, 12967), (433, 12997), (438, 13105),

Gene: Camara_15 Start: 9789, Stop: 12077, Start Num: 8

Candidate Starts for Camara_15:

(Start: 8 @9789 has 53 MA's), (11, 9801), (14, 9822), (16, 9831), (17, 9840), (29, 9942), (44, 9984), (62, 10122), (70, 10176), (73, 10206), (94, 10308), (97, 10320), (99, 10338), (105, 10362), (109, 10383), (110, 10404), (126, 10485), (127, 10488), (129, 10497), (133, 10509), (160, 10629), (166, 10659), (177, 10701), (207, 10827), (214, 10851), (224, 10872), (232, 10920), (235, 10932), (237, 10944), (239, 10953), (244, 10980), (253, 11016), (256, 11028), (257, 11031), (259, 11040), (267, 11088), (271, 11109), (302, 11274), (332, 11421), (333, 11430), (341, 11493), (343, 11505), (353, 11568), (362, 11616), (372, 11691), (383, 11751), (385, 11757), (386, 11778), (398, 11853), (426, 12069),

Gene: CanFranMach_17 Start: 10379, Stop: 13138, Start Num: 10

Candidate Starts for CanFranMach_17:

(Start: 10 @10379 has 66 MA's), (27, 10532), (28, 10538), (38, 10580), (67, 10763), (85, 10865), (105, 10964), (115, 11036), (130, 11114), (132, 11123), (142, 11180), (146, 11201), (161, 11264), (163, 11273), (164, 11279), (169, 11303), (170, 11312), (189, 11396), (200, 11441), (220, 11519), (238, 11618), (246, 11657), (270, 11777), (286, 11867), (289, 11876), (307, 11966), (315, 12080), (319, 12107), (325, 12182), (335, 12242), (338, 12275), (342, 12302), (354, 12380), (359, 12401), (382, 12542), (387, 12587), (390, 12602), (399, 12641), (409, 12710), (414, 12731), (415, 12743), (418, 12770), (430, 12896), (431, 12911), (433, 12926), (438, 13034),

Gene: Cashington_16 Start: 10302, Stop: 13061, Start Num: 10

Candidate Starts for Cashington_16:

(Start: 10 @10302 has 66 MA's), (27, 10455), (28, 10461), (35, 10491), (37, 10500), (44, 10524), (55, 10596), (85, 10788), (105, 10887), (115, 10959), (130, 11037), (132, 11046), (133, 11049), (140, 11094), (142, 11103), (159, 11181), (161, 11187), (163, 11196), (164, 11202), (169, 11226), (171, 11238), (177, 11256), (189, 11319), (217, 11433), (221, 11445), (225, 11472), (238, 11541), (246, 11580), (276, 11739), (286, 11790), (289, 11799), (292, 11811), (307, 11889), (315, 12003), (319, 12030), (326, 12114), (345, 12225), (346, 12234), (354, 12300), (366, 12366), (382, 12462), (387, 12507), (390, 12522), (399, 12561), (409, 12630), (413, 12648), (414, 12651), (415, 12663), (418, 12690), (430, 12816), (431, 12831), (433, 12846),

Gene: Celaena_15 Start: 9829, Stop: 12606, Start Num: 10

Candidate Starts for Celaena_15:

(Start: 10 @9829 has 66 MA's), (14, 9862), (26, 9970), (44, 10048), (79, 10300), (81, 10306), (83, 10309), (107, 10450), (119, 10558), (125, 10582), (127, 10591), (146, 10690), (173, 10810), (185, 10858), (186, 10861), (190, 10879), (193, 10888), (197, 10909), (243, 11107), (245, 11116), (246, 11119), (260, 11182), (289, 11338), (291, 11344), (292, 11350), (315, 11542), (319, 11569), (323, 11614), (335, 11704), (337, 11728), (339, 11746), (342, 11764), (350, 11818), (354, 11848), (367, 11917), (370, 11941), (380, 11998), (381, 12001), (387, 12061), (390, 12076), (414, 12196), (415, 12208), (418, 12235), (423, 12277), (430, 12361), (431, 12376), (432, 12379), (442, 12592),

Gene: Chickaboom_15 Start: 10149, Stop: 12554, Start Num: 8

Candidate Starts for Chickaboom_15:

(Start: 8 @10149 has 53 MA's), (14, 10185), (17, 10203), (24, 10239), (28, 10314), (42, 10359), (54, 10446), (56, 10458), (76, 10617), (78, 10626), (100, 10734), (114, 10821), (124, 10875), (134, 10914), (139, 10953), (182, 11151), (195, 11205), (209, 11268), (210, 11271), (216, 11295), (237, 11382), (244, 11418), (271, 11547), (280, 11604), (281, 11607), (288, 11643), (293, 11661), (296, 11676), (297, 11679), (298, 11685), (299, 11694), (301, 11706), (303, 11712), (305, 11727), (308, 11736), (311, 11754), (313, 11778), (318, 11790), (321, 11808), (323, 11841), (332, 11910), (333, 11919), (334, 11922), (336, 11943), (340, 11979), (350, 12039), (353, 12057), (386, 12267), (416, 12432),

Gene: Chicken_16 Start: 10182, Stop: 12410, Start Num: 8

Candidate Starts for Chicken_16:

(Start: 8 @10182 has 53 MA's), (11, 10197), (14, 10218), (24, 10272), (28, 10347), (35, 10377), (36, 10380), (49, 10434), (62, 10560), (66, 10584), (67, 10593), (69, 10602), (80, 10674), (82, 10680), (86, 10710), (87, 10713), (94, 10749), (98, 10770), (102, 10791), (108, 10815), (114, 10869), (115, 10875), (117, 10881), (120, 10911), (121, 10920), (133, 10962), (144, 11016), (154, 11061), (184, 11199), (195, 11241), (201, 11271), (211, 11313), (224, 11343), (237, 11415), (239, 11424), (242, 11445), (259, 11511), (267, 11559), (268, 11562), (273, 11595), (304, 11673), (328, 11742), (347, 11868), (350, 11889), (352, 11898), (383, 12090), (384, 12093), (386, 12117), (416, 12288), (422, 12345), (426, 12399),

Gene: ChiliPepper_15 Start: 10180, Stop: 12810, Start Num: 10

Candidate Starts for ChiliPepper_15:

(Start: 10 @10180 has 66 MA's), (14, 10213), (20, 10240), (27, 10333), (30, 10345), (35, 10369), (44, 10402), (55, 10474), (75, 10627), (85, 10666), (115, 10837), (130, 10915), (133, 10927), (152, 11029), (163, 11074), (177, 11134), (189, 11197), (202, 11251), (243, 11311), (246, 11323), (253, 11353), (254, 11356), (259, 11377), (270, 11443), (291, 11548), (292, 11554), (307, 11632), (319, 11773), (322, 11797), (324, 11821), (335, 11908), (370, 12145), (375, 12181), (376, 12190), (384, 12223), (387, 12265), (390, 12280), (394, 12304), (415, 12412), (430, 12565), (431, 12580), (433, 12595),

Gene: Chymera_17 Start: 10951, Stop: 12987, Start Num: 22

Candidate Starts for Chymera_17:

(7, 10852), (Start: 22 @10951 has 1 MA's), (25, 10987), (43, 11086), (46, 11095), (49, 11113), (58, 11203), (65, 11260), (67, 11272), (71, 11305), (72, 11314), (77, 11347), (102, 11470), (105, 11482), (106, 11491), (108, 11494), (115, 11554), (116, 11557), (118, 11569), (144, 11695), (168, 11803), (172, 11821), (181, 11854), (190, 11887), (199, 11929), (205, 11953), (208, 11965), (212, 11980), (225, 12019), (233, 12061), (234, 12064), (241, 12103), (246, 12124), (249, 12136), (250, 12139), (265, 12208), (329, 12475), (346, 12574), (360, 12661), (365, 12691), (375, 12763), (388, 12841), (395, 12883), (396, 12886),

Gene: CliffHanger_16 Start: 9935, Stop: 12646, Start Num: 10

Candidate Starts for CliffHanger_16:

(Start: 10 @9935 has 66 MA's), (14, 9968), (31, 10109), (32, 10115), (40, 10151), (44, 10163), (88, 10415), (90, 10421), (107, 10514), (113, 10565), (123, 10631), (162, 10793), (170, 10826), (180, 10862), (196, 10928), (198, 10937), (213, 11000), (222, 11033), (242, 11153), (251, 11189), (258, 11219), (276, 11321), (285, 11363), (287, 11375), (294, 11396), (297, 11408), (315, 11576), (335, 11738), (339, 11780), (342, 11798), (344, 11804), (348, 11834), (361, 11912), (366, 11945), (373, 11999), (374, 12005), (387, 12092), (390, 12107), (391, 12116), (399, 12146), (415, 12248), (418, 12275), (424, 12332), (428, 12374), (430, 12401), (439, 12548),

Gene: Colusalem_16 Start: 10214, Stop: 12349, Start Num: 8

Candidate Starts for Colusalem_16:

(Start: 8 @10214 has 53 MA's), (14, 10247), (15, 10253), (17, 10265), (35, 10370), (62, 10535), (65, 10556), (85, 10670), (97, 10733), (105, 10775), (109, 10796), (110, 10817), (126, 10898), (127, 10901), (129, 10910), (133, 10922), (134, 10925), (160, 11042), (166, 11072), (177, 11114), (178, 11123), (207, 11240), (216, 11273), (226, 11300), (229, 11324), (233, 11336), (235, 11345), (236, 11354), (244, 11393), (253, 11429), (256, 11441), (259, 11453), (262, 11474), (267, 11501), (272, 11534), (274, 11549), (333, 11711), (336, 11735), (341, 11774), (347, 11810), (364, 11918), (372, 11972), (385, 12038), (386, 12059), (416, 12230), (420, 12263), (421, 12275), (425, 12320), (426, 12341),

Gene: Coral_16 Start: 10214, Stop: 12349, Start Num: 8

Candidate Starts for Coral_16:

(Start: 8 @10214 has 53 MA's), (14, 10247), (15, 10253), (17, 10265), (35, 10370), (62, 10535), (65, 10556), (85, 10670), (97, 10733), (105, 10775), (109, 10796), (110, 10817), (126, 10898), (127,

10901), (129, 10910), (133, 10922), (134, 10925), (160, 11042), (166, 11072), (177, 11114), (178, 11123), (207, 11240), (216, 11273), (226, 11300), (229, 11324), (233, 11336), (235, 11345), (236, 11354), (244, 11393), (253, 11429), (256, 11441), (259, 11453), (262, 11474), (267, 11501), (272, 11534), (274, 11549), (333, 11711), (336, 11735), (341, 11774), (347, 11810), (364, 11918), (372, 11972), (385, 12038), (386, 12059), (416, 12230), (420, 12263), (421, 12275), (425, 12320), (426, 12341),

Gene: Cote_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for Cote_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: CroZenni_16 Start: 10285, Stop: 13044, Start Num: 10

Candidate Starts for CroZenni_16:

(Start: 10 @10285 has 66 MA's), (27, 10438), (28, 10444), (37, 10483), (67, 10669), (82, 10753), (85, 10771), (105, 10870), (115, 10942), (127, 11008), (130, 11020), (132, 11029), (136, 11044), (140, 11077), (142, 11086), (145, 11104), (159, 11164), (161, 11170), (163, 11179), (164, 11185), (169, 11209), (171, 11221), (189, 11302), (217, 11416), (221, 11428), (238, 11524), (246, 11563), (266, 11659), (270, 11683), (279, 11737), (286, 11773), (289, 11782), (292, 11794), (307, 11872), (315, 11986), (319, 12013), (326, 12097), (345, 12208), (346, 12217), (354, 12283), (366, 12349), (382, 12445), (387, 12490), (390, 12505), (399, 12544), (409, 12613), (413, 12631), (414, 12634), (415, 12646), (418, 12673), (429, 12787), (430, 12799), (433, 12829), (438, 12937),

Gene: CupcakePrincess_16 Start: 10399, Stop: 13161, Start Num: 10

Candidate Starts for CupcakePrincess_16:

(Start: 10 @10399 has 66 MA's), (27, 10552), (28, 10558), (35, 10588), (37, 10597), (44, 10621), (55, 10693), (85, 10885), (105, 10984), (115, 11056), (130, 11134), (132, 11143), (133, 11146), (140, 11191), (142, 11200), (161, 11284), (163, 11293), (164, 11299), (166, 11311), (169, 11323), (171, 11335), (189, 11416), (210, 11503), (217, 11530), (220, 11539), (238, 11638), (246, 11677), (266, 11773), (270, 11797), (279, 11851), (292, 11908), (307, 11986), (315, 12100), (319, 12127), (335, 12262), (342, 12322), (354, 12400), (359, 12421), (367, 12469), (382, 12562), (387, 12607), (390, 12622), (399, 12661), (409, 12730), (413, 12748), (414, 12751), (415, 12763), (418, 12790), (430, 12916), (431, 12931), (433, 12946),

Gene: Cygnet_16 Start: 10164, Stop: 12530, Start Num: 8

Candidate Starts for Cygnet_16:

(Start: 8 @10164 has 53 MA's), (11, 10179), (14, 10200), (29, 10332), (45, 10395), (52, 10455), (57, 10494), (61, 10533), (63, 10554), (66, 10566), (67, 10575), (69, 10584), (80, 10656), (82, 10662), (87, 10695), (94, 10731), (95, 10737), (98, 10752), (108, 10797), (114, 10851), (115, 10857), (120, 10893), (121, 10902), (133, 10944), (144, 10998), (154, 11043), (181, 11169), (184, 11181), (195, 11223), (201, 11253), (207, 11280), (229, 11364), (235, 11385), (238, 11403), (249, 11454), (253, 11469), (256, 11481), (259, 11493), (260, 11502), (267, 11541), (272, 11574), (273, 11577), (284, 11640), (302, 11727), (323, 11805), (327, 11853), (341, 11946), (346, 11967), (347, 11982), (355, 12036), (382, 12198), (385, 12210), (386, 12231), (389, 12264), (393, 12294), (407, 12354), (422, 12465), (425, 12498),

Gene: Damocles_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for Damocles_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: DanHam62_15 Start: 9788, Stop: 12076, Start Num: 8

Candidate Starts for DanHam62_15:

(Start: 8 @9788 has 53 MA's), (11, 9800), (14, 9821), (16, 9830), (17, 9839), (29, 9941), (44, 9983), (62, 10121), (70, 10175), (73, 10205), (94, 10307), (97, 10319), (99, 10337), (105, 10361), (109, 10382), (110, 10403), (126, 10484), (127, 10487), (129, 10496), (133, 10508), (160, 10628), (166, 10658), (177, 10700), (207, 10826), (214, 10850), (224, 10871), (232, 10919), (235, 10931), (237, 10943), (239, 10952), (244, 10979), (253, 11015), (256, 11027), (257, 11030), (259, 11039), (267, 11087), (271, 11108), (302, 11273), (332, 11420), (333, 11429), (341, 11492), (353, 11567), (372, 11690), (383, 11750), (385, 11756), (386, 11777), (398, 11852), (426, 12068),

Gene: Daob_17 Start: 10378, Stop: 12513, Start Num: 8

Candidate Starts for Daob_17:

(Start: 8 @10378 has 53 MA's), (14, 10411), (15, 10417), (17, 10429), (35, 10534), (62, 10699), (65, 10720), (85, 10834), (97, 10897), (105, 10939), (109, 10960), (110, 10981), (126, 11062), (127, 11065), (129, 11074), (133, 11086), (134, 11089), (160, 11206), (166, 11236), (177, 11278), (178, 11287), (207, 11404), (216, 11437), (226, 11464), (229, 11488), (233, 11500), (235, 11509), (236, 11518), (244, 11557), (253, 11593), (256, 11605), (259, 11617), (262, 11638), (267, 11665), (272, 11698), (274, 11713), (333, 11875), (336, 11899), (341, 11938), (347, 11974), (364, 12082), (372, 12136), (385, 12202), (386, 12223), (416, 12394), (420, 12427), (421, 12439), (425, 12484), (426, 12505),

Gene: DickRichards_16 Start: 10780, Stop: 13539, Start Num: 10

Candidate Starts for DickRichards_16:

(Start: 10 @10780 has 66 MA's), (27, 10933), (28, 10939), (37, 10978), (67, 11164), (82, 11248), (85, 11266), (105, 11365), (115, 11437), (127, 11503), (130, 11515), (132, 11524), (136, 11539), (140, 11572), (142, 11581), (145, 11599), (159, 11659), (161, 11665), (163, 11674), (164, 11680), (169, 11704), (171, 11716), (179, 11746), (189, 11797), (217, 11911), (221, 11923), (238, 12019), (246, 12058), (266, 12154), (279, 12232), (286, 12268), (289, 12277), (292, 12289), (307, 12367), (315, 12481), (319, 12508), (326, 12592), (341, 12685), (345, 12703), (346, 12712), (354, 12778), (366, 12844), (382, 12940), (387, 12985), (390, 13000), (399, 13039), (409, 13108), (413, 13126), (414, 13129), (415, 13141), (418, 13168), (429, 13282), (430, 13294), (433, 13324), (438, 13432),

Gene: Didgeridoo_17 Start: 10509, Stop: 13271, Start Num: 10

Candidate Starts for Didgeridoo_17:

(Start: 10 @10509 has 66 MA's), (27, 10662), (30, 10674), (44, 10731), (55, 10803), (75, 10956), (85, 10995), (115, 11166), (130, 11244), (133, 11256), (134, 11259), (140, 11301), (157, 11382), (163, 11403), (177, 11463), (180, 11481), (189, 11526), (202, 11580), (217, 11640), (221, 11652), (225, 11679), (246, 11787), (264, 11871), (270, 11907), (286, 11997), (289, 12006), (292, 12018), (307, 12096), (315, 12210), (319, 12237), (325, 12312), (335, 12372), (342, 12432), (354, 12510), (359, 12531), (367, 12579), (382, 12672), (387, 12717), (390, 12732), (392, 12744), (399, 12771), (409, 12840), (414, 12861), (415, 12873), (418, 12900), (430, 13026), (431, 13041), (433, 13056), (440, 13182), (442, 13257),

Gene: DirtyBubble_16 Start: 10465, Stop: 13095, Start Num: 10

Candidate Starts for DirtyBubble_16:

(Start: 10 @10465 has 66 MA's), (20, 10525), (27, 10618), (28, 10624), (30, 10630), (37, 10663), (55, 10759), (75, 10912), (85, 10951), (97, 11011), (102, 11038), (115, 11122), (130, 11200), (134, 11215), (137, 11236), (138, 11242), (148, 11296), (157, 11338), (163, 11359), (177, 11419), (180, 11437), (189, 11482), (194, 11500), (243, 11596), (245, 11605), (246, 11608), (254, 11641), (259, 11662), (270, 11728), (315, 12031), (316, 12034), (319, 12058), (322, 12082), (335, 12193), (342, 12253), (354, 12337), (366, 12403), (368, 12415), (370, 12430), (377, 12478), (380, 12487), (381, 12490), (387, 12550), (390, 12565), (408, 12649), (415, 12697), (430, 12850), (431, 12865), (433, 12880), (437, 12967), (441, 13009),

Gene: Dismas_15 Start: 10180, Stop: 12810, Start Num: 10

Candidate Starts for Dismas_15:

(Start: 10 @10180 has 66 MA's), (14, 10213), (20, 10240), (27, 10333), (30, 10345), (35, 10369), (44, 10402), (55, 10474), (75, 10627), (85, 10666), (115, 10837), (130, 10915), (133, 10927), (152, 11029), (163, 11074), (177, 11134), (189, 11197), (202, 11251), (243, 11311), (246, 11323), (252, 11350), (253, 11353), (254, 11356), (259, 11377), (270, 11443), (291, 11548), (292, 11554), (307, 11632), (319, 11773), (322, 11797), (324, 11821), (335, 11908), (370, 12145), (375, 12181), (376, 12190), (384, 12223), (387, 12265), (390, 12280), (394, 12304), (415, 12412), (430, 12565), (431, 12580), (433, 12595),

Gene: Doobus_16 Start: 10637, Stop: 13396, Start Num: 10

Candidate Starts for Doobus_16:

(Start: 10 @10637 has 66 MA's), (27, 10790), (37, 10835), (60, 10976), (85, 11123), (115, 11294), (127, 11360), (130, 11372), (132, 11381), (140, 11429), (142, 11438), (159, 11516), (161, 11522), (163, 11531), (164, 11537), (169, 11561), (171, 11573), (177, 11591), (189, 11654), (217, 11768), (221, 11780), (238, 11876), (246, 11915), (276, 12074), (286, 12125), (289, 12134), (292, 12146), (307, 12224), (315, 12338), (319, 12365), (326, 12449), (341, 12542), (345, 12560), (346, 12569), (354, 12635), (366, 12701), (382, 12797), (387, 12842), (390, 12857), (399, 12896), (409, 12965), (413, 12983), (414, 12986), (415, 12998), (418, 13025), (429, 13139), (430, 13151), (433, 13181), (438, 13289),

Gene: Eesa_16 Start: 10396, Stop: 12624, Start Num: 8

Candidate Starts for Eesa_16:

(Start: 8 @10396 has 53 MA's), (11, 10411), (14, 10432), (24, 10486), (28, 10561), (35, 10591), (40, 10612), (49, 10648), (62, 10774), (66, 10798), (67, 10807), (69, 10816), (80, 10888), (87, 10927), (94, 10963), (98, 10984), (102, 11005), (108, 11029), (114, 11083), (115, 11089), (117, 11095), (120, 11125), (121, 11134), (133, 11176), (144, 11230), (154, 11275), (184, 11413), (195, 11455), (201, 11485), (211, 11527), (224, 11557), (235, 11617), (237, 11629), (239, 11638), (242, 11659), (259, 11725), (267, 11773), (271, 11794), (273, 11809), (275, 11827), (304, 11887), (352, 12112), (386, 12331), (416, 12502), (422, 12559), (426, 12613),

Gene: Elva_17 Start: 10426, Stop: 13056, Start Num: 10

Candidate Starts for Elva_17:

(Start: 10 @10426 has 66 MA's), (20, 10486), (27, 10579), (30, 10591), (37, 10624), (55, 10720), (75, 10873), (85, 10912), (97, 10972), (115, 11083), (130, 11161), (132, 11170), (134, 11176), (137, 11197), (140, 11218), (148, 11257), (157, 11299), (163, 11320), (177, 11380), (189, 11443), (194, 11461), (202, 11497), (242, 11554), (246, 11569), (254, 11602), (267, 11671), (270, 11689), (282, 11758), (315, 11992), (319, 12019), (322, 12043), (335, 12154), (342, 12214), (354, 12298), (358, 12316), (366, 12364), (370, 12391), (380, 12448), (381, 12451), (387, 12511), (390, 12526), (408, 12610), (415, 12658), (430, 12811), (431, 12826), (433, 12841), (437, 12928), (441, 12970),

Gene: Eula_16 Start: 10360, Stop: 13122, Start Num: 10

Candidate Starts for Eula_16:

(Start: 10 @10360 has 66 MA's), (27, 10513), (35, 10549), (37, 10558), (60, 10699), (67, 10744), (82, 10828), (85, 10846), (115, 11017), (127, 11083), (130, 11095), (132, 11104), (140, 11152), (142, 11161), (161, 11245), (163, 11254), (164, 11260), (166, 11272), (169, 11284), (171, 11296), (189, 11377), (210, 11464), (217, 11491), (220, 11500), (238, 11599), (266, 11734), (270, 11758), (307, 11947), (315, 12061), (319, 12088), (335, 12223), (342, 12283), (354, 12361), (359, 12382), (367, 12430), (382, 12523), (387, 12568), (390, 12583), (399, 12622), (409, 12691), (413, 12709), (414, 12712), (415, 12724), (418, 12751), (430, 12877), (431, 12892), (433, 12907),

Gene: Finalfrontier_17 Start: 10873, Stop: 13635, Start Num: 10

Candidate Starts for Finalfrontier_17:

(Start: 10 @10873 has 66 MA's), (27, 11026), (28, 11032), (35, 11062), (37, 11071), (44, 11095), (55, 11167), (85, 11359), (105, 11458), (115, 11530), (130, 11608), (132, 11617), (133, 11620), (140, 11665), (142, 11674), (161, 11758), (163, 11767), (164, 11773), (166, 11785), (169, 11797), (171, 11809), (189, 11890), (210, 11977), (217, 12004), (220, 12013), (238, 12112), (246, 12151), (266, 12247), (270, 12271), (279, 12325), (292, 12382), (307, 12460), (315, 12574), (319, 12601), (325, 12676), (335, 12736), (342, 12796), (354, 12874), (359, 12895), (367, 12943), (382, 13036), (387, 13081), (390, 13096), (392, 13108), (399, 13135), (409, 13204), (414, 13225), (415, 13237), (418, 13264), (430, 13390), (431, 13405), (433, 13420), (440, 13546), (442, 13621),

Gene: Fingolfin_15 Start: 9789, Stop: 12077, Start Num: 8

Candidate Starts for Fingolfin_15:

(Start: 8 @9789 has 53 MA's), (11, 9801), (14, 9822), (16, 9831), (17, 9840), (29, 9942), (44, 9984), (62, 10122), (70, 10176), (73, 10206), (94, 10308), (97, 10320), (99, 10338), (105, 10362), (109, 10383), (110, 10404), (126, 10485), (127, 10488), (129, 10497), (133, 10509), (160, 10629), (166, 10659), (177, 10701), (207, 10827), (214, 10851), (224, 10872), (232, 10920), (235, 10932), (237, 10944), (239, 10953), (244, 10980), (253, 11016), (256, 11028), (257, 11031), (259, 11040), (267, 11088), (271, 11109), (302, 11274), (332, 11421), (333, 11430), (341, 11493), (353, 11568), (372, 11691), (383, 11751), (385, 11757), (386, 11778), (398, 11853), (426, 12069),

Gene: FlameThrower_15 Start: 9717, Stop: 12494, Start Num: 10

Candidate Starts for FlameThrower_15:

(Start: 10 @9717 has 66 MA's), (14, 9750), (26, 9858), (44, 9936), (79, 10188), (81, 10194), (83, 10197), (107, 10338), (119, 10446), (125, 10470), (173, 10698), (185, 10746), (186, 10749), (190, 10767), (193, 10776), (197, 10797), (243, 10995), (245, 11004), (246, 11007), (260, 11070), (270, 11127), (289, 11226), (291, 11232), (292, 11238), (315, 11430), (319, 11457), (323, 11502), (335, 11592), (337, 11616), (339, 11634), (342, 11652), (350, 11706), (354, 11736), (367, 11805), (370, 11829), (380, 11886), (381, 11889), (387, 11949), (390, 11964), (414, 12084), (415, 12096), (418, 12123), (423, 12165), (430, 12249), (431, 12264), (432, 12267), (442, 12480),

Gene: Galaxy_16 Start: 10481, Stop: 12862, Start Num: 8

Candidate Starts for Galaxy_16:

(Start: 8 @10481 has 53 MA's), (14, 10517), (17, 10535), (36, 10667), (40, 10685), (56, 10790), (76, 10949), (78, 10958), (84, 10979), (86, 10997), (100, 11066), (112, 11141), (114, 11153), (124, 11207), (139, 11285), (166, 11408), (182, 11483), (195, 11537), (208, 11597), (209, 11600), (212, 11612), (216, 11627), (227, 11657), (237, 11714), (240, 11732), (244, 11750), (253, 11786), (265, 11843), (267, 11858), (271, 11879), (277, 11921), (280, 11936), (281, 11939), (283, 11951), (288, 11975), (297, 12011), (298, 12017), (299, 12026), (303, 12044), (309, 12077), (311, 12086), (313, 12110), (318, 12122), (321, 12140), (323, 12173), (332, 12242), (333, 12251), (334, 12254), (336, 12275), (350, 12371), (364, 12458), (371, 12500), (372, 12512), (386, 12599), (393, 12662), (397, 12674), (419, 12794),

Gene: Glotell_15 Start: 9786, Stop: 12074, Start Num: 8

Candidate Starts for Glotell_15:

(Start: 8 @9786 has 53 MA's), (11, 9798), (14, 9819), (16, 9828), (17, 9837), (29, 9939), (44, 9981), (62, 10119), (70, 10173), (73, 10203), (94, 10305), (97, 10317), (99, 10335), (105, 10359), (109, 10380), (110, 10401), (126, 10482), (127, 10485), (129, 10494), (133, 10506), (160, 10626), (166, 10656), (177, 10698), (207, 10824), (214, 10848), (224, 10869), (232, 10917), (235, 10929), (237, 10941), (239, 10950), (244, 10977), (253, 11013), (256, 11025), (257, 11028), (259, 11037), (267, 11085), (271, 11106), (302, 11271), (332, 11418), (333, 11427), (341, 11490), (343, 11502), (353, 11565), (372, 11688), (383, 11748), (385, 11754), (386, 11775), (398, 11850), (426, 12066),

Gene: GramZayde_16 Start: 10214, Stop: 12349, Start Num: 8

Candidate Starts for GramZayde_16:

(Start: 8 @10214 has 53 MA's), (14, 10247), (15, 10253), (17, 10265), (35, 10370), (62, 10535), (65, 10556), (85, 10670), (97, 10733), (105, 10775), (109, 10796), (110, 10817), (126, 10898), (127, 10901), (129, 10910), (133, 10922), (134, 10925), (160, 11042), (166, 11072), (177, 11114), (178, 11123), (207, 11240), (216, 11273), (226, 11300), (229, 11324), (233, 11336), (235, 11345), (236, 11354), (244, 11393), (253, 11429), (256, 11441), (259, 11453), (262, 11474), (267, 11501), (272, 11534), (274, 11549), (333, 11711), (336, 11735), (341, 11774), (347, 11810), (364, 11918), (372, 11972), (385, 12038), (386, 12059), (416, 12230), (420, 12263), (421, 12275), (425, 12320), (426, 12341),

Gene: Gravel_17 Start: 10380, Stop: 12530, Start Num: 8

Candidate Starts for Gravel_17:

(Start: 8 @10380 has 53 MA's), (14, 10416), (17, 10434), (21, 10455), (44, 10575), (51, 10626), (67, 10746), (84, 10842), (97, 10911), (99, 10929), (105, 10953), (110, 10995), (126, 11076), (127, 11079), (129, 11088), (133, 11100), (160, 11220), (166, 11250), (177, 11292), (204, 11406), (207, 11418), (217, 11454), (236, 11532), (238, 11541), (259, 11631), (267, 11679), (271, 11700), (275, 11733), (288, 11793), (328, 11862), (331, 11877), (352, 12018), (386, 12237), (400, 12324), (416, 12408), (422, 12465), (426, 12519),

Gene: Grist_16 Start: 10331, Stop: 13093, Start Num: 10

Candidate Starts for Grist_16:

(Start: 10 @10331 has 66 MA's), (27, 10484), (30, 10496), (44, 10553), (55, 10625), (75, 10778), (85, 10817), (115, 10988), (130, 11066), (133, 11078), (134, 11081), (140, 11123), (157, 11204), (163, 11225), (177, 11285), (180, 11303), (189, 11348), (194, 11366), (202, 11402), (217, 11462), (221, 11474), (246, 11609), (264, 11693), (270, 11729), (286, 11819), (307, 11918), (315, 12032), (319, 12059), (325, 12134), (335, 12194), (342, 12254), (354, 12332), (359, 12353), (367, 12401), (382, 12494), (387, 12539), (390, 12554), (392, 12566), (399, 12593), (409, 12662), (414, 12683), (415, 12695), (418, 12722), (430, 12848), (431, 12863), (433, 12878), (440, 13004), (442, 13079),

Gene: HamCheese_15 Start: 9788, Stop: 12076, Start Num: 8

Candidate Starts for HamCheese_15:

(Start: 8 @9788 has 53 MA's), (11, 9800), (14, 9821), (16, 9830), (17, 9839), (29, 9941), (44, 9983), (62, 10121), (70, 10175), (73, 10205), (94, 10307), (97, 10319), (99, 10337), (105, 10361), (109, 10382), (110, 10403), (126, 10484), (127, 10487), (129, 10496), (133, 10508), (160, 10628), (166, 10658), (177, 10700), (207, 10826), (214, 10850), (224, 10871), (232, 10919), (235, 10931), (237, 10943), (239, 10952), (244, 10979), (253, 11015), (256, 11027), (257, 11030), (259, 11039), (267, 11087), (271, 11108), (302, 11273), (332, 11420), (333, 11429), (341, 11492), (343, 11504), (353, 11567), (362, 11615), (372, 11690), (383, 11750), (385, 11756), (386, 11777), (398, 11852), (426, 12068),

Gene: HannahPhantana_17 Start: 10378, Stop: 12513, Start Num: 8

Candidate Starts for HannahPhantana_17:

(Start: 8 @10378 has 53 MA's), (14, 10411), (15, 10417), (17, 10429), (35, 10534), (46, 10567), (62, 10699), (65, 10720), (85, 10834), (97, 10897), (105, 10939), (109, 10960), (110, 10981), (126, 11062), (127, 11065), (129, 11074), (133, 11086), (134, 11089), (160, 11206), (166, 11236), (177, 11278), (178, 11287), (207, 11404), (216, 11437), (226, 11464), (229, 11488), (233, 11500), (235, 11509), (236, 11518), (244, 11557), (253, 11593), (256, 11605), (259, 11617), (262, 11638), (267, 11665), (272, 11698), (274, 11713), (333, 11875), (336, 11899), (341, 11938), (347, 11974), (364, 12082), (372, 12136), (385, 12202), (386, 12223), (416, 12394), (420, 12427), (421, 12439), (425, 12484), (426, 12505),

Gene: Icarian_17 Start: 10347, Stop: 12977, Start Num: 10

Candidate Starts for Icarian_17:

(Start: 10 @10347 has 66 MA's), (20, 10407), (27, 10500), (30, 10512), (37, 10545), (55, 10641), (75, 10794), (85, 10833), (115, 11004), (130, 11082), (134, 11097), (137, 11118), (138, 11124), (148, 11178), (163, 11241), (177, 11301), (189, 11364), (194, 11382), (202, 11418), (243, 11478), (245, 11487), (246, 11490), (254, 11523), (259, 11544), (270, 11610), (282, 11679), (315, 11913), (316, 11916), (319, 11940), (322, 11964), (335, 12075), (342, 12135), (354, 12219), (358, 12237), (366, 12285), (369, 12309), (370, 12312), (375, 12348), (380, 12369), (381, 12372), (387, 12432), (390, 12447), (414, 12567), (415, 12579), (430, 12732), (431, 12747), (433, 12762), (437, 12849), (441, 12891),

Gene: IndyLu_16 Start: 10331, Stop: 13093, Start Num: 10

Candidate Starts for IndyLu_16:

(Start: 10 @10331 has 66 MA's), (27, 10484), (30, 10496), (44, 10553), (55, 10625), (75, 10778), (85, 10817), (115, 10988), (130, 11066), (133, 11078), (134, 11081), (140, 11123), (157, 11204), (163, 11225), (177, 11285), (180, 11303), (189, 11348), (194, 11366), (202, 11402), (217, 11462), (221, 11474), (225, 11501), (246, 11609), (264, 11693), (270, 11729), (286, 11819), (307, 11918), (315, 12032), (319, 12059), (325, 12134), (335, 12194), (342, 12254), (354, 12332), (359, 12353), (367, 12401), (382, 12494), (387, 12539), (390, 12554), (392, 12566), (399, 12593), (409, 12662), (414, 12683), (415, 12695), (418, 12722), (430, 12848), (431, 12863), (433, 12878), (440, 13004), (442, 13079),

Gene: Jabb_16 Start: 10399, Stop: 13161, Start Num: 10

Candidate Starts for Jabb_16:

(Start: 10 @10399 has 66 MA's), (27, 10552), (28, 10558), (35, 10588), (37, 10597), (44, 10621), (55, 10693), (85, 10885), (105, 10984), (115, 11056), (130, 11134), (132, 11143), (133, 11146), (140, 11191), (142, 11200), (161, 11284), (163, 11293), (164, 11299), (166, 11311), (169, 11323), (171, 11335), (189, 11416), (210, 11503), (217, 11530), (220, 11539), (238, 11638), (246, 11677), (266, 11773), (270, 11797), (279, 11851), (292, 11908), (307, 11986), (315, 12100), (319, 12127), (335, 12262), (342, 12322), (354, 12400), (359, 12421), (367, 12469), (382, 12562), (387, 12607), (390, 12622), (399, 12661), (409, 12730), (413, 12748), (414, 12751), (415, 12763), (418, 12790), (430, 12916), (431, 12931), (433, 12946),

Gene: Jamun_16 Start: 10816, Stop: 13221, Start Num: 8

Candidate Starts for Jamun_16:

(Start: 8 @10816 has 53 MA's), (14, 10852), (17, 10870), (24, 10906), (28, 10981), (42, 11026), (54, 11113), (56, 11125), (76, 11284), (78, 11293), (89, 11344), (100, 11401), (101, 11407), (114, 11488), (124, 11542), (134, 11581), (139, 11620), (182, 11818), (195, 11872), (208, 11932), (209, 11935), (216, 11962), (236, 12046), (244, 12085), (248, 12103), (253, 12121), (263, 12169), (271, 12214), (281, 12274), (283, 12286), (287, 12307), (288, 12310), (293, 12328), (296, 12343), (297, 12346), (298, 12352), (299, 12361), (301, 12373), (303, 12379), (305, 12394), (308, 12403), (311, 12421), (313, 12445), (318, 12457), (321, 12475), (323, 12508), (332, 12577), (333, 12586), (334, 12589), (336, 12610), (340, 12646), (350, 12706), (353, 12724), (386, 12934), (404, 13042), (416, 13099), (422, 13156),

Gene: Jerole_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for Jerole_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: Johnathan_16 Start: 10389, Stop: 13148, Start Num: 10

Candidate Starts for Johnathan_16:

(1, 10236), (4, 10317), (Start: 10 @10389 has 66 MA's), (27, 10542), (28, 10548), (37, 10587), (67, 10773), (85, 10875), (115, 11046), (127, 11112), (130, 11124), (132, 11133), (136, 11148), (140, 11181), (142, 11190), (145, 11208), (159, 11268), (161, 11274), (163, 11283), (164, 11289), (169, 11313), (171, 11325), (177, 11343), (189, 11406), (217, 11520), (221, 11532), (238, 11628), (246, 11667), (276, 11826), (286, 11877), (289, 11886), (292, 11898), (307, 11976), (315, 12090), (319, 12117), (326, 12201), (341, 12294), (345, 12312), (346, 12321), (354, 12387), (366, 12453), (382, 12549), (387, 12594), (390, 12609), (399, 12648), (409, 12717), (413, 12735), (414, 12738), (415, 12750), (418, 12777), (429, 12891), (430, 12903), (433, 12933), (438, 13041),

Gene: Jovita_16 Start: 10461, Stop: 13223, Start Num: 10

Candidate Starts for Jovita_16:

(Start: 10 @10461 has 66 MA's), (27, 10614), (28, 10620), (37, 10659), (44, 10683), (55, 10755), (85, 10947), (105, 11046), (115, 11118), (130, 11196), (132, 11205), (133, 11208), (140, 11253), (142, 11262), (161, 11346), (163, 11355), (164, 11361), (166, 11373), (169, 11385), (171, 11397), (189, 11478), (210, 11565), (217, 11592), (220, 11601), (238, 11700), (246, 11739), (266, 11835), (270, 11859), (279, 11913), (286, 11949), (289, 11958), (292, 11970), (315, 12162), (319, 12189), (335, 12324), (342, 12384), (354, 12462), (382, 12624), (387, 12669), (390, 12684), (399, 12723), (409, 12792), (413, 12810), (414, 12813), (415, 12825), (418, 12852), (430, 12978), (431, 12993), (433, 13008),

Gene: Juno112_15 Start: 9789, Stop: 12077, Start Num: 8

Candidate Starts for Juno112_15:

(Start: 8 @9789 has 53 MA's), (11, 9801), (14, 9822), (16, 9831), (17, 9840), (29, 9942), (44, 9984), (62, 10122), (70, 10176), (73, 10206), (94, 10308), (97, 10320), (99, 10338), (105, 10362), (109, 10383), (110, 10404), (126, 10485), (127, 10488), (129, 10497), (133, 10509), (160, 10629), (166, 10659), (177, 10701), (207, 10827), (214, 10851), (224, 10872), (232, 10920), (235, 10932), (237, 10944), (239, 10953), (244, 10980), (253, 11016), (256, 11028), (257, 11031), (259, 11040), (267, 11088), (271, 11109), (302, 11274), (332, 11421), (333, 11430), (341, 11493), (353, 11568), (372, 11691), (383, 11751), (385, 11757), (386, 11778), (398, 11853), (426, 12069),

Gene: KHumphrey_15 Start: 9786, Stop: 12074, Start Num: 8

Candidate Starts for KHumphrey_15:

(Start: 8 @9786 has 53 MA's), (11, 9798), (14, 9819), (16, 9828), (17, 9837), (29, 9939), (44, 9981), (62, 10119), (70, 10173), (73, 10203), (94, 10305), (97, 10317), (99, 10335), (105, 10359), (109, 10380), (110, 10401), (126, 10482), (127, 10485), (129, 10494), (133, 10506), (160, 10626), (166, 10656), (177, 10698), (207, 10824), (214, 10848), (224, 10869), (232, 10917), (235, 10929), (237, 10941), (239, 10950), (244, 10977), (253, 11013), (256, 11025), (257, 11028), (259, 11037), (267, 11085), (271, 11106), (302, 11271), (332, 11418), (333, 11427), (341, 11490), (343, 11502), (353, 11565), (372, 11688), (383, 11748), (385, 11754), (386, 11775), (398, 11850), (426, 12066),

Gene: Kamdara_15 Start: 10179, Stop: 12809, Start Num: 10

Candidate Starts for Kamdara_15:

(Start: 10 @10179 has 66 MA's), (14, 10212), (20, 10239), (27, 10332), (30, 10344), (35, 10368), (44, 10401), (55, 10473), (75, 10626), (85, 10665), (115, 10836), (130, 10914), (133, 10926), (152, 11028), (163, 11073), (177, 11133), (189, 11196), (202, 11250), (243, 11310), (246, 11322), (253, 11352), (254, 11355), (259, 11376), (270, 11442), (291, 11547), (292, 11553), (307, 11631), (319, 11772), (322, 11796), (324, 11820), (335, 11907), (370, 12144), (375, 12180), (376, 12189), (384, 12222), (387, 12264), (390, 12279), (394, 12303), (415, 12411), (430, 12564), (431, 12579), (433, 12594),

Gene: Kate33_16 Start: 10330, Stop: 13092, Start Num: 10

Candidate Starts for Kate33_16:

(Start: 10 @10330 has 66 MA's), (27, 10483), (30, 10495), (44, 10552), (55, 10624), (75, 10777), (85, 10816), (115, 10987), (130, 11065), (133, 11077), (134, 11080), (140, 11122), (157, 11203), (163, 11224), (177, 11284), (180, 11302), (189, 11347), (194, 11365), (202, 11401), (217, 11461), (221, 11473), (225, 11500), (246, 11608), (264, 11692), (270, 11728), (286, 11818), (307, 11917), (315, 12031), (319, 12058), (325, 12133), (335, 12193), (342, 12253), (354, 12331), (359, 12352), (367, 12400), (382, 12493), (387, 12538), (390, 12553), (392, 12565), (399, 12592), (409, 12661), (414, 12682), (415, 12694), (418, 12721), (430, 12847), (431, 12862), (433, 12877), (440, 13003), (442, 13078),

Gene: Katzastrophic_15 Start: 9892, Stop: 12669, Start Num: 10

Candidate Starts for Katzastrophic_15:

(Start: 10 @9892 has 66 MA's), (14, 9925), (26, 10033), (44, 10111), (79, 10363), (81, 10369), (83, 10372), (107, 10513), (119, 10621), (125, 10645), (127, 10654), (146, 10753), (173, 10873), (185, 10921), (186, 10924), (190, 10942), (193, 10951), (197, 10972), (243, 11170), (245, 11179), (246, 11182), (260, 11245), (270, 11302), (289, 11401), (291, 11407), (292, 11413), (315, 11605), (319, 11632), (323, 11677), (335, 11767), (337, 11791), (339, 11809), (342, 11827), (350, 11881), (354, 11911), (367, 11980), (370, 12004), (380, 12061), (381, 12064), (387, 12124), (390, 12139), (414, 12259), (415, 12271), (418, 12298), (423, 12340), (430, 12424), (431, 12439), (432, 12442), (442, 12655),

Gene: KendraB23_17 Start: 10381, Stop: 12531, Start Num: 8

Candidate Starts for KendraB23_17:

(Start: 8 @10381 has 53 MA's), (14, 10417), (17, 10435), (21, 10456), (44, 10576), (51, 10627), (67, 10747), (84, 10843), (97, 10912), (99, 10930), (105, 10954), (110, 10996), (126, 11077), (127, 11080), (129, 11089), (133, 11101), (160, 11221), (166, 11251), (177, 11293), (204, 11407), (207, 11419), (217, 11455), (236, 11533), (238, 11542), (259, 11632), (267, 11680), (271, 11701), (275, 11734), (288, 11794), (328, 11863), (331, 11878), (352, 12019), (386, 12238), (400, 12325), (416, 12409), (422, 12466), (426, 12520),

Gene: Kenzers_16 Start: 10373, Stop: 13135, Start Num: 10

Candidate Starts for Kenzers_16:

(Start: 10 @10373 has 66 MA's), (27, 10526), (37, 10571), (67, 10757), (85, 10859), (115, 11030), (127, 11096), (130, 11108), (132, 11117), (140, 11165), (142, 11174), (145, 11192), (161, 11258), (163, 11267), (164, 11273), (169, 11297), (171, 11309), (189, 11390), (221, 11516), (238, 11612), (246, 11651), (270, 11771), (292, 11882), (297, 11906), (315, 12074), (319, 12101), (335, 12236), (337, 12260), (342, 12296), (353, 12365), (366, 12443), (381, 12530), (382, 12539), (387, 12590), (390, 12605), (394, 12629), (414, 12725), (415, 12737), (430, 12890), (433, 12920), (438, 13028),

Gene: Kepler_16 Start: 10213, Stop: 12348, Start Num: 8

Candidate Starts for Kepler_16:

(Start: 8 @10213 has 53 MA's), (14, 10246), (15, 10252), (17, 10264), (35, 10369), (62, 10534), (65, 10555), (85, 10669), (97, 10732), (105, 10774), (109, 10795), (110, 10816), (126, 10897), (127, 10900), (129, 10909), (133, 10921), (134, 10924), (160, 11041), (166, 11071), (177, 11113), (178, 11122), (207, 11239), (216, 11272), (226, 11299), (229, 11323), (233, 11335), (235, 11344), (236, 11353), (244, 11392), (253, 11428), (256, 11440), (259, 11452), (262, 11473), (267, 11500), (272, 11533), (274, 11548), (333, 11710), (336, 11734), (341, 11773), (347, 11809), (364, 11917), (372, 11971), (385, 12037), (386, 12058), (416, 12229), (420, 12262), (421, 12274), (425, 12319), (426, 12340),

Gene: Kieran_15 Start: 10183, Stop: 12813, Start Num: 10

Candidate Starts for Kieran_15:

(Start: 10 @10183 has 66 MA's), (14, 10216), (20, 10243), (27, 10336), (30, 10348), (35, 10372), (44, 10405), (55, 10477), (75, 10630), (85, 10669), (115, 10840), (130, 10918), (133, 10930), (152, 11032), (163, 11077), (177, 11137), (180, 11155), (189, 11200), (202, 11254), (243, 11314), (246, 11326), (252, 11353), (253, 11356), (254, 11359), (259, 11380), (266, 11422), (270, 11446), (291, 11551), (307, 11635), (319, 11776), (322, 11800), (324, 11824), (335, 11911), (370, 12148), (375, 12184), (376, 12193), (384, 12226), (387, 12268), (390, 12283), (394, 12307), (415, 12415), (430, 12568), (431, 12583), (433, 12598),

Gene: Kuleana_16 Start: 10172, Stop: 12535, Start Num: 9

Candidate Starts for Kuleana_16:

(Start: 9 @10172 has 2 MA's), (14, 10205), (28, 10334), (40, 10385), (52, 10460), (62, 10547), (66, 10571), (69, 10589), (82, 10667), (94, 10736), (95, 10742), (98, 10757), (108, 10802), (114, 10856), (115, 10862), (117, 10868), (120, 10898), (121, 10907), (133, 10949), (144, 11003), (154, 11048), (158, 11069), (181, 11174), (183, 11177), (184, 11186), (197, 11240), (201, 11258), (207, 11285), (211, 11300), (224, 11330), (232, 11378), (235, 11390), (244, 11438), (259, 11498), (260, 11507), (267, 11546), (272, 11579), (273, 11582), (274, 11594), (275, 11600), (302, 11732), (327, 11858), (341, 11951), (355, 12041), (382, 12203), (386, 12236), (389, 12269), (402, 12338), (403, 12344), (416, 12413), (425, 12503), (426, 12524),

Gene: Lahqtemish_16 Start: 10376, Stop: 13138, Start Num: 10

Candidate Starts for Lahqtemish_16:

(Start: 10 @10376 has 66 MA's), (27, 10529), (30, 10541), (44, 10598), (55, 10670), (75, 10823), (85, 10862), (115, 11033), (130, 11111), (134, 11126), (140, 11168), (157, 11249), (163, 11270), (177, 11330), (180, 11348), (189, 11393), (192, 11402), (217, 11507), (221, 11519), (225, 11546), (246, 11654), (264, 11738), (270, 11774), (286, 11864), (289, 11873), (292, 11885), (307, 11963), (315, 12077), (319, 12104), (323, 12149), (335, 12239), (338, 12272), (342, 12299), (354, 12377), (359, 12398), (367, 12446), (382, 12539), (387, 12584), (390, 12599), (392, 12611), (399, 12638), (414, 12728), (415, 12740), (418, 12767), (430, 12893), (431, 12908), (433, 12923), (436, 12962), (441, 13052),

Gene: Laphuphu24k_14 Start: 9788, Stop: 12076, Start Num: 8

Candidate Starts for Laphuphu24k_14:

(Start: 8 @9788 has 53 MA's), (11, 9800), (14, 9821), (16, 9830), (17, 9839), (29, 9941), (44, 9983), (62, 10121), (70, 10175), (73, 10205), (94, 10307), (97, 10319), (99, 10337), (105, 10361), (109, 10382), (110, 10403), (126, 10484), (127, 10487), (129, 10496), (133, 10508), (160, 10628), (166, 10658), (177, 10700), (207, 10826), (214, 10850), (224, 10871), (232, 10919), (235, 10931), (237, 10943), (239, 10952), (244, 10979), (253, 11015), (256, 11027), (257, 11030), (259, 11039), (267, 11087), (271, 11108), (302, 11273), (332, 11420), (333, 11429), (341, 11492), (343, 11504), (353, 11567), (362, 11615), (372, 11690), (383, 11750), (385, 11756), (386, 11777), (398, 11852), (426, 12068),

Gene: Leona_15 Start: 9839, Stop: 12127, Start Num: 8

Candidate Starts for Leona_15:

(Start: 8 @9839 has 53 MA's), (11, 9851), (14, 9872), (16, 9881), (17, 9890), (29, 9992), (44, 10034), (62, 10172), (70, 10226), (73, 10256), (97, 10370), (99, 10388), (105, 10412), (109, 10433), (110, 10454), (126, 10535), (127, 10538), (129, 10547), (133, 10559), (160, 10679), (166, 10709), (177, 10751), (207, 10877), (214, 10901), (224, 10922), (237, 10994), (244, 11030), (253, 11066), (256, 11078), (259, 11090), (262, 11111), (267, 11138), (271, 11159), (302, 11324), (332, 11471), (333, 11480), (341, 11543), (343, 11555), (353, 11618), (372, 11741), (383, 11801), (385, 11807), (386, 11828), (398, 11903), (426, 12119),

Gene: Lilo27_16 Start: 10336, Stop: 13095, Start Num: 10

Candidate Starts for Lilo27_16:

(Start: 10 @10336 has 66 MA's), (27, 10489), (28, 10495), (37, 10534), (44, 10558), (55, 10630), (85, 10822), (97, 10882), (105, 10921), (115, 10993), (130, 11071), (132, 11080), (133, 11083), (140, 11128), (142, 11137), (161, 11221), (163, 11230), (164, 11236), (166, 11248), (169, 11260), (171, 11272), (189, 11353), (210, 11440), (220, 11476), (238, 11575), (270, 11734), (286, 11824), (289, 11833), (292, 11845), (307, 11923), (315, 12037), (319, 12064), (326, 12148), (345, 12259), (346, 12268), (354, 12334), (381, 12487), (382, 12496), (387, 12541), (390, 12556), (399, 12595), (409, 12664), (413, 12682), (414, 12685), (415, 12697), (418, 12724), (429, 12838), (430, 12850), (433, 12880),

Gene: LimaBean_16 Start: 10388, Stop: 13147, Start Num: 10

Candidate Starts for LimaBean_16:

(Start: 10 @10388 has 66 MA's), (27, 10541), (28, 10547), (37, 10586), (67, 10772), (85, 10874), (115, 11045), (127, 11111), (130, 11123), (132, 11132), (136, 11147), (140, 11180), (142, 11189), (145, 11207), (159, 11267), (161, 11273), (163, 11282), (164, 11288), (169, 11312), (171, 11324), (177, 11342), (189, 11405), (217, 11519), (221, 11531), (225, 11558), (238, 11627), (246, 11666), (276, 11825), (286, 11876), (289, 11885), (307, 11975), (315, 12089), (319, 12116), (326, 12200), (341, 12293), (345, 12311), (346, 12320), (354, 12386), (366, 12452), (382, 12548), (387, 12593), (390, 12608), (399, 12647), (409, 12716), (413, 12734), (414, 12737), (415, 12749), (418, 12776), (429, 12890), (430, 12902), (433, 12932), (438, 13040),

Gene: LittleTokyo_16 Start: 10123, Stop: 12486, Start Num: 8

Candidate Starts for LittleTokyo_16:

(Start: 8 @10123 has 53 MA's), (11, 10138), (14, 10159), (16, 10168), (39, 10336), (44, 10351), (52, 10414), (57, 10453), (61, 10492), (62, 10501), (63, 10513), (66, 10525), (67, 10534), (69, 10543), (82, 10621), (87, 10654), (94, 10690), (98, 10711), (106, 10753), (108, 10756), (114, 10810), (115, 10816), (117, 10822), (120, 10852), (121, 10861), (133, 10903), (144, 10957), (154, 11002), (181, 11128), (184, 11140), (195, 11182), (201, 11212), (204, 11227), (207, 11239), (217, 11275), (230, 11326), (235, 11344), (238, 11362), (240, 11374), (249, 11413), (253, 11428), (255, 11437), (257, 11443), (259, 11452), (267, 11500), (272, 11533), (273, 11536), (302, 11686), (327, 11812), (333, 11842), (336, 11866), (341, 11905), (353, 11980), (361, 12025), (371, 12091), (382, 12157), (385, 12169), (386, 12190), (389, 12223), (393, 12253), (402, 12292), (403, 12298), (420, 12397), (425, 12454), (426, 12475),

Gene: Loviatar_16 Start: 10435, Stop: 13065, Start Num: 10

Candidate Starts for Loviatar_16:

(Start: 10 @10435 has 66 MA's), (20, 10495), (27, 10588), (35, 10624), (37, 10633), (55, 10729), (75, 10882), (85, 10921), (115, 11092), (120, 11128), (128, 11161), (133, 11182), (136, 11194), (138, 11212), (142, 11236), (153, 11287), (159, 11314), (161, 11320), (163, 11329), (166, 11347), (180, 11407), (189, 11452), (238, 11539), (243, 11566), (245, 11575), (260, 11641), (270, 11698), (315, 12001), (316, 12004), (319, 12028), (322, 12052), (335, 12163), (342, 12223), (354, 12307), (366, 12373), (368, 12385), (370, 12400), (377, 12448), (380, 12457), (381, 12460), (387, 12520), (390, 12535), (408, 12619), (415, 12667), (430, 12820), (431, 12835), (433, 12850), (437, 12937), (441,

12979),

Gene: Lunar_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for Lunar_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: Lynlen_16 Start: 10373, Stop: 13135, Start Num: 10

Candidate Starts for Lynlen_16:

(Start: 10 @10373 has 66 MA's), (27, 10526), (37, 10571), (67, 10757), (85, 10859), (115, 11030), (127, 11096), (130, 11108), (132, 11117), (140, 11165), (142, 11174), (145, 11192), (161, 11258), (163, 11267), (164, 11273), (169, 11297), (171, 11309), (189, 11390), (221, 11516), (238, 11612), (246, 11651), (270, 11771), (292, 11882), (297, 11906), (315, 12074), (319, 12101), (335, 12236), (337, 12260), (342, 12296), (353, 12365), (366, 12443), (381, 12530), (382, 12539), (387, 12590), (390, 12605), (394, 12629), (414, 12725), (415, 12737), (430, 12890), (433, 12920), (438, 13028),

Gene: Melons_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for Melons_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: Milomuff_17 Start: 10774, Stop: 13533, Start Num: 10

Candidate Starts for Milomuff_17:

(Start: 10 @10774 has 66 MA's), (27, 10927), (28, 10933), (37, 10972), (67, 11158), (85, 11260), (115, 11431), (127, 11497), (130, 11509), (132, 11518), (136, 11533), (140, 11566), (142, 11575), (145, 11593), (159, 11653), (161, 11659), (163, 11668), (164, 11674), (169, 11698), (171, 11710), (177, 11728), (189, 11791), (217, 11905), (221, 11917), (238, 12013), (246, 12052), (276, 12211), (286, 12262), (289, 12271), (292, 12283), (307, 12361), (315, 12475), (319, 12502), (326, 12586), (341, 12679), (345, 12697), (346, 12706), (354, 12772), (366, 12838), (382, 12934), (387, 12979), (390, 12994), (399, 13033), (409, 13102), (413, 13120), (414, 13123), (415, 13135), (418, 13162), (429, 13276), (430, 13288), (432, 13306), (433, 13318), (438, 13426),

Gene: MsUbiquitous_16 Start: 10399, Stop: 13161, Start Num: 10

Candidate Starts for MsUbiquitous_16:

(Start: 10 @10399 has 66 MA's), (27, 10552), (28, 10558), (35, 10588), (37, 10597), (44, 10621), (55, 10693), (85, 10885), (105, 10984), (115, 11056), (130, 11134), (132, 11143), (133, 11146), (140, 11191), (142, 11200), (161, 11284), (163, 11293), (164, 11299), (166, 11311), (169, 11323), (171, 11335), (189, 11416), (210, 11503), (217, 11530), (220, 11539), (238, 11638), (246, 11677), (266, 11773), (270, 11797), (279, 11851), (292, 11908), (307, 11986), (315, 12100), (319, 12127), (335, 12262), (342, 12322), (354, 12400), (359, 12421), (367, 12469), (382, 12562), (387, 12607), (390, 12622), (399, 12661), (409, 12730), (413, 12748), (414, 12751), (415, 12763), (418, 12790), (430,

12916), (431, 12931), (433, 12946),

Gene: Niblet_16 Start: 10182, Stop: 12410, Start Num: 8

Candidate Starts for Niblet_16:

(Start: 8 @10182 has 53 MA's), (11, 10197), (14, 10218), (24, 10272), (28, 10347), (35, 10377), (36, 10380), (49, 10434), (62, 10560), (66, 10584), (67, 10593), (69, 10602), (80, 10674), (82, 10680), (86, 10710), (87, 10713), (94, 10749), (98, 10770), (102, 10791), (108, 10815), (114, 10869), (115, 10875), (117, 10881), (120, 10911), (121, 10920), (133, 10962), (144, 11016), (154, 11061), (184, 11199), (195, 11241), (201, 11271), (211, 11313), (224, 11343), (237, 11415), (239, 11424), (242, 11445), (259, 11511), (267, 11559), (268, 11562), (273, 11595), (304, 11673), (328, 11742), (347, 11868), (350, 11889), (352, 11898), (383, 12090), (384, 12093), (386, 12117), (416, 12288), (422, 12345), (426, 12399),

Gene: Nicky22_17 Start: 10807, Stop: 13566, Start Num: 10

Candidate Starts for Nicky22_17:

(Start: 10 @10807 has 66 MA's), (27, 10960), (28, 10966), (37, 11005), (44, 11029), (55, 11101), (85, 11293), (97, 11353), (105, 11392), (115, 11464), (130, 11542), (132, 11551), (133, 11554), (140, 11599), (142, 11608), (161, 11692), (163, 11701), (164, 11707), (166, 11719), (169, 11731), (171, 11743), (189, 11824), (210, 11911), (220, 11947), (238, 12046), (270, 12205), (286, 12295), (289, 12304), (292, 12316), (307, 12394), (315, 12508), (319, 12535), (326, 12619), (341, 12712), (345, 12730), (346, 12739), (354, 12805), (381, 12958), (382, 12967), (387, 13012), (390, 13027), (399, 13066), (409, 13135), (413, 13153), (414, 13156), (415, 13168), (418, 13195), (430, 13321), (433, 13351),

Gene: Olliecat_15 Start: 10032, Stop: 13001, Start Num: 2

Candidate Starts for Olliecat_15:

(Start: 2 @10032 has 3 MA's), (5, 10107), (6, 10122), (18, 10230), (31, 10356), (33, 10368), (41, 10401), (60, 10554), (62, 10566), (64, 10584), (68, 10602), (71, 10629), (72, 10638), (73, 10650), (91, 10731), (93, 10743), (96, 10758), (104, 10806), (108, 10830), (112, 10875), (117, 10905), (120, 10935), (122, 10947), (138, 11025), (141, 11046), (150, 11085), (155, 11109), (173, 11190), (175, 11196), (188, 11259), (203, 11325), (208, 11343), (213, 11361), (219, 11382), (248, 11541), (269, 11637), (272, 11658), (312, 11847), (315, 11937), (323, 12009), (335, 12099), (337, 12123), (339, 12141), (342, 12159), (351, 12216), (354, 12240), (356, 12249), (378, 12384), (381, 12393), (387, 12453), (390, 12468), (391, 12477), (399, 12507), (405, 12546), (415, 12609), (418, 12636), (428, 12735), (430, 12762), (431, 12777), (435, 12828), (436, 12831),

Gene: Oppalora_15 Start: 9786, Stop: 12074, Start Num: 8

Candidate Starts for Oppalora_15:

(Start: 8 @9786 has 53 MA's), (11, 9798), (14, 9819), (16, 9828), (17, 9837), (29, 9939), (44, 9981), (62, 10119), (70, 10173), (73, 10203), (94, 10305), (97, 10317), (99, 10335), (105, 10359), (109, 10380), (110, 10401), (126, 10482), (127, 10485), (129, 10494), (133, 10506), (160, 10626), (166, 10656), (177, 10698), (207, 10824), (214, 10848), (224, 10869), (232, 10917), (235, 10929), (237, 10941), (239, 10950), (244, 10977), (253, 11013), (256, 11025), (257, 11028), (259, 11037), (267, 11085), (271, 11106), (302, 11271), (332, 11418), (333, 11427), (341, 11490), (343, 11502), (353, 11565), (372, 11688), (383, 11748), (385, 11754), (386, 11775), (398, 11850), (426, 12066),

Gene: Orcanus_16 Start: 10174, Stop: 12324, Start Num: 8

Candidate Starts for Orcanus_16:

(Start: 8 @10174 has 53 MA's), (14, 10210), (17, 10228), (21, 10249), (44, 10369), (51, 10420), (67, 10540), (70, 10561), (84, 10636), (97, 10705), (99, 10723), (105, 10747), (110, 10789), (126, 10870), (127, 10873), (129, 10882), (133, 10894), (160, 11014), (177, 11086), (204, 11200), (207, 11212), (217, 11248), (236, 11326), (238, 11335), (259, 11425), (267, 11473), (271, 11494), (275, 11527), (288, 11587), (328, 11656), (331, 11671), (352, 11812), (372, 11944), (382, 11998), (383, 12004),

(384, 12007), (386, 12031), (400, 12118), (416, 12202), (422, 12259), (426, 12313),

Gene: OtsoOtso_16 Start: 10214, Stop: 12352, Start Num: 8

Candidate Starts for OtsoOtso_16:

(Start: 8 @10214 has 53 MA's), (14, 10250), (15, 10256), (17, 10268), (35, 10373), (62, 10538), (65, 10559), (85, 10673), (97, 10736), (105, 10778), (109, 10799), (110, 10820), (126, 10901), (127, 10904), (129, 10913), (133, 10925), (134, 10928), (160, 11045), (166, 11075), (177, 11117), (178, 11126), (207, 11243), (216, 11276), (226, 11303), (229, 11327), (233, 11339), (235, 11348), (236, 11357), (244, 11396), (253, 11432), (256, 11444), (259, 11456), (262, 11477), (267, 11504), (272, 11537), (274, 11552), (333, 11714), (336, 11738), (341, 11777), (347, 11813), (364, 11921), (372, 11975), (385, 12041), (386, 12062), (416, 12233), (420, 12266), (421, 12278), (425, 12323), (426, 12344),

Gene: PastaFagioli_16 Start: 10364, Stop: 13126, Start Num: 10

Candidate Starts for PastaFagioli_16:

(Start: 10 @10364 has 66 MA's), (27, 10517), (30, 10529), (44, 10586), (55, 10658), (75, 10811), (85, 10850), (115, 11021), (130, 11099), (133, 11111), (134, 11114), (140, 11156), (157, 11237), (163, 11258), (177, 11318), (180, 11336), (189, 11381), (192, 11390), (217, 11495), (221, 11507), (225, 11534), (246, 11642), (264, 11726), (270, 11762), (286, 11852), (292, 11873), (307, 11951), (315, 12065), (319, 12092), (323, 12137), (335, 12227), (338, 12260), (342, 12287), (354, 12365), (359, 12386), (367, 12434), (382, 12527), (387, 12572), (390, 12587), (392, 12599), (399, 12626), (414, 12716), (415, 12728), (418, 12755), (430, 12881), (431, 12896), (433, 12911), (436, 12950), (441, 13040),

Gene: Pecas_16 Start: 10360, Stop: 13122, Start Num: 10

Candidate Starts for Pecas_16:

(Start: 10 @10360 has 66 MA's), (27, 10513), (35, 10549), (37, 10558), (60, 10699), (67, 10744), (82, 10828), (85, 10846), (115, 11017), (127, 11083), (130, 11095), (132, 11104), (140, 11152), (142, 11161), (161, 11245), (163, 11254), (164, 11260), (166, 11272), (169, 11284), (171, 11296), (189, 11377), (210, 11464), (217, 11491), (220, 11500), (238, 11599), (266, 11734), (270, 11758), (307, 11947), (315, 12061), (319, 12088), (335, 12223), (342, 12283), (354, 12361), (359, 12382), (367, 12430), (382, 12523), (387, 12568), (390, 12583), (399, 12622), (409, 12691), (413, 12709), (414, 12712), (415, 12724), (418, 12751), (430, 12877), (431, 12892), (433, 12907),

Gene: Pelletreau_17 Start: 10380, Stop: 12530, Start Num: 8

Candidate Starts for Pelletreau_17:

(Start: 8 @10380 has 53 MA's), (14, 10416), (17, 10434), (21, 10455), (44, 10575), (51, 10626), (67, 10746), (84, 10842), (97, 10911), (99, 10929), (105, 10953), (110, 10995), (126, 11076), (127, 11079), (129, 11088), (133, 11100), (160, 11220), (166, 11250), (177, 11292), (204, 11406), (207, 11418), (217, 11454), (236, 11532), (238, 11541), (259, 11631), (267, 11679), (271, 11700), (275, 11733), (288, 11793), (328, 11862), (331, 11877), (352, 12018), (386, 12237), (400, 12324), (416, 12408), (422, 12465), (426, 12519),

Gene: PhigPhack_17 Start: 10362, Stop: 13121, Start Num: 10

Candidate Starts for PhigPhack_17:

(Start: 10 @10362 has 66 MA's), (27, 10515), (28, 10521), (37, 10560), (67, 10746), (82, 10830), (85, 10848), (105, 10947), (115, 11019), (127, 11085), (130, 11097), (132, 11106), (136, 11121), (140, 11154), (142, 11163), (145, 11181), (159, 11241), (161, 11247), (163, 11256), (164, 11262), (169, 11286), (171, 11298), (179, 11328), (189, 11379), (217, 11493), (221, 11505), (238, 11601), (246, 11640), (266, 11736), (270, 11760), (279, 11814), (286, 11850), (289, 11859), (292, 11871), (307, 11949), (315, 12063), (319, 12090), (326, 12174), (341, 12267), (345, 12285), (346, 12294), (354, 12360), (366, 12426), (382, 12522), (387, 12567), (390, 12582), (399, 12621), (409, 12690), (413, 12708), (414, 12711), (415, 12723), (418, 12750), (429, 12864), (430, 12876), (433, 12906), (438,

13014),

Gene: PhirstandPhine_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for PhirstandPhine_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: Phisb_16 Start: 10373, Stop: 13135, Start Num: 10

Candidate Starts for Phisb_16:

(Start: 10 @10373 has 66 MA's), (27, 10526), (37, 10571), (67, 10757), (85, 10859), (115, 11030), (127, 11096), (130, 11108), (132, 11117), (140, 11165), (142, 11174), (145, 11192), (161, 11258), (163, 11267), (164, 11273), (169, 11297), (171, 11309), (189, 11390), (210, 11477), (217, 11504), (220, 11513), (238, 11612), (270, 11771), (279, 11825), (292, 11882), (307, 11960), (315, 12074), (319, 12101), (323, 12146), (335, 12236), (338, 12269), (342, 12296), (354, 12374), (359, 12395), (367, 12443), (382, 12536), (387, 12581), (390, 12596), (399, 12635), (409, 12704), (413, 12722), (414, 12725), (415, 12737), (418, 12764), (430, 12890), (431, 12905), (433, 12920),

Gene: PhluffyCoco_15 Start: 9788, Stop: 12076, Start Num: 8

Candidate Starts for PhluffyCoco_15:

(Start: 8 @9788 has 53 MA's), (11, 9800), (14, 9821), (16, 9830), (17, 9839), (29, 9941), (44, 9983), (62, 10121), (70, 10175), (73, 10205), (94, 10307), (97, 10319), (99, 10337), (105, 10361), (109, 10382), (110, 10403), (126, 10484), (127, 10487), (129, 10496), (133, 10508), (160, 10628), (166, 10658), (177, 10700), (207, 10826), (214, 10850), (224, 10871), (232, 10919), (235, 10931), (237, 10943), (239, 10952), (244, 10979), (253, 11015), (256, 11027), (257, 11030), (259, 11039), (267, 11087), (271, 11108), (302, 11273), (332, 11420), (333, 11429), (341, 11492), (343, 11504), (353, 11567), (362, 11615), (372, 11690), (383, 11750), (385, 11756), (386, 11777), (398, 11852), (426, 12068),

Gene: Pineda_17 Start: 10375, Stop: 12510, Start Num: 8

Candidate Starts for Pineda_17:

(Start: 8 @10375 has 53 MA's), (14, 10408), (15, 10414), (17, 10426), (35, 10531), (62, 10696), (65, 10717), (85, 10831), (97, 10894), (105, 10936), (109, 10957), (110, 10978), (126, 11059), (127, 11062), (129, 11071), (133, 11083), (134, 11086), (160, 11203), (166, 11233), (177, 11275), (178, 11284), (207, 11401), (216, 11434), (226, 11461), (229, 11485), (233, 11497), (235, 11506), (236, 11515), (244, 11554), (253, 11590), (256, 11602), (259, 11614), (262, 11635), (267, 11662), (272, 11695), (274, 11710), (333, 11872), (336, 11896), (341, 11935), (347, 11971), (364, 12079), (372, 12133), (385, 12199), (386, 12220), (416, 12391), (420, 12424), (421, 12436), (425, 12481), (426, 12502),

Gene: Polka_16 Start: 10214, Stop: 12352, Start Num: 8

Candidate Starts for Polka_16:

(Start: 8 @10214 has 53 MA's), (14, 10250), (15, 10256), (17, 10268), (35, 10373), (62, 10538), (65, 10559), (85, 10673), (97, 10736), (105, 10778), (109, 10799), (110, 10820), (126, 10901), (127, 10904), (129, 10913), (133, 10925), (134, 10928), (160, 11045), (166, 11075), (177, 11117), (178, 11126), (207, 11243), (216, 11276), (226, 11303), (229, 11327), (233, 11339), (235, 11348), (236, 11357), (244, 11396), (253, 11432), (256, 11444), (259, 11456), (262, 11477), (267, 11504), (272, 11537), (274, 11552), (333, 11714), (336, 11738), (341, 11777), (347, 11813), (364, 11921), (372,

11975), (385, 12041), (386, 12062), (416, 12233), (420, 12266), (421, 12278), (425, 12323), (426, 12344),

Gene: PondAmelia_17 Start: 10487, Stop: 13117, Start Num: 10

Candidate Starts for PondAmelia_17:

(Start: 10 @10487 has 66 MA's), (20, 10547), (27, 10640), (30, 10652), (37, 10685), (55, 10781), (75, 10934), (85, 10973), (115, 11144), (130, 11222), (134, 11237), (137, 11258), (140, 11279), (148, 11318), (157, 11360), (163, 11381), (177, 11441), (180, 11459), (188, 11501), (189, 11504), (194, 11522), (206, 11579), (243, 11618), (245, 11627), (246, 11630), (254, 11663), (259, 11684), (315, 12053), (316, 12056), (319, 12080), (322, 12104), (335, 12215), (342, 12275), (354, 12359), (366, 12425), (370, 12452), (377, 12500), (380, 12509), (381, 12512), (387, 12572), (390, 12587), (408, 12671), (415, 12719), (430, 12872), (431, 12887), (433, 12902), (437, 12989), (441, 13031),

Gene: QMacho_17 Start: 10843, Stop: 13605, Start Num: 10

Candidate Starts for QMacho_17:

(Start: 10 @10843 has 66 MA's), (27, 10996), (35, 11032), (37, 11041), (60, 11182), (67, 11227), (82, 11311), (85, 11329), (115, 11500), (127, 11566), (130, 11578), (132, 11587), (140, 11635), (142, 11644), (161, 11728), (163, 11737), (164, 11743), (166, 11755), (169, 11767), (171, 11779), (189, 11860), (210, 11947), (217, 11974), (220, 11983), (238, 12082), (266, 12217), (270, 12241), (307, 12430), (315, 12544), (319, 12571), (335, 12706), (342, 12766), (354, 12844), (359, 12865), (367, 12913), (382, 13006), (387, 13051), (390, 13066), (399, 13105), (409, 13174), (413, 13192), (414, 13195), (415, 13207), (418, 13234), (430, 13360), (431, 13375), (433, 13390),

Gene: Quenya_16 Start: 9890, Stop: 12667, Start Num: 10

Candidate Starts for Quenya_16:

(Start: 10 @9890 has 66 MA's), (14, 9923), (26, 10031), (44, 10109), (79, 10361), (81, 10367), (83, 10370), (103, 10490), (107, 10511), (119, 10619), (125, 10643), (127, 10652), (173, 10871), (186, 10922), (190, 10940), (193, 10949), (197, 10970), (200, 10982), (243, 11168), (260, 11243), (270, 11300), (286, 11390), (289, 11399), (291, 11405), (292, 11411), (315, 11603), (319, 11630), (322, 11654), (324, 11678), (335, 11765), (339, 11807), (342, 11825), (350, 11879), (354, 11909), (367, 11978), (370, 12002), (380, 12059), (381, 12062), (387, 12122), (390, 12137), (392, 12149), (414, 12257), (415, 12269), (418, 12296), (423, 12338), (426, 12386), (430, 12422), (431, 12437), (432, 12440), (434, 12467),

Gene: Rattail_15 Start: 9839, Stop: 12127, Start Num: 8

Candidate Starts for Rattail_15:

(Start: 8 @9839 has 53 MA's), (11, 9851), (14, 9872), (16, 9881), (17, 9890), (29, 9992), (44, 10034), (62, 10172), (70, 10226), (73, 10256), (97, 10370), (99, 10388), (105, 10412), (109, 10433), (110, 10454), (126, 10535), (127, 10538), (129, 10547), (133, 10559), (160, 10679), (166, 10709), (177, 10751), (207, 10877), (214, 10901), (224, 10922), (237, 10994), (244, 11030), (253, 11066), (256, 11078), (259, 11090), (262, 11111), (267, 11138), (271, 11159), (302, 11324), (332, 11471), (333, 11480), (341, 11543), (343, 11555), (353, 11618), (372, 11741), (383, 11801), (385, 11807), (386, 11828), (398, 11903), (426, 12119),

Gene: RedFox_15 Start: 9788, Stop: 12076, Start Num: 8

Candidate Starts for RedFox_15:

(Start: 8 @9788 has 53 MA's), (11, 9800), (14, 9821), (16, 9830), (17, 9839), (29, 9941), (44, 9983), (62, 10121), (70, 10175), (73, 10205), (94, 10307), (97, 10319), (99, 10337), (105, 10361), (109, 10382), (110, 10403), (126, 10484), (127, 10487), (129, 10496), (133, 10508), (160, 10628), (166, 10658), (177, 10700), (207, 10826), (214, 10850), (224, 10871), (232, 10919), (235, 10931), (237, 10943), (239, 10952), (244, 10979), (253, 11015), (256, 11027), (257, 11030), (259, 11039), (267, 11087), (271, 11108), (302, 11273), (332, 11420), (333, 11429), (341, 11492), (353, 11567), (372, 11690), (383, 11750), (385, 11756), (386, 11777), (398, 11852), (426, 12068),

Gene: Renna12_16 Start: 9997, Stop: 12417, Start Num: 8

Candidate Starts for Renna12_16:

(Start: 8 @9997 has 53 MA's), (11, 10009), (14, 10030), (16, 10039), (17, 10048), (29, 10150), (44, 10192), (62, 10330), (70, 10384), (73, 10414), (97, 10528), (99, 10546), (105, 10570), (109, 10591), (110, 10612), (126, 10693), (127, 10696), (129, 10705), (133, 10717), (166, 10867), (177, 10909), (207, 11035), (214, 11059), (217, 11071), (224, 11080), (232, 11128), (237, 11152), (239, 11161), (244, 11188), (253, 11224), (256, 11236), (267, 11296), (284, 11395), (314, 11614), (341, 11833), (353, 11908), (385, 12097), (386, 12118), (398, 12193), (416, 12298), (426, 12409),

Gene: Rona_15 Start: 10180, Stop: 12810, Start Num: 10

Candidate Starts for Rona_15:

(Start: 10 @10180 has 66 MA's), (14, 10213), (20, 10240), (27, 10333), (30, 10345), (35, 10369), (44, 10402), (55, 10474), (75, 10627), (85, 10666), (115, 10837), (130, 10915), (133, 10927), (152, 11029), (163, 11074), (177, 11134), (189, 11197), (202, 11251), (243, 11311), (246, 11323), (252, 11350), (253, 11353), (254, 11356), (259, 11377), (270, 11443), (291, 11548), (292, 11554), (307, 11632), (319, 11773), (322, 11797), (324, 11821), (335, 11908), (370, 12145), (375, 12181), (376, 12190), (384, 12223), (387, 12265), (390, 12280), (394, 12304), (415, 12412), (430, 12565), (431, 12580), (433, 12595),

Gene: Ruchi_16 Start: 10744, Stop: 13149, Start Num: 8

Candidate Starts for Ruchi_16:

(Start: 8 @10744 has 53 MA's), (14, 10780), (17, 10798), (24, 10834), (28, 10909), (42, 10954), (54, 11041), (56, 11053), (76, 11212), (78, 11221), (100, 11329), (101, 11335), (114, 11416), (124, 11470), (134, 11509), (176, 11710), (182, 11746), (195, 11800), (208, 11860), (209, 11863), (216, 11890), (227, 11920), (236, 11974), (244, 12013), (248, 12031), (253, 12049), (263, 12097), (271, 12142), (281, 12202), (283, 12214), (287, 12235), (288, 12238), (293, 12256), (296, 12271), (297, 12274), (298, 12280), (299, 12289), (301, 12301), (303, 12307), (305, 12322), (308, 12331), (313, 12373), (318, 12385), (321, 12403), (323, 12436), (332, 12505), (333, 12514), (334, 12517), (336, 12538), (340, 12574), (350, 12634), (353, 12652), (386, 12862), (416, 13027), (422, 13084),

Gene: SanaSana_17 Start: 10377, Stop: 13007, Start Num: 10

Candidate Starts for SanaSana_17:

(Start: 10 @10377 has 66 MA's), (20, 10437), (27, 10530), (28, 10536), (30, 10542), (37, 10575), (55, 10671), (75, 10824), (85, 10863), (115, 11034), (130, 11112), (134, 11127), (137, 11148), (140, 11169), (148, 11208), (157, 11250), (163, 11271), (177, 11331), (180, 11349), (189, 11394), (191, 11400), (194, 11412), (243, 11508), (245, 11517), (246, 11520), (254, 11553), (259, 11574), (270, 11640), (315, 11943), (316, 11946), (319, 11970), (322, 11994), (335, 12105), (342, 12165), (354, 12249), (366, 12315), (370, 12342), (377, 12390), (380, 12399), (381, 12402), (387, 12462), (390, 12477), (408, 12561), (415, 12609), (430, 12762), (431, 12777), (433, 12792), (437, 12879), (441, 12921),

Gene: SansAfet_16 Start: 10296, Stop: 13055, Start Num: 10

Candidate Starts for SansAfet_16:

(Start: 10 @10296 has 66 MA's), (27, 10449), (28, 10455), (37, 10494), (67, 10680), (82, 10764), (85, 10782), (105, 10881), (115, 10953), (127, 11019), (130, 11031), (132, 11040), (136, 11055), (140, 11088), (142, 11097), (145, 11115), (159, 11175), (161, 11181), (163, 11190), (164, 11196), (169, 11220), (171, 11232), (189, 11313), (217, 11427), (221, 11439), (238, 11535), (246, 11574), (266, 11670), (270, 11694), (279, 11748), (286, 11784), (289, 11793), (292, 11805), (307, 11883), (315, 11997), (319, 12024), (326, 12108), (345, 12219), (346, 12228), (354, 12294), (366, 12360), (382, 12456), (387, 12501), (390, 12516), (399, 12555), (409, 12624), (413, 12642), (414, 12645), (415, 12657), (418, 12684), (429, 12798), (430, 12810), (433, 12840), (438, 12948),

Gene: SarBear_16 Start: 10338, Stop: 13100, Start Num: 10

Candidate Starts for SarBear_16:

(Start: 10 @10338 has 66 MA's), (27, 10491), (28, 10497), (35, 10527), (37, 10536), (44, 10560), (55, 10632), (85, 10824), (105, 10923), (115, 10995), (130, 11073), (132, 11082), (133, 11085), (140, 11130), (142, 11139), (161, 11223), (163, 11232), (164, 11238), (166, 11250), (169, 11262), (171, 11274), (189, 11355), (210, 11442), (217, 11469), (220, 11478), (238, 11577), (246, 11616), (266, 11712), (270, 11736), (279, 11790), (292, 11847), (307, 11925), (315, 12039), (319, 12066), (335, 12201), (342, 12261), (354, 12339), (359, 12360), (367, 12408), (382, 12501), (387, 12546), (390, 12561), (399, 12600), (409, 12669), (413, 12687), (414, 12690), (415, 12702), (418, 12729), (430, 12855), (431, 12870), (433, 12885),

Gene: Sharkboy_15 Start: 10179, Stop: 12809, Start Num: 10

Candidate Starts for Sharkboy_15:

(Start: 10 @10179 has 66 MA's), (14, 10212), (20, 10239), (27, 10332), (30, 10344), (35, 10368), (44, 10401), (55, 10473), (75, 10626), (85, 10665), (115, 10836), (130, 10914), (133, 10926), (152, 11028), (163, 11073), (177, 11133), (189, 11196), (202, 11250), (243, 11310), (246, 11322), (253, 11352), (254, 11355), (259, 11376), (270, 11442), (291, 11547), (292, 11553), (307, 11631), (319, 11772), (322, 11796), (324, 11820), (335, 11907), (370, 12144), (375, 12180), (376, 12189), (384, 12222), (387, 12264), (390, 12279), (394, 12303), (415, 12411), (430, 12564), (431, 12579), (433, 12594),

Gene: Shayna_15 Start: 9869, Stop: 12856, Start Num: 3

Candidate Starts for Shayna_15:

(Start: 3 @9869 has 3 MA's), (12, 10031), (13, 10037), (18, 10064), (23, 10094), (62, 10400), (64, 10418), (73, 10484), (92, 10568), (117, 10739), (120, 10769), (155, 10943), (165, 10991), (175, 11030), (203, 11159), (222, 11228), (223, 11231), (228, 11276), (247, 11369), (261, 11435), (276, 11516), (291, 11573), (297, 11603), (317, 11783), (320, 11801), (335, 11933), (348, 12041), (349, 12053), (356, 12095), (361, 12119), (370, 12179), (374, 12212), (387, 12308), (390, 12323), (399, 12362), (415, 12464), (418, 12491), (428, 12590), (430, 12617), (436, 12686), (439, 12764),

Gene: Shen_17 Start: 10456, Stop: 12531, Start Num: 21

Candidate Starts for Shen_17:

(Start: 8 @10381 has 53 MA's), (14, 10417), (17, 10435), (21, 10456), (44, 10576), (51, 10627), (67, 10747), (84, 10843), (97, 10912), (99, 10930), (105, 10954), (110, 10996), (126, 11077), (127, 11080), (129, 11089), (133, 11101), (160, 11221), (166, 11251), (177, 11293), (204, 11407), (207, 11419), (217, 11455), (236, 11533), (238, 11542), (259, 11632), (267, 11680), (271, 11701), (275, 11734), (288, 11794), (328, 11863), (331, 11878), (352, 12019), (371, 12139), (386, 12238), (400, 12325), (416, 12409), (422, 12466), (426, 12520),

Gene: SirBeanington_16 Start: 10380, Stop: 13142, Start Num: 10

Candidate Starts for SirBeanington_16:

(Start: 10 @10380 has 66 MA's), (27, 10533), (37, 10578), (67, 10764), (85, 10866), (115, 11037), (127, 11103), (130, 11115), (132, 11124), (140, 11172), (142, 11181), (145, 11199), (161, 11265), (163, 11274), (164, 11280), (169, 11304), (171, 11316), (189, 11397), (210, 11484), (217, 11511), (220, 11520), (238, 11619), (270, 11778), (279, 11832), (292, 11889), (307, 11967), (315, 12081), (319, 12108), (323, 12153), (335, 12243), (338, 12276), (342, 12303), (354, 12381), (359, 12402), (367, 12450), (382, 12543), (387, 12588), (390, 12603), (399, 12642), (409, 12711), (413, 12729), (414, 12732), (415, 12744), (418, 12771), (430, 12897), (431, 12912), (433, 12927), (438, 13035),

Gene: Slay_16 Start: 10880, Stop: 13642, Start Num: 10

Candidate Starts for Slay_16:

(Start: 10 @10880 has 66 MA's), (27, 11033), (28, 11039), (35, 11069), (37, 11078), (44, 11102), (55, 11174), (85, 11366), (105, 11465), (115, 11537), (130, 11615), (132, 11624), (133, 11627), (140, 11672), (142, 11681), (161, 11765), (163, 11774), (164, 11780), (166, 11792), (169, 11804), (171,

11816), (189, 11897), (210, 11984), (217, 12011), (220, 12020), (238, 12119), (246, 12158), (266, 12254), (270, 12278), (279, 12332), (292, 12389), (307, 12467), (315, 12581), (319, 12608), (335, 12743), (338, 12776), (342, 12803), (354, 12881), (359, 12902), (367, 12950), (382, 13043), (387, 13088), (390, 13103), (399, 13142), (409, 13211), (413, 13229), (414, 13232), (415, 13244), (418, 13271), (430, 13397), (431, 13412), (433, 13427),

Gene: Softsoap_15 Start: 10114, Stop: 12876, Start Num: 10

Candidate Starts for Softsoap_15:

(Start: 10 @10114 has 66 MA's), (27, 10267), (34, 10297), (35, 10303), (37, 10312), (67, 10498), (85, 10600), (115, 10771), (120, 10807), (128, 10840), (130, 10849), (142, 10915), (153, 10966), (161, 10999), (163, 11008), (169, 11038), (171, 11050), (189, 11131), (210, 11218), (217, 11245), (221, 11257), (238, 11353), (246, 11392), (270, 11512), (286, 11602), (289, 11611), (292, 11623), (307, 11701), (315, 11815), (319, 11842), (323, 11887), (335, 11977), (338, 12010), (342, 12037), (354, 12115), (359, 12136), (367, 12184), (382, 12277), (387, 12322), (390, 12337), (399, 12376), (409, 12445), (413, 12463), (414, 12466), (415, 12478), (418, 12505), (430, 12631), (431, 12646), (433, 12661), (438, 12769),

Gene: Solea_18 Start: 10774, Stop: 13533, Start Num: 10

Candidate Starts for Solea_18:

(Start: 10 @10774 has 66 MA's), (27, 10927), (28, 10933), (37, 10972), (67, 11158), (85, 11260), (115, 11431), (127, 11497), (130, 11509), (132, 11518), (136, 11533), (140, 11566), (142, 11575), (145, 11593), (159, 11653), (161, 11659), (163, 11668), (164, 11674), (169, 11698), (171, 11710), (177, 11728), (189, 11791), (217, 11905), (221, 11917), (238, 12013), (246, 12052), (276, 12211), (286, 12262), (289, 12271), (292, 12283), (307, 12361), (315, 12475), (319, 12502), (326, 12586), (341, 12679), (345, 12697), (346, 12706), (354, 12772), (366, 12838), (382, 12934), (387, 12979), (390, 12994), (399, 13033), (409, 13102), (413, 13120), (414, 13123), (415, 13135), (418, 13162), (429, 13276), (430, 13288), (432, 13306), (433, 13318), (438, 13426),

Gene: Squirrel_15 Start: 10031, Stop: 13000, Start Num: 2

Candidate Starts for Squirrel_15:

(Start: 2 @10031 has 3 MA's), (5, 10106), (6, 10121), (18, 10229), (31, 10355), (33, 10367), (41, 10400), (60, 10553), (62, 10565), (64, 10583), (68, 10601), (71, 10628), (72, 10637), (73, 10649), (91, 10730), (93, 10742), (96, 10757), (104, 10805), (108, 10829), (112, 10874), (117, 10904), (120, 10934), (122, 10946), (138, 11024), (141, 11045), (150, 11084), (155, 11108), (173, 11189), (175, 11195), (188, 11258), (203, 11324), (208, 11342), (213, 11360), (219, 11381), (248, 11540), (269, 11636), (272, 11657), (312, 11846), (315, 11936), (323, 12008), (335, 12098), (337, 12122), (339, 12140), (342, 12158), (351, 12215), (354, 12239), (356, 12248), (378, 12383), (381, 12392), (387, 12452), (390, 12467), (391, 12476), (399, 12506), (405, 12545), (415, 12608), (418, 12635), (428, 12734), (430, 12761), (431, 12776), (435, 12827), (436, 12830),

Gene: Stoor_16 Start: 10374, Stop: 13004, Start Num: 10

Candidate Starts for Stoor_16:

(Start: 10 @10374 has 66 MA's), (20, 10434), (27, 10527), (28, 10533), (30, 10539), (37, 10572), (55, 10668), (75, 10821), (85, 10860), (115, 11031), (130, 11109), (134, 11124), (137, 11145), (140, 11166), (148, 11205), (157, 11247), (163, 11268), (177, 11328), (180, 11346), (189, 11391), (191, 11397), (194, 11409), (243, 11505), (245, 11514), (246, 11517), (254, 11550), (259, 11571), (270, 11637), (315, 11940), (316, 11943), (319, 11967), (322, 11991), (335, 12102), (342, 12162), (354, 12246), (366, 12312), (370, 12339), (377, 12387), (380, 12396), (381, 12399), (387, 12459), (390, 12474), (408, 12558), (415, 12606), (430, 12759), (431, 12774), (433, 12789), (437, 12876), (441, 12918),

Gene: Stromboli_16 Start: 10505, Stop: 13135, Start Num: 10

Candidate Starts for Stromboli_16:

(Start: 10 @10505 has 66 MA's), (27, 10658), (28, 10664), (30, 10670), (37, 10703), (55, 10799), (75, 10952), (85, 10991), (97, 11051), (102, 11078), (115, 11162), (130, 11240), (134, 11255), (137, 11276), (138, 11282), (148, 11336), (157, 11378), (163, 11399), (177, 11459), (180, 11477), (189, 11522), (191, 11528), (194, 11540), (243, 11636), (245, 11645), (246, 11648), (254, 11681), (259, 11702), (270, 11768), (315, 12071), (316, 12074), (319, 12098), (322, 12122), (335, 12233), (342, 12293), (354, 12377), (366, 12443), (368, 12455), (370, 12470), (377, 12518), (380, 12527), (381, 12530), (387, 12590), (390, 12605), (408, 12689), (415, 12737), (430, 12890), (431, 12905), (433, 12920), (437, 13007), (441, 13049),

Gene: StuartMinion_15 Start: 9820, Stop: 12108, Start Num: 8

Candidate Starts for StuartMinion_15:

(Start: 8 @9820 has 53 MA's), (14, 9853), (16, 9862), (17, 9871), (29, 9973), (44, 10015), (62, 10153), (70, 10207), (97, 10351), (99, 10369), (105, 10393), (110, 10435), (126, 10516), (127, 10519), (129, 10528), (133, 10540), (135, 10549), (160, 10660), (166, 10690), (176, 10729), (207, 10858), (214, 10882), (224, 10903), (237, 10975), (238, 10981), (242, 11005), (256, 11059), (257, 11062), (259, 11071), (267, 11119), (271, 11140), (302, 11305), (341, 11524), (343, 11536), (353, 11599), (371, 11710), (382, 11776), (385, 11788), (386, 11809), (396, 11881), (398, 11884), (416, 11986), (422, 12043), (426, 12097), (427, 12100),

Gene: SunnyD_15 Start: 9869, Stop: 12856, Start Num: 3

Candidate Starts for SunnyD_15:

(Start: 3 @9869 has 3 MA's), (12, 10031), (13, 10037), (18, 10064), (23, 10094), (62, 10400), (64, 10418), (73, 10484), (92, 10568), (117, 10739), (120, 10769), (155, 10943), (165, 10991), (175, 11030), (203, 11159), (222, 11228), (223, 11231), (228, 11276), (247, 11369), (261, 11435), (276, 11516), (291, 11573), (297, 11603), (317, 11783), (320, 11801), (335, 11933), (348, 12041), (349, 12053), (356, 12095), (361, 12119), (370, 12179), (374, 12212), (387, 12308), (390, 12323), (399, 12362), (415, 12464), (418, 12491), (428, 12590), (430, 12617), (436, 12686), (439, 12764),

Gene: Swervy_16 Start: 10338, Stop: 13100, Start Num: 10

Candidate Starts for Swervy_16:

(Start: 10 @10338 has 66 MA's), (27, 10491), (28, 10497), (35, 10527), (37, 10536), (44, 10560), (55, 10632), (85, 10824), (105, 10923), (115, 10995), (130, 11073), (132, 11082), (133, 11085), (140, 11130), (142, 11139), (161, 11223), (163, 11232), (164, 11238), (166, 11250), (169, 11262), (171, 11274), (189, 11355), (210, 11442), (217, 11469), (220, 11478), (238, 11577), (246, 11616), (266, 11712), (270, 11736), (279, 11790), (292, 11847), (307, 11925), (315, 12039), (319, 12066), (335, 12201), (342, 12261), (354, 12339), (359, 12360), (367, 12408), (382, 12501), (387, 12546), (390, 12561), (399, 12600), (409, 12669), (413, 12687), (414, 12690), (415, 12702), (418, 12729), (430, 12855), (431, 12870), (433, 12885),

Gene: TaylorSipht_16 Start: 10274, Stop: 12499, Start Num: 8

Candidate Starts for TaylorSipht_16:

(Start: 8 @10274 has 53 MA's), (11, 10289), (14, 10310), (35, 10469), (49, 10526), (52, 10565), (62, 10652), (63, 10664), (66, 10676), (67, 10685), (69, 10694), (74, 10742), (80, 10766), (82, 10772), (94, 10841), (98, 10862), (106, 10904), (108, 10907), (114, 10961), (115, 10967), (117, 10973), (120, 11003), (121, 11012), (133, 11054), (144, 11108), (154, 11153), (184, 11291), (195, 11333), (201, 11363), (211, 11405), (224, 11435), (237, 11507), (239, 11516), (242, 11537), (257, 11594), (259, 11603), (267, 11651), (271, 11672), (275, 11705), (304, 11765), (306, 11771), (327, 11831), (330, 11846), (343, 11936), (346, 11945), (350, 11981), (371, 12110), (372, 12122), (386, 12209), (400, 12296), (402, 12311), (410, 12353), (416, 12380), (422, 12437), (426, 12491),

Gene: Teagster_15 Start: 9869, Stop: 12856, Start Num: 3

Candidate Starts for Teagster_15:

(Start: 3 @9869 has 3 MA's), (12, 10031), (13, 10037), (18, 10064), (23, 10094), (25, 10133), (47, 10256), (53, 10316), (62, 10400), (64, 10418), (73, 10484), (96, 10592), (120, 10769), (155, 10943), (165, 10991), (174, 11027), (203, 11159), (208, 11177), (222, 11228), (223, 11231), (247, 11369), (261, 11435), (276, 11516), (291, 11573), (317, 11783), (320, 11801), (335, 11933), (348, 12041), (349, 12053), (356, 12095), (361, 12119), (370, 12179), (374, 12212), (387, 12308), (390, 12323), (396, 12356), (399, 12362), (415, 12464), (417, 12482), (418, 12491), (428, 12590), (430, 12617), (439, 12764),

Gene: Toad24_17 Start: 10381, Stop: 12531, Start Num: 8

Candidate Starts for Toad24_17:

(Start: 8 @10381 has 53 MA's), (14, 10417), (17, 10435), (21, 10456), (44, 10576), (51, 10627), (67, 10747), (84, 10843), (97, 10912), (99, 10930), (105, 10954), (110, 10996), (126, 11077), (127, 11080), (129, 11089), (133, 11101), (160, 11221), (166, 11251), (177, 11293), (204, 11407), (207, 11419), (217, 11455), (236, 11533), (238, 11542), (259, 11632), (267, 11680), (271, 11701), (275, 11734), (288, 11794), (328, 11863), (331, 11878), (352, 12019), (386, 12238), (400, 12325), (416, 12409), (422, 12466), (426, 12520),

Gene: TukTuk_16 Start: 10396, Stop: 13158, Start Num: 10

Candidate Starts for TukTuk_16:

(Start: 10 @10396 has 66 MA's), (27, 10549), (28, 10555), (35, 10585), (37, 10594), (44, 10618), (55, 10690), (85, 10882), (105, 10981), (115, 11053), (130, 11131), (132, 11140), (133, 11143), (140, 11188), (142, 11197), (161, 11281), (163, 11290), (164, 11296), (166, 11308), (169, 11320), (171, 11332), (189, 11413), (210, 11500), (217, 11527), (220, 11536), (238, 11635), (246, 11674), (266, 11770), (270, 11794), (279, 11848), (292, 11905), (307, 11983), (315, 12097), (319, 12124), (335, 12259), (342, 12319), (354, 12397), (382, 12559), (387, 12604), (390, 12619), (399, 12658), (409, 12727), (413, 12745), (414, 12748), (415, 12760), (418, 12787), (430, 12913), (433, 12943),

Gene: Vulpecula_16 Start: 10814, Stop: 13219, Start Num: 8

Candidate Starts for Vulpecula_16:

(Start: 8 @10814 has 53 MA's), (14, 10850), (17, 10868), (24, 10904), (28, 10979), (42, 11024), (54, 11111), (56, 11123), (76, 11282), (78, 11291), (89, 11342), (100, 11399), (101, 11405), (114, 11486), (124, 11540), (134, 11579), (182, 11816), (195, 11870), (208, 11930), (209, 11933), (216, 11960), (227, 11990), (244, 12083), (248, 12101), (253, 12119), (271, 12212), (281, 12272), (283, 12284), (287, 12305), (288, 12308), (293, 12326), (296, 12341), (297, 12344), (298, 12350), (299, 12359), (301, 12371), (303, 12377), (305, 12392), (308, 12401), (311, 12419), (313, 12443), (318, 12455), (321, 12473), (323, 12506), (333, 12584), (334, 12587), (336, 12608), (338, 12626), (340, 12644), (350, 12704), (353, 12722), (386, 12932), (404, 13040), (416, 13097), (422, 13154),

Gene: WalkingDead_16 Start: 10494, Stop: 13124, Start Num: 10

Candidate Starts for WalkingDead_16:

(Start: 10 @10494 has 66 MA's), (20, 10554), (27, 10647), (35, 10683), (37, 10692), (55, 10788), (75, 10941), (85, 10980), (115, 11151), (120, 11187), (128, 11220), (133, 11241), (136, 11253), (138, 11271), (142, 11295), (153, 11346), (159, 11373), (161, 11379), (163, 11388), (166, 11406), (180, 11466), (189, 11511), (238, 11598), (243, 11625), (245, 11634), (260, 11700), (270, 11757), (290, 11859), (315, 12060), (316, 12063), (319, 12087), (322, 12111), (324, 12135), (335, 12222), (342, 12282), (354, 12366), (366, 12432), (368, 12444), (370, 12459), (377, 12507), (380, 12516), (381, 12519), (387, 12579), (390, 12594), (408, 12678), (415, 12726), (430, 12879), (431, 12894), (433, 12909), (437, 12996), (441, 13038),

Gene: Westrich_17 Start: 10369, Stop: 12519, Start Num: 8

Candidate Starts for Westrich_17:

(Start: 8 @10369 has 53 MA's), (14, 10405), (17, 10423), (21, 10444), (44, 10564), (51, 10615), (67, 10735), (84, 10831), (97, 10900), (99, 10918), (105, 10942), (109, 10963), (110, 10984), (126, 11065),

(127, 11068), (129, 11077), (133, 11089), (134, 11092), (160, 11209), (177, 11281), (204, 11395), (207, 11407), (217, 11443), (236, 11521), (238, 11530), (259, 11620), (267, 11668), (271, 11689), (275, 11722), (288, 11782), (328, 11851), (331, 11866), (352, 12007), (372, 12139), (382, 12193), (383, 12199), (384, 12202), (386, 12226), (400, 12313), (416, 12397), (422, 12454), (426, 12508),

Gene: WileyE_15 Start: 10149, Stop: 12554, Start Num: 8

Candidate Starts for WileyE_15:

(Start: 8 @10149 has 53 MA's), (14, 10185), (17, 10203), (24, 10239), (28, 10314), (42, 10359), (54, 10446), (56, 10458), (76, 10617), (78, 10626), (100, 10734), (114, 10821), (124, 10875), (134, 10914), (139, 10953), (182, 11151), (195, 11205), (209, 11268), (210, 11271), (216, 11295), (237, 11382), (244, 11418), (271, 11547), (280, 11604), (281, 11607), (288, 11643), (293, 11661), (296, 11676), (297, 11679), (298, 11685), (299, 11694), (301, 11706), (303, 11712), (305, 11727), (308, 11736), (311, 11754), (313, 11778), (318, 11790), (321, 11808), (323, 11841), (332, 11910), (333, 11919), (334, 11922), (336, 11943), (340, 11979), (350, 12039), (353, 12057), (386, 12267), (416, 12432),

Gene: Zhuangyuan_17 Start: 10550, Stop: 12916, Start Num: 8

Candidate Starts for Zhuangyuan_17:

(Start: 8 @10550 has 53 MA's), (11, 10565), (14, 10586), (16, 10595), (36, 10748), (45, 10781), (52, 10841), (57, 10880), (61, 10919), (63, 10940), (66, 10952), (67, 10961), (69, 10970), (80, 11042), (87, 11081), (94, 11117), (98, 11138), (99, 11147), (102, 11159), (108, 11183), (114, 11237), (115, 11243), (117, 11249), (120, 11279), (121, 11288), (133, 11330), (144, 11384), (154, 11429), (181, 11555), (184, 11567), (195, 11609), (201, 11639), (207, 11666), (237, 11783), (238, 11789), (240, 11801), (253, 11855), (257, 11870), (259, 11879), (260, 11888), (267, 11927), (272, 11960), (273, 11963), (302, 12113), (327, 12239), (333, 12269), (336, 12293), (341, 12332), (353, 12407), (372, 12530), (382, 12584), (385, 12596), (386, 12617), (389, 12650), (393, 12680), (402, 12719), (416, 12794), (425, 12884),

Gene: Zixiang_16 Start: 10182, Stop: 12410, Start Num: 8

Candidate Starts for Zixiang_16:

(Start: 8 @10182 has 53 MA's), (11, 10197), (14, 10218), (24, 10272), (28, 10347), (35, 10377), (36, 10380), (49, 10434), (62, 10560), (66, 10584), (67, 10593), (69, 10602), (80, 10674), (82, 10680), (86, 10710), (87, 10713), (94, 10749), (98, 10770), (102, 10791), (108, 10815), (114, 10869), (115, 10875), (117, 10881), (120, 10911), (121, 10920), (133, 10962), (144, 11016), (154, 11061), (184, 11199), (195, 11241), (201, 11271), (211, 11313), (224, 11343), (237, 11415), (239, 11424), (242, 11445), (259, 11511), (267, 11559), (268, 11562), (273, 11595), (304, 11673), (328, 11742), (347, 11868), (350, 11889), (352, 11898), (383, 12090), (384, 12093), (386, 12117), (416, 12288), (422, 12345), (426, 12399),