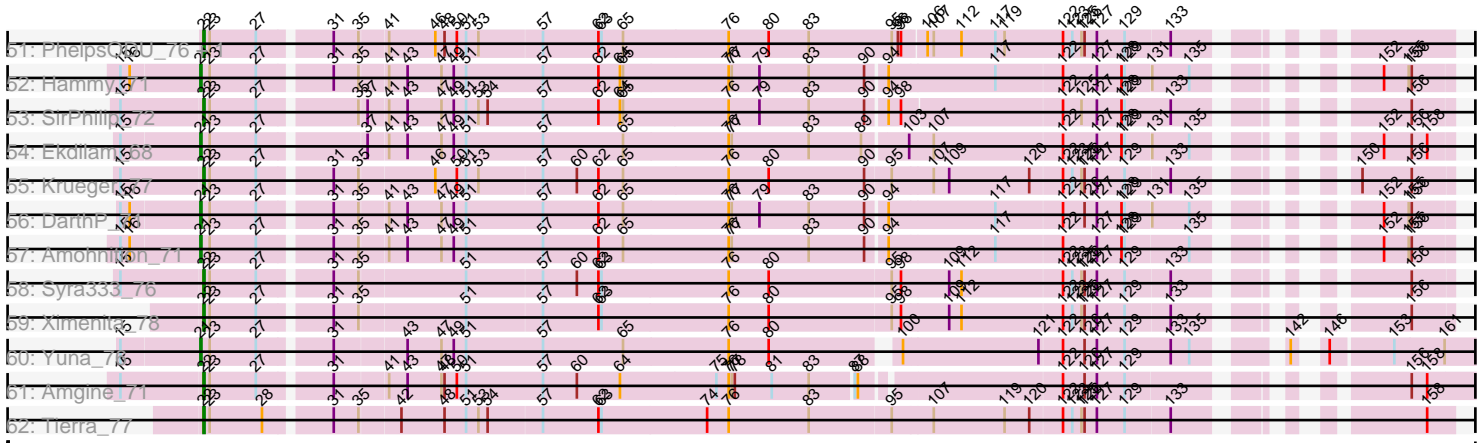


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1: Guanica15_79	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
2: Anaya_77	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
3: Twitch_73+29	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
4: Validus_78	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
5: Nikao_63+8	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
6: Emerson_76+1	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
7: Ganymede_73+	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
8: Geraldini_77	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
9: HedwigODU_73	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
10: Curiosium_79	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
11: Lagan_60_56+1	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
12: Valiki_74+1	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
13: Nikias_75+1	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
14: Simson_74	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
15: BarreiRol_74+2	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
16: Pokerus_74+2	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
17: Ageoldapage_74	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
18: Darlin_74+2	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
19: TimBug_56	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
20: Pithvi_76+2	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
21: DrHayes_73+2	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
22: Luvhala_6ee_75	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
23: Megsy_75	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
24: Efra2_80	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
25: MarkPhew_74	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
26: TaiwanKao_75	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
27: Beik_84	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
28: Cllnd_75	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
29: MeaningOfLife	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
30: Apocalypse_76	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
31: Devera_81+2	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
32: Yunqian1_79	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
33: Lagan_60_79	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
34: Lagan_60_79	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
35: Lagan_60_79	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
36: Sunley_72+1	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
37: Murucutumbu_72	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
38: Tiri_73	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
39: CheetoDust_73	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
40: Adonis_73	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
41: Lagan_60_75	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
42: Jatis_72	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
43: LaterVi_73	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
44: TingHu_84_76	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
45: Cain_74_81	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
46: TCIII_746	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
47: Phrank_77	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
48: Shadow_77+1	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
49: Fetterhead_72	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207
50: Elite_69	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207

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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 193841 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193841 has 124 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Guanica15_79
- Track 2 : Anaya_77
- Track 3 : Twitch_73, Jeckyll_73, AlishaPH_72, Atiba_74, Llorens_73, Belladonna_73, CaseJules_75, Lunahalos_73, Blizzard_73, Hyperbowlee_72, Rosmarinus_73, Boiiii_73, Adephegia_72, Durfee_73, Homura_72, Spock_73, Jarvi_73, ShiaSurprise_74, BEEST_73, Padfoot_73, Piatt_72, Inky_73, Asayake_73, Capricorn_73, Peel_73, CREW_72, Topper_73, Tachez_73, BGlluviae_73, Dalmuri_73
- Track 4 : Validus_78
- Track 5 : Nikao_63, LilPharaoh_61, SgtBeansprout_61, Torres_62, Nutello_60, Amelie_60, Enkosi_62, Mdavu_61, Biglebops_60
- Track 6 : Emerson_76, Padpat_77
- Track 7 : Ganymede_73, QuincyRose_71
- Track 8 : Geraldini_77
- Track 9 : HedwigODU_73, Zabiza_69, Joy99_74, ActinUp_74
- Track 10 : Curiosium_79
- Track 11 : Beezoo_76, YoureAdopted_73
- Track 12 : Veliki_74, Ramen_74
- Track 13 : Niklas_75, Shaobing_74
- Track 14 : Stinson_74
- Track 15 : BarrelRoll_74, Rapunzel97_76, Jayhawk_76, Slimphazie_75
- Track 16 : Pokerus_74, Deby_73, Mynx_75
- Track 17 : Ageofdapage_77
- Track 18 : Dartin_74, McMater_74, Richo_74
- Track 19 : TiniBug_73
- Track 20 : Prithvi_76, LindNT_72, TreyKay_76
- Track 21 : DrHayes_73, SamuelLPlaqson_73, Urkel_73
- Track 22 : TruffulaTree_75
- Track 23 : Megsy_75
- Track 24 : Efra2_80
- Track 25 : MarkPhew_74
- Track 26 : TaiwanKao_75
- Track 27 : Bella96_74
- Track 28 : CrimD_75
- Track 29 : MeaningOfLife_75
- Track 30 : Apocalypse_76
- Track 31 : Devera_81, Dole_78, Illumine_79

- Track 32 : Yunkel11_79
- Track 33 : LastHope_79
- Track 34 : Zavala_76
- Track 35 : BaghaKamala_72
- Track 36 : Sulley_72, Angelica_72
- Track 37 : Murucutumbu_74
- Track 38 : Tiri_73
- Track 39 : CheetoDust_73
- Track 40 : Adonis_73
- Track 41 : Peanam_75
- Track 42 : JAWS_72
- Track 43 : LaterM_73
- Track 44 : TingHuaYa_76
- Track 45 : Cain_77, Bryler_77
- Track 46 : TClif_74
- Track 47 : Phrank_77
- Track 48 : Shadow1_77, Sunflower1121_78
- Track 49 : Fefferhead_72
- Track 50 : Ellie_69
- Track 51 : PhelpsODU_76, Unicorn_76
- Track 52 : Hammy_71
- Track 53 : SirPhilip_72
- Track 54 : Ekdilam_68
- Track 55 : Krueger_77
- Track 56 : DarthP_71
- Track 57 : Amohnition_71
- Track 58 : Syra333_76
- Track 59 : Ximenita_78
- Track 60 : Yuna_76
- Track 61 : Amgine_71
- Track 62 : Tierra_77

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

The start number called the most often in the published annotations is 22, it was called in 111 of the 118 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_74, Adephagia_72, Adonis_73, Ageofdapage_77, AlishaPH_72, Amelie_60, Amgine_71, Anaya_77, Angelica_72, Apocalypse_76, Asayake_73, Atiba_74, BEEST_73, BGlluviae_73, BaghaKamala_72, BarrelRoll_74, Beezoo_76, Bella96_74, Belladonna_73, Binglebops_60, Blizzard_73, Boiiii_73, Bryler_77, CREW_72, Cain_77, Capricorn_73, CaseJules_75, CheetoDust_73, CrimD_75, Curiosium_79, Dalmuri_73, Deby_73, Devera_81, Dole_78, DrHayes_73, Durfee_73, Efra2_80, Ellie_69, Emerson_76, Enkosi_62, Fefferhead_72, Ganymede_73, Geraldini_77, Guanica15_79, HedwigODU_73, Homura_72, Hyperbowlee_72, Illumine_79, Inky_73, Jarvi_73, Jayhawk_76, Jeckyll_73, Joy99_74, Krueger_77, LastHope_79, LaterM_73, LilPharaoh_61, LindNT_72, Llorens_73, Lunahalos_73, Mdavu_61, MeaningOfLife_75, Megsy_75, Murucutumbu_74, Mynx_75, Nikao_63, Niklas_75, Nutello_60, Padfoot_73, Padpat_77, Peanam_75, Peel_73,

PhelpsODU_76, Phrank_77, Piatt_72, Pokerus_74, Prithvi_76, QuincyRose_71, Ramen_74, Rapunzel97_76, Rosmarinus_73, SamuelLPlaqson_73, SgtBeansprout_61, Shadow1_77, Shaobing_74, ShiaSurprise_74, SirPhilip_72, Slimphazie_75, Spock_73, Stinson_74, Sulley_72, Sunflower1121_78, Syra333_76, TClif_74, Tachez_73, TaiwanKao_75, Tierra_77, TingHuaYa_76, TiniBug_73, Tiri_73, Topper_73, Torres_62, TreyKay_76, TruffulaTree_75, Twitch_73, Unicorn_76, Urkel_73, Validus_78, Veliki_74, Ximenita_78, YoureAdopted_73, Yunkel11_79, Zabiza_69, Zavala_76,

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

- Dartin_74, JAWS_72, McMater_74, Richo_74,

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

- Amohnition_71, DarthP_71, Ekdilam_68, Hammy_71, MarkPhew_74, Yuna_76,

Summary by start number:

Start 21:

- Found in 5 of 124 (4.0%) of genes in pham
- Manual Annotations of this start: 5 of 118
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amohnition_71 (K6), DarthP_71 (K6), Ekdilam_68 (K6), Hammy_71 (K6), Yuna_76 (K6),

Start 22:

- Found in 118 of 124 (95.2%) of genes in pham
- Manual Annotations of this start: 111 of 118
- Called 96.6% of time when present
- Phage (with cluster) where this start called: ActinUp_74 (K1), Adephagia_72 (K1), Adonis_73 (K1), Ageofdapage_77 (K1), AlishaPH_72 (K1), Amelie_60 (K1), Amgine_71 (K6), Anaya_77 (K1), Angelica_72 (K1), Apocalypse_76 (K1), Asayake_73 (K1), Atiba_74 (K1), BEEST_73 (K1), BGIlluviae_73 (K1), BaghaKamala_72 (K1), BarrelRoll_74 (K1), Beezoo_76 (K1), Bella96_74 (K1), Belladonna_73 (K1), Biglebops_60 (K1), Blizzard_73 (K1), Boiiii_73 (K1), Bryler_77 (K6), CREW_72 (K1), Cain_77 (K6), Capricorn_73 (K1), CaseJules_75 (K1), CheetoDust_73 (K1), CrimD_75 (K1), Curiosium_79 (K1), Dalmuri_73 (K1), Deby_73 (K1), Devera_81 (K1), Dole_78 (K1), DrHayes_73 (K1), Durfee_73 (K1), Efra2_80 (K1), Ellie_69 (K6), Emerson_76 (K1), Enkosi_62 (K1), Fefferhead_72 (K6), Ganymede_73 (K1), Geraldini_77 (K1), Guanica15_79 (K1), HedwigODU_73 (K1), Homura_72 (K1), Hyperbowlee_72 (K1), Illumine_79 (K1), Inky_73 (K1), Jarvi_73 (K1), Jayhawk_76 (K1), Jeckyll_73 (K1), Joy99_74 (K1), Krueger_77 (K6), LastHope_79 (K1), LaterM_73 (K1), LilPharaoh_61 (K1), LindNT_72 (K1), Llorens_73 (K1), Lunahalos_73 (K1), Mdavu_61 (K1), MeaningOfLife_75 (K1), Megsy_75 (K1), Murucutumbu_74 (K1), Mynx_75 (K1), Nikao_63 (K1), Niklas_75 (K1), Nutello_60 (K1), Padfoot_73 (K1), Padpat_77 (K1), Peanam_75 (K1), Peel_73 (K1), PhelpsODU_76 (K6), Phrank_77 (K6), Piatt_72 (K1), Pokerus_74 (K1), Prithvi_76 (K1), QuincyRose_71 (K1), Ramen_74 (K1), Rapunzel97_76 (K1), Rosmarinus_73 (K1), SamuelLPlaqson_73 (K1), SgtBeansprout_61 (K1), Shadow1_77 (K6), Shaobing_74 (K1), ShiaSurprise_74 (K1), SirPhilip_72 (K6), Slimphazie_75 (K1), Spock_73 (K1), Stinson_74 (K1), Sulley_72 (K1), Sunflower1121_78 (K6), Syra333_76 (K6), TClif_74 (K6), Tachez_73 (K1), TaiwanKao_75 (K1), Tierra_77 (K6), TingHuaYa_76 (K1), TiniBug_73 (K1), Tiri_73 (K1), Topper_73 (K1), Torres_62 (K1), TreyKay_76 (K1), TruffulaTree_75 (K1), Twitch_73 (K1), Unicorn_76 (K6),

Urkel_73 (K1), Validus_78 (K1), Veliki_74 (K1), Ximenita_78 (K6), YoureAdopted_73 (K1), Yunkel11_79 (K1), Zabiza_69 (K1), Zavala_76 (K1),

Start 27:

- Found in 31 of 124 (25.0%) of genes in pham
- Manual Annotations of this start: 1 of 118
- Called 3.2% of time when present
- Phage (with cluster) where this start called: MarkPhew_74 (K1),

Start 31:

- Found in 120 of 124 (96.8%) of genes in pham
- Manual Annotations of this start: 1 of 118
- Called 0.8% of time when present
- Phage (with cluster) where this start called: JAWS_72 (K1),

Start 35:

- Found in 31 of 124 (25.0%) of genes in pham
- No Manual Annotations of this start.
- Called 9.7% of time when present
- Phage (with cluster) where this start called: Dartin_74 (K1), McMater_74 (K1), Richo_74 (K1),

Summary by clusters:

There are 2 clusters represented in this pham: K1, K6,

Info for manual annotations of cluster K1:

- Start number 22 was manually annotated 95 times for cluster K1.
- Start number 27 was manually annotated 1 time for cluster K1.
- Start number 31 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K6:

- Start number 21 was manually annotated 5 times for cluster K6.
- Start number 22 was manually annotated 16 times for cluster K6.

Gene Information:

Gene: ActinUp_74 Start: 48731, Stop: 49918, Start Num: 22

Candidate Starts for ActinUp_74:

(Start: 22 @48731 has 111 MA's), (23, 48737), (Start: 31 @48857 has 1 MA's), (32, 48863), (39, 48893), (41, 48905), (46, 48950), (47, 48956), (48, 48959), (51, 48980), (53, 48992), (57, 49055), (58, 49073), (59, 49082), (60, 49088), (62, 49109), (65, 49133), (67, 49151), (76, 49235), (77, 49238), (80, 49274), (81, 49277), (82, 49304), (83, 49313), (86, 49355), (119, 49487), (122, 49544), (129, 49604), (133, 49649), (134, 49655), (135, 49667), (139, 49742), (143, 49766), (144, 49793), (145, 49799), (147, 49814), (149, 49826), (154, 49868),

Gene: Adephagia_72 Start: 48568, Stop: 49755, Start Num: 22

Candidate Starts for Adephagia_72:

(Start: 22 @48568 has 111 MA's), (23, 48574), (Start: 31 @48694 has 1 MA's), (32, 48700), (36, 48718), (41, 48742), (46, 48787), (47, 48793), (48, 48796), (51, 48817), (53, 48829), (57, 48892), (59, 48919), (60, 48925), (62, 48946), (65, 48970), (67, 48988), (76, 49072), (77, 49075), (80, 49111), (81,

49114), (82, 49141), (83, 49150), (86, 49192), (119, 49324), (122, 49381), (129, 49441), (133, 49486), (134, 49492), (135, 49504), (139, 49579), (143, 49603), (144, 49630), (145, 49636), (147, 49651), (149, 49663), (154, 49705),

Gene: Adonis_73 Start: 49003, Stop: 50190, Start Num: 22

Candidate Starts for Adonis_73:

(Start: 22 @49003 has 111 MA's), (23, 49009), (Start: 31 @49129 has 1 MA's), (32, 49135), (39, 49165), (41, 49177), (46, 49222), (47, 49228), (48, 49231), (51, 49252), (53, 49264), (57, 49327), (59, 49354), (60, 49360), (62, 49381), (64, 49402), (65, 49405), (67, 49423), (76, 49507), (77, 49510), (80, 49546), (81, 49549), (82, 49576), (83, 49585), (86, 49627), (119, 49759), (122, 49816), (129, 49876), (133, 49921), (134, 49927), (135, 49939), (139, 50014), (143, 50038), (144, 50065), (145, 50071), (147, 50086), (149, 50098), (154, 50140),

Gene: Ageofdapage_77 Start: 49926, Stop: 51116, Start Num: 22

Candidate Starts for Ageofdapage_77:

(Start: 22 @49926 has 111 MA's), (23, 49932), (Start: 31 @50052 has 1 MA's), (36, 50079), (45, 50136), (47, 50157), (48, 50160), (51, 50181), (53, 50193), (57, 50256), (58, 50274), (59, 50283), (60, 50289), (62, 50310), (64, 50331), (65, 50334), (67, 50352), (76, 50436), (77, 50439), (80, 50475), (82, 50505), (83, 50514), (86, 50556), (92, 50571), (122, 50745), (129, 50805), (132, 50841), (133, 50847), (136, 50868), (139, 50940), (143, 50964), (144, 50991), (149, 51024),

Gene: AlishaPH_72 Start: 48829, Stop: 50016, Start Num: 22

Candidate Starts for AlishaPH_72:

(Start: 22 @48829 has 111 MA's), (23, 48835), (Start: 31 @48955 has 1 MA's), (32, 48961), (36, 48979), (41, 49003), (46, 49048), (47, 49054), (48, 49057), (51, 49078), (53, 49090), (57, 49153), (59, 49180), (60, 49186), (62, 49207), (65, 49231), (67, 49249), (76, 49333), (77, 49336), (80, 49372), (81, 49375), (82, 49402), (83, 49411), (86, 49453), (119, 49585), (122, 49642), (129, 49702), (133, 49747), (134, 49753), (135, 49765), (139, 49840), (143, 49864), (144, 49891), (145, 49897), (147, 49912), (149, 49924), (154, 49966),

Gene: Amelie_60 Start: 45735, Stop: 46916, Start Num: 22

Candidate Starts for Amelie_60:

(Start: 22 @45735 has 111 MA's), (23, 45741), (24, 45753), (Start: 31 @45849 has 1 MA's), (35, 45873), (39, 45885), (42, 45909), (43, 45915), (45, 45927), (46, 45942), (47, 45948), (48, 45951), (51, 45972), (52, 45981), (53, 45984), (56, 46038), (57, 46044), (58, 46062), (60, 46077), (62, 46098), (63, 46101), (65, 46122), (68, 46149), (70, 46155), (72, 46173), (74, 46203), (76, 46224), (77, 46227), (79, 46254), (80, 46263), (82, 46293), (83, 46302), (84, 46314), (91, 46359), (99, 46386), (101, 46389), (108, 46422), (110, 46437), (112, 46443), (116, 46467), (117, 46476), (119, 46485), (121, 46518), (122, 46539), (123, 46548), (124, 46551), (127, 46572), (129, 46599), (132, 46638), (133, 46644), (135, 46662), (136, 46665), (137, 46674), (138, 46710), (139, 46737), (140, 46740), (141, 46746), (143, 46761), (144, 46788), (147, 46809), (148, 46812), (149, 46821), (159, 46905), (160, 46908),

Gene: Amgine_71 Start: 49342, Stop: 50448, Start Num: 22

Candidate Starts for Amgine_71:

(15, 49264), (Start: 22 @49342 has 111 MA's), (23, 49348), (Start: 27 @49393 has 1 MA's), (Start: 31 @49456 has 1 MA's), (41, 49504), (43, 49522), (47, 49555), (48, 49558), (50, 49570), (51, 49579), (57, 49654), (60, 49687), (64, 49729), (75, 49822), (76, 49834), (77, 49837), (78, 49840), (81, 49876), (83, 49912), (87, 49951), (88, 49954), (122, 50134), (126, 50155), (127, 50167), (129, 50194), (156, 50389), (158, 50404),

Gene: Amohnition_71 Start: 49043, Stop: 50146, Start Num: 21

Candidate Starts for Amohnition_71:

(15, 48968), (16, 48977), (Start: 21 @49043 has 5 MA's), (23, 49052), (Start: 27 @49097 has 1 MA's), (Start: 31 @49160 has 1 MA's), (35, 49184), (41, 49208), (43, 49226), (47, 49259), (49, 49271), (51, 49283), (57, 49358), (62, 49412), (65, 49436), (76, 49538), (77, 49541), (83, 49616), (90, 49670), (94, 49688), (117, 49790), (122, 49853), (127, 49886), (128, 49910), (129, 49913), (135, 49973), (152, 50081), (155, 50105), (156, 50108),

Gene: Anaya_77 Start: 49707, Stop: 50813, Start Num: 22

Candidate Starts for Anaya_77:

(Start: 22 @49707 has 111 MA's), (23, 49713), (Start: 31 @49833 has 1 MA's), (32, 49839), (36, 49857), (39, 49869), (41, 49881), (46, 49926), (47, 49932), (48, 49935), (51, 49956), (53, 49968), (57, 50031), (58, 50049), (59, 50058), (60, 50064), (62, 50085), (65, 50109), (67, 50127), (76, 50211), (77, 50214), (80, 50250), (81, 50253), (82, 50280), (83, 50289), (86, 50331), (92, 50346), (97, 50364), (119, 50463), (122, 50520), (127, 50553), (129, 50580), (135, 50643), (154, 50763),

Gene: Angelica_72 Start: 48688, Stop: 49875, Start Num: 22

Candidate Starts for Angelica_72:

(Start: 22 @48688 has 111 MA's), (23, 48694), (29, 48745), (Start: 31 @48814 has 1 MA's), (32, 48820), (36, 48838), (41, 48862), (46, 48907), (47, 48913), (48, 48916), (51, 48937), (53, 48949), (57, 49012), (58, 49030), (59, 49039), (60, 49045), (62, 49066), (65, 49090), (67, 49108), (76, 49192), (77, 49195), (80, 49231), (81, 49234), (82, 49261), (83, 49270), (86, 49312), (122, 49501), (129, 49561), (133, 49606), (134, 49612), (135, 49624), (139, 49699), (143, 49723), (144, 49750), (145, 49756), (147, 49771), (149, 49783), (154, 49825),

Gene: Apocalypse_76 Start: 49451, Stop: 50557, Start Num: 22

Candidate Starts for Apocalypse_76:

(Start: 22 @49451 has 111 MA's), (23, 49457), (29, 49508), (Start: 31 @49577 has 1 MA's), (32, 49583), (36, 49601), (41, 49625), (46, 49670), (47, 49676), (48, 49679), (51, 49700), (53, 49712), (57, 49775), (58, 49793), (59, 49802), (62, 49829), (64, 49850), (65, 49853), (67, 49871), (73, 49907), (76, 49955), (77, 49958), (80, 49994), (81, 49997), (82, 50024), (83, 50033), (86, 50075), (92, 50090), (97, 50108), (122, 50264), (127, 50297), (129, 50324), (133, 50369), (135, 50387), (154, 50507),

Gene: Asayake_73 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for Asayake_73:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59, 49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: Atiba_74 Start: 48531, Stop: 49718, Start Num: 22

Candidate Starts for Atiba_74:

(Start: 22 @48531 has 111 MA's), (23, 48537), (Start: 31 @48657 has 1 MA's), (32, 48663), (36, 48681), (41, 48705), (46, 48750), (47, 48756), (48, 48759), (51, 48780), (53, 48792), (57, 48855), (59, 48882), (60, 48888), (62, 48909), (65, 48933), (67, 48951), (76, 49035), (77, 49038), (80, 49074), (81, 49077), (82, 49104), (83, 49113), (86, 49155), (119, 49287), (122, 49344), (129, 49404), (133, 49449), (134, 49455), (135, 49467), (139, 49542), (143, 49566), (144, 49593), (145, 49599), (147, 49614), (149, 49626), (154, 49668),

Gene: BEEST_73 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for BEEST_73:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59,

49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: BGlluviae_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for BGlluviae_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: BaghaKamala_72 Start: 48117, Stop: 49304, Start Num: 22

Candidate Starts for BaghaKamala_72:

(1, 47949), (3, 47973), (4, 47979), (6, 47982), (9, 47994), (10, 48000), (14, 48039), (17, 48060), (Start: 22 @48117 has 111 MA's), (23, 48123), (Start: 31 @48243 has 1 MA's), (32, 48249), (36, 48267), (41, 48291), (46, 48336), (47, 48342), (48, 48345), (51, 48366), (53, 48378), (57, 48441), (59, 48468), (60, 48474), (62, 48495), (65, 48519), (67, 48537), (76, 48621), (77, 48624), (80, 48660), (81, 48663), (82, 48690), (83, 48699), (86, 48741), (119, 48873), (122, 48930), (129, 48990), (133, 49035), (134, 49041), (135, 49053), (139, 49128), (143, 49152), (144, 49179), (145, 49185), (147, 49200), (149, 49212), (154, 49254),

Gene: BarrelRoll_74 Start: 49169, Stop: 50275, Start Num: 22

Candidate Starts for BarrelRoll_74:

(Start: 22 @49169 has 111 MA's), (23, 49175), (29, 49226), (Start: 31 @49295 has 1 MA's), (32, 49301), (36, 49319), (41, 49343), (46, 49388), (47, 49394), (48, 49397), (51, 49418), (53, 49430), (57, 49493), (58, 49511), (59, 49520), (60, 49526), (62, 49547), (65, 49571), (67, 49589), (76, 49673), (77, 49676), (80, 49712), (81, 49715), (82, 49742), (83, 49751), (86, 49793), (92, 49808), (97, 49826), (119, 49925), (122, 49982), (127, 50015), (129, 50042), (133, 50087), (135, 50105), (154, 50225),

Gene: Beezoo_76 Start: 49665, Stop: 50852, Start Num: 22

Candidate Starts for Beezoo_76:

(Start: 22 @49665 has 111 MA's), (23, 49671), (29, 49722), (Start: 31 @49791 has 1 MA's), (32, 49797), (36, 49815), (39, 49827), (41, 49839), (46, 49884), (47, 49890), (48, 49893), (51, 49914), (53, 49926), (57, 49989), (58, 50007), (59, 50016), (60, 50022), (62, 50043), (65, 50067), (67, 50085), (76, 50169), (77, 50172), (80, 50208), (81, 50211), (82, 50238), (83, 50247), (86, 50289), (119, 50421), (122, 50478), (129, 50538), (133, 50583), (134, 50589), (135, 50601), (139, 50676), (143, 50700), (144, 50727), (145, 50733), (147, 50748), (149, 50760), (154, 50802),

Gene: Bella96_74 Start: 49027, Stop: 50136, Start Num: 22

Candidate Starts for Bella96_74:

(Start: 22 @49027 has 111 MA's), (23, 49033), (Start: 31 @49153 has 1 MA's), (36, 49180), (45, 49237), (47, 49258), (48, 49261), (51, 49282), (55, 49333), (57, 49357), (58, 49375), (59, 49384), (60, 49390), (62, 49411), (64, 49432), (65, 49435), (67, 49453), (74, 49516), (76, 49537), (77, 49540), (81, 49579), (82, 49606), (83, 49615), (86, 49657), (122, 49846), (127, 49879), (129, 49906), (135, 49966), (136, 49969), (154, 50086),

Gene: Belladonna_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Belladonna_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59,

49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: Biglebops_60 Start: 45750, Stop: 46931, Start Num: 22

Candidate Starts for Biglebops_60:

(Start: 22 @45750 has 111 MA's), (23, 45756), (24, 45768), (Start: 31 @45864 has 1 MA's), (35, 45888), (39, 45900), (42, 45924), (43, 45930), (45, 45942), (46, 45957), (47, 45963), (48, 45966), (51, 45987), (52, 45996), (53, 45999), (56, 46053), (57, 46059), (58, 46077), (60, 46092), (62, 46113), (63, 46116), (65, 46137), (68, 46164), (70, 46170), (72, 46188), (74, 46218), (76, 46239), (77, 46242), (79, 46269), (80, 46278), (82, 46308), (83, 46317), (84, 46329), (91, 46374), (99, 46401), (101, 46404), (108, 46437), (110, 46452), (112, 46458), (116, 46482), (117, 46491), (119, 46500), (121, 46533), (122, 46554), (123, 46563), (124, 46566), (127, 46587), (129, 46614), (132, 46653), (133, 46659), (135, 46677), (136, 46680), (137, 46689), (138, 46725), (139, 46752), (140, 46755), (141, 46761), (143, 46776), (144, 46803), (147, 46824), (148, 46827), (149, 46836), (159, 46920), (160, 46923),

Gene: Blizzard_73 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for Blizzard_73:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59, 49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: Boiiii_73 Start: 48885, Stop: 50072, Start Num: 22

Candidate Starts for Boiiii_73:

(Start: 22 @48885 has 111 MA's), (23, 48891), (Start: 31 @49011 has 1 MA's), (32, 49017), (36, 49035), (41, 49059), (46, 49104), (47, 49110), (48, 49113), (51, 49134), (53, 49146), (57, 49209), (59, 49236), (60, 49242), (62, 49263), (65, 49287), (67, 49305), (76, 49389), (77, 49392), (80, 49428), (81, 49431), (82, 49458), (83, 49467), (86, 49509), (119, 49641), (122, 49698), (129, 49758), (133, 49803), (134, 49809), (135, 49821), (139, 49896), (143, 49920), (144, 49947), (145, 49953), (147, 49968), (149, 49980), (154, 50022),

Gene: Bryler_77 Start: 48601, Stop: 49704, Start Num: 22

Candidate Starts for Bryler_77:

(15, 48523), (Start: 22 @48601 has 111 MA's), (23, 48607), (28, 48658), (Start: 31 @48715 has 1 MA's), (35, 48739), (48, 48817), (51, 48838), (53, 48850), (54, 48859), (57, 48910), (62, 48964), (63, 48967), (74, 49069), (76, 49090), (83, 49168), (95, 49246), (107, 49285), (120, 49378), (122, 49408), (125, 49426), (126, 49429), (127, 49441), (129, 49468), (133, 49510),

Gene: CREW_72 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for CREW_72:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: Cain_77 Start: 48589, Stop: 49692, Start Num: 22

Candidate Starts for Cain_77:

(15, 48511), (Start: 22 @48589 has 111 MA's), (23, 48595), (28, 48646), (Start: 31 @48703 has 1 MA's), (35, 48727), (48, 48805), (51, 48826), (53, 48838), (54, 48847), (57, 48898), (62, 48952), (63, 48955), (74, 49057), (76, 49078), (83, 49156), (95, 49234), (107, 49273), (120, 49366), (122, 49396), (125, 49414), (126, 49417), (127, 49429), (129, 49456), (133, 49498),

Gene: Capricorn_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Capricorn_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: CaseJules_75 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for CaseJules_75:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59, 49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: CheetoDust_73 Start: 48364, Stop: 49470, Start Num: 22

Candidate Starts for CheetoDust_73:

(Start: 22 @48364 has 111 MA's), (23, 48370), (29, 48421), (Start: 31 @48490 has 1 MA's), (32, 48496), (36, 48514), (41, 48538), (46, 48583), (47, 48589), (48, 48592), (51, 48613), (53, 48625), (57, 48688), (58, 48706), (59, 48715), (60, 48721), (62, 48742), (65, 48766), (67, 48784), (76, 48868), (77, 48871), (80, 48907), (81, 48910), (82, 48937), (83, 48946), (86, 48988), (119, 49120), (122, 49177), (127, 49210), (129, 49237), (133, 49282), (135, 49300), (154, 49420),

Gene: CrimD_75 Start: 49772, Stop: 50872, Start Num: 22

Candidate Starts for CrimD_75:

(2, 49604), (7, 49634), (8, 49637), (12, 49655), (15, 49694), (Start: 22 @49772 has 111 MA's), (23, 49778), (Start: 31 @49886 has 1 MA's), (36, 49913), (45, 49970), (47, 49991), (48, 49994), (51, 50015), (53, 50027), (57, 50090), (59, 50117), (60, 50123), (62, 50144), (64, 50165), (65, 50168), (67, 50186), (76, 50270), (77, 50273), (80, 50309), (81, 50312), (82, 50339), (83, 50348), (86, 50390), (99, 50426), (111, 50477), (119, 50522), (122, 50579), (127, 50612), (129, 50639), (132, 50678), (135, 50702), (154, 50822),

Gene: Curiosium_79 Start: 48656, Stop: 49837, Start Num: 22

Candidate Starts for Curiosium_79:

(Start: 22 @48656 has 111 MA's), (23, 48662), (25, 48680), (26, 48704), (Start: 27 @48707 has 1 MA's), (30, 48719), (Start: 31 @48770 has 1 MA's), (32, 48776), (44, 48845), (45, 48854), (47, 48875), (48, 48878), (51, 48899), (57, 48974), (59, 49001), (60, 49007), (62, 49028), (64, 49049), (65, 49052), (67, 49070), (76, 49154), (77, 49157), (80, 49193), (81, 49196), (82, 49223), (83, 49232), (86, 49274), (92, 49289), (119, 49406), (122, 49463), (127, 49496), (129, 49523), (132, 49559), (133, 49565), (134, 49571), (135, 49583), (139, 49658), (143, 49682), (144, 49709), (147, 49730), (159, 49826),

Gene: Dalmuri_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Dalmuri_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59,

49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: DarthP_71 Start: 48900, Stop: 50003, Start Num: 21

Candidate Starts for DarthP_71:

(15, 48825), (16, 48834), (Start: 21 @48900 has 5 MA's), (23, 48909), (Start: 27 @48954 has 1 MA's), (Start: 31 @49017 has 1 MA's), (35, 49041), (41, 49065), (43, 49083), (47, 49116), (49, 49128), (51, 49140), (57, 49215), (62, 49269), (65, 49293), (76, 49395), (77, 49398), (79, 49425), (83, 49473), (90, 49527), (94, 49545), (117, 49647), (122, 49710), (126, 49731), (127, 49743), (128, 49767), (129, 49770), (131, 49794), (135, 49830), (152, 49938), (155, 49962), (156, 49965),

Gene: Dartin_74 Start: 49082, Stop: 50047, Start Num: 35

Candidate Starts for Dartin_74:

(Start: 22 @48944 has 111 MA's), (23, 48950), (Start: 27 @48995 has 1 MA's), (Start: 31 @49058 has 1 MA's), (35, 49082), (43, 49124), (46, 49151), (47, 49157), (48, 49160), (51, 49181), (57, 49253), (59, 49280), (60, 49286), (65, 49331), (74, 49412), (75, 49421), (76, 49433), (77, 49436), (78, 49439), (80, 49472), (82, 49502), (83, 49511), (94, 49589), (95, 49592), (107, 49628), (112, 49655), (116, 49679), (118, 49694), (122, 49754), (126, 49775), (127, 49787), (129, 49814), (132, 49850), (133, 49856), (150, 49961),

Gene: Deby_73 Start: 49136, Stop: 50242, Start Num: 22

Candidate Starts for Deby_73:

(Start: 22 @49136 has 111 MA's), (23, 49142), (29, 49193), (Start: 31 @49262 has 1 MA's), (32, 49268), (36, 49286), (41, 49310), (46, 49355), (47, 49361), (48, 49364), (51, 49385), (53, 49397), (57, 49460), (58, 49478), (59, 49487), (60, 49493), (62, 49514), (65, 49538), (67, 49556), (76, 49640), (77, 49643), (80, 49679), (81, 49682), (82, 49709), (83, 49718), (86, 49760), (92, 49775), (97, 49793), (122, 49949), (127, 49982), (129, 50009), (133, 50054), (135, 50072), (154, 50192),

Gene: Devera_81 Start: 50477, Stop: 51667, Start Num: 22

Candidate Starts for Devera_81:

(Start: 22 @50477 has 111 MA's), (23, 50483), (Start: 31 @50603 has 1 MA's), (36, 50630), (45, 50687), (47, 50708), (48, 50711), (51, 50732), (57, 50807), (59, 50834), (60, 50840), (62, 50861), (64, 50882), (65, 50885), (67, 50903), (74, 50966), (76, 50987), (77, 50990), (80, 51026), (82, 51056), (86, 51107), (92, 51122), (111, 51194), (114, 51209), (122, 51296), (129, 51356), (132, 51392), (133, 51398), (136, 51419), (139, 51491), (143, 51515), (144, 51542), (149, 51575),

Gene: Dole_78 Start: 50480, Stop: 51670, Start Num: 22

Candidate Starts for Dole_78:

(Start: 22 @50480 has 111 MA's), (23, 50486), (Start: 31 @50606 has 1 MA's), (36, 50633), (45, 50690), (47, 50711), (48, 50714), (51, 50735), (57, 50810), (59, 50837), (60, 50843), (62, 50864), (64, 50885), (65, 50888), (67, 50906), (74, 50969), (76, 50990), (77, 50993), (80, 51029), (82, 51059), (86, 51110), (92, 51125), (111, 51197), (114, 51212), (122, 51299), (129, 51359), (132, 51395), (133, 51401), (136, 51422), (139, 51494), (143, 51518), (144, 51545), (149, 51578),

Gene: DrHayes_73 Start: 49181, Stop: 50269, Start Num: 22

Candidate Starts for DrHayes_73:

(Start: 22 @49181 has 111 MA's), (23, 49187), (Start: 31 @49307 has 1 MA's), (36, 49334), (45, 49391), (47, 49412), (48, 49415), (51, 49436), (57, 49511), (59, 49538), (60, 49544), (62, 49565), (64, 49586), (65, 49589), (67, 49607), (76, 49691), (77, 49694), (80, 49730), (81, 49733), (82, 49760), (83, 49769), (104, 49835), (115, 49901), (119, 49922), (122, 49979), (127, 50012), (129, 50039), (135, 50099), (136, 50102), (154, 50219),

Gene: Durfee_73 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for Durfee_73:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59, 49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: Efra2_80 Start: 49519, Stop: 50703, Start Num: 22

Candidate Starts for Efra2_80:

(Start: 22 @49519 has 111 MA's), (23, 49525), (26, 49567), (Start: 27 @49570 has 1 MA's), (30, 49582), (Start: 31 @49633 has 1 MA's), (32, 49639), (36, 49660), (38, 49669), (40, 49681), (47, 49738), (48, 49741), (51, 49762), (57, 49837), (59, 49864), (60, 49870), (62, 49891), (64, 49912), (65, 49915), (76, 50017), (77, 50020), (80, 50056), (81, 50059), (82, 50086), (83, 50095), (86, 50137), (92, 50152), (99, 50173), (111, 50224), (112, 50227), (113, 50230), (122, 50326), (127, 50359), (129, 50386), (133, 50431), (135, 50449), (139, 50524), (144, 50575), (147, 50596), (148, 50599), (151, 50629), (157, 50674),

Gene: Ekdilam_68 Start: 49108, Stop: 50211, Start Num: 21

Candidate Starts for Ekdilam_68:

(15, 49033), (Start: 21 @49108 has 5 MA's), (23, 49117), (Start: 27 @49162 has 1 MA's), (37, 49255), (41, 49273), (43, 49291), (47, 49324), (49, 49336), (51, 49348), (57, 49423), (65, 49501), (76, 49603), (77, 49606), (83, 49681), (89, 49732), (103, 49771), (107, 49795), (122, 49918), (127, 49951), (128, 49975), (129, 49978), (131, 50002), (135, 50038), (152, 50146), (156, 50173), (158, 50188),

Gene: Ellie_69 Start: 48362, Stop: 49447, Start Num: 22

Candidate Starts for Ellie_69:

(Start: 22 @48362 has 111 MA's), (23, 48368), (Start: 27 @48413 has 1 MA's), (Start: 31 @48476 has 1 MA's), (35, 48500), (41, 48524), (43, 48542), (47, 48575), (48, 48578), (50, 48590), (51, 48599), (57, 48674), (60, 48707), (64, 48749), (75, 48842), (76, 48854), (77, 48857), (78, 48860), (81, 48896), (83, 48932), (87, 48971), (88, 48974), (122, 49154), (126, 49175), (127, 49187), (129, 49214), (156, 49409),

Gene: Emerson_76 Start: 49203, Stop: 50309, Start Num: 22

Candidate Starts for Emerson_76:

(Start: 22 @49203 has 111 MA's), (23, 49209), (Start: 31 @49329 has 1 MA's), (32, 49335), (33, 49344), (36, 49353), (41, 49377), (46, 49422), (47, 49428), (48, 49431), (51, 49452), (53, 49464), (57, 49527), (58, 49545), (59, 49554), (60, 49560), (62, 49581), (65, 49605), (76, 49707), (77, 49710), (80, 49746), (81, 49749), (82, 49776), (83, 49785), (86, 49827), (119, 49959), (122, 50016), (127, 50049), (129, 50076), (133, 50121), (135, 50139), (154, 50259),

Gene: Enkosi_62 Start: 48348, Stop: 49529, Start Num: 22

Candidate Starts for Enkosi_62:

(Start: 22 @48348 has 111 MA's), (23, 48354), (24, 48366), (Start: 31 @48462 has 1 MA's), (35, 48486), (39, 48498), (42, 48522), (43, 48528), (45, 48540), (46, 48555), (47, 48561), (48, 48564), (51, 48585), (52, 48594), (53, 48597), (56, 48651), (57, 48657), (58, 48675), (60, 48690), (62, 48711), (63, 48714), (65, 48735), (68, 48762), (70, 48768), (72, 48786), (74, 48816), (76, 48837), (77, 48840), (79, 48867), (80, 48876), (82, 48906), (83, 48915), (84, 48927), (91, 48972), (99, 48999), (101, 49002), (108, 49035), (110, 49050), (112, 49056), (116, 49080), (117, 49089), (119, 49098), (121, 49131), (122, 49152), (123, 49161), (124, 49164), (127, 49185), (129, 49212), (132, 49251), (133, 49257), (135, 49275), (136, 49278), (137, 49287), (138, 49323), (139, 49350), (140, 49353), (141, 49359),

(143, 49374), (144, 49401), (147, 49422), (148, 49425), (149, 49434), (159, 49518), (160, 49521),

Gene: Fefferhead_72 Start: 48571, Stop: 49677, Start Num: 22

Candidate Starts for Fefferhead_72:

(15, 48493), (Start: 22 @48571 has 111 MA's), (23, 48577), (Start: 27 @48622 has 1 MA's), (Start: 31 @48685 has 1 MA's), (41, 48733), (43, 48751), (47, 48784), (50, 48799), (51, 48808), (57, 48883), (60, 48916), (64, 48958), (75, 49051), (76, 49063), (77, 49066), (78, 49069), (81, 49105), (83, 49141), (87, 49180), (88, 49183), (122, 49363), (126, 49384), (127, 49396), (129, 49423), (156, 49618), (158, 49633),

Gene: Ganymede_73 Start: 49093, Stop: 50280, Start Num: 22

Candidate Starts for Ganymede_73:

(Start: 22 @49093 has 111 MA's), (23, 49099), (Start: 31 @49219 has 1 MA's), (32, 49225), (41, 49267), (46, 49312), (47, 49318), (48, 49321), (51, 49342), (53, 49354), (57, 49417), (59, 49444), (60, 49450), (62, 49471), (65, 49495), (67, 49513), (76, 49597), (77, 49600), (80, 49636), (81, 49639), (82, 49666), (83, 49675), (86, 49717), (122, 49906), (129, 49966), (133, 50011), (134, 50017), (135, 50029), (139, 50104), (143, 50128), (144, 50155), (145, 50161), (147, 50176), (149, 50188), (154, 50230),

Gene: Geraldini_77 Start: 49764, Stop: 50870, Start Num: 22

Candidate Starts for Geraldini_77:

(Start: 22 @49764 has 111 MA's), (23, 49770), (Start: 31 @49890 has 1 MA's), (32, 49896), (36, 49914), (41, 49938), (46, 49983), (47, 49989), (48, 49992), (51, 50013), (53, 50025), (57, 50088), (58, 50106), (59, 50115), (60, 50121), (62, 50142), (65, 50166), (67, 50184), (76, 50268), (77, 50271), (80, 50307), (81, 50310), (82, 50337), (83, 50346), (86, 50388), (119, 50520), (122, 50577), (127, 50610), (129, 50637), (133, 50682), (135, 50700), (150, 50787), (154, 50820),

Gene: Guanica15_79 Start: 49265, Stop: 50449, Start Num: 22

Candidate Starts for Guanica15_79:

(Start: 22 @49265 has 111 MA's), (23, 49271), (26, 49313), (Start: 27 @49316 has 1 MA's), (Start: 31 @49379 has 1 MA's), (32, 49385), (36, 49406), (38, 49415), (40, 49427), (47, 49484), (48, 49487), (51, 49508), (57, 49583), (58, 49601), (59, 49610), (60, 49616), (62, 49637), (64, 49658), (65, 49661), (76, 49763), (77, 49766), (80, 49802), (81, 49805), (82, 49832), (83, 49841), (86, 49883), (92, 49898), (99, 49919), (110, 49967), (116, 49997), (122, 50072), (126, 50093), (127, 50105), (129, 50132), (132, 50171), (133, 50177), (135, 50195), (139, 50270), (147, 50342), (148, 50345), (149, 50354), (157, 50420),

Gene: Hammy_71 Start: 48885, Stop: 49988, Start Num: 21

Candidate Starts for Hammy_71:

(15, 48810), (16, 48819), (Start: 21 @48885 has 5 MA's), (23, 48894), (Start: 27 @48939 has 1 MA's), (Start: 31 @49002 has 1 MA's), (35, 49026), (41, 49050), (43, 49068), (47, 49101), (49, 49113), (51, 49125), (57, 49200), (62, 49254), (64, 49275), (65, 49278), (76, 49380), (77, 49383), (79, 49410), (83, 49458), (90, 49512), (94, 49530), (117, 49632), (122, 49695), (127, 49728), (128, 49752), (129, 49755), (131, 49779), (135, 49815), (152, 49923), (155, 49947), (156, 49950),

Gene: HedwigODU_73 Start: 48731, Stop: 49918, Start Num: 22

Candidate Starts for HedwigODU_73:

(Start: 22 @48731 has 111 MA's), (23, 48737), (Start: 31 @48857 has 1 MA's), (32, 48863), (39, 48893), (41, 48905), (46, 48950), (47, 48956), (48, 48959), (51, 48980), (53, 48992), (57, 49055), (58, 49073), (59, 49082), (60, 49088), (62, 49109), (65, 49133), (67, 49151), (76, 49235), (77, 49238), (80, 49274), (81, 49277), (82, 49304), (83, 49313), (86, 49355), (119, 49487), (122, 49544), (129, 49604), (133, 49649), (134, 49655), (135, 49667), (139, 49742), (143, 49766), (144, 49793), (145, 49799), (147, 49814), (149, 49826), (154, 49868),

Gene: Homura_72 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Homura_72:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: Hyperbowlee_72 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for Hyperbowlee_72:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59, 49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: Illumine_79 Start: 50479, Stop: 51669, Start Num: 22

Candidate Starts for Illumine_79:

(Start: 22 @50479 has 111 MA's), (23, 50485), (Start: 31 @50605 has 1 MA's), (36, 50632), (45, 50689), (47, 50710), (48, 50713), (51, 50734), (57, 50809), (59, 50836), (60, 50842), (62, 50863), (64, 50884), (65, 50887), (67, 50905), (74, 50968), (76, 50989), (77, 50992), (80, 51028), (82, 51058), (86, 51109), (92, 51124), (111, 51196), (114, 51211), (122, 51298), (129, 51358), (132, 51394), (133, 51400), (136, 51421), (139, 51493), (143, 51517), (144, 51544), (149, 51577),

Gene: Inky_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Inky_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: JAWS_72 Start: 48855, Stop: 49835, Start Num: 31

Candidate Starts for JAWS_72:

(2, 48561), (5, 48585), (8, 48594), (11, 48606), (12, 48612), (15, 48651), (Start: 22 @48729 has 111 MA's), (23, 48735), (Start: 31 @48855 has 1 MA's), (32, 48861), (33, 48870), (36, 48879), (41, 48903), (46, 48948), (47, 48954), (48, 48957), (51, 48978), (53, 48990), (57, 49053), (59, 49080), (60, 49086), (62, 49107), (65, 49131), (67, 49149), (73, 49185), (76, 49233), (77, 49236), (80, 49272), (81, 49275), (82, 49302), (83, 49311), (86, 49353), (92, 49368), (97, 49386), (119, 49485), (122, 49542), (127, 49575), (129, 49602), (133, 49647), (135, 49665), (154, 49785),

Gene: Jarvi_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Jarvi_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: Jayhawk_76 Start: 49229, Stop: 50335, Start Num: 22

Candidate Starts for Jayhawk_76:

(Start: 22 @49229 has 111 MA's), (23, 49235), (29, 49286), (Start: 31 @49355 has 1 MA's), (32, 49361), (36, 49379), (41, 49403), (46, 49448), (47, 49454), (48, 49457), (51, 49478), (53, 49490), (57, 49553), (58, 49571), (59, 49580), (60, 49586), (62, 49607), (65, 49631), (67, 49649), (76, 49733), (77, 49736), (80, 49772), (81, 49775), (82, 49802), (83, 49811), (86, 49853), (92, 49868), (97, 49886), (119, 49985), (122, 50042), (127, 50075), (129, 50102), (133, 50147), (135, 50165), (154, 50285),

Gene: Jeckyll_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Jeckyll_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: Joy99_74 Start: 48815, Stop: 50002, Start Num: 22

Candidate Starts for Joy99_74:

(Start: 22 @48815 has 111 MA's), (23, 48821), (Start: 31 @48941 has 1 MA's), (32, 48947), (39, 48977), (41, 48989), (46, 49034), (47, 49040), (48, 49043), (51, 49064), (53, 49076), (57, 49139), (58, 49157), (59, 49166), (60, 49172), (62, 49193), (65, 49217), (67, 49235), (76, 49319), (77, 49322), (80, 49358), (81, 49361), (82, 49388), (83, 49397), (86, 49439), (119, 49571), (122, 49628), (129, 49688), (133, 49733), (134, 49739), (135, 49751), (139, 49826), (143, 49850), (144, 49877), (145, 49883), (147, 49898), (149, 49910), (154, 49952),

Gene: Krueger_77 Start: 48733, Stop: 49833, Start Num: 22

Candidate Starts for Krueger_77:

(15, 48655), (Start: 22 @48733 has 111 MA's), (23, 48739), (Start: 27 @48784 has 1 MA's), (Start: 31 @48847 has 1 MA's), (35, 48871), (46, 48940), (50, 48961), (51, 48970), (53, 48982), (57, 49042), (60, 49075), (62, 49096), (65, 49120), (76, 49222), (80, 49261), (90, 49354), (95, 49378), (107, 49417), (109, 49432), (120, 49510), (122, 49540), (123, 49549), (125, 49558), (126, 49561), (127, 49573), (129, 49600), (133, 49642), (150, 49747), (156, 49795),

Gene: LastHope_79 Start: 48375, Stop: 49559, Start Num: 22

Candidate Starts for LastHope_79:

(13, 48264), (Start: 22 @48375 has 111 MA's), (23, 48381), (25, 48399), (26, 48423), (Start: 27 @48426 has 1 MA's), (30, 48438), (Start: 31 @48489 has 1 MA's), (32, 48495), (36, 48516), (45, 48573), (47, 48594), (48, 48597), (51, 48618), (57, 48693), (58, 48711), (60, 48726), (62, 48747), (64, 48768), (65, 48771), (67, 48789), (71, 48813), (76, 48873), (77, 48876), (80, 48912), (81, 48915), (82, 48942), (83, 48951), (86, 48993), (92, 49008), (110, 49077), (116, 49107), (117, 49116), (119, 49125), (122, 49182), (129, 49242), (133, 49287), (134, 49293), (135, 49305), (139, 49380), (143, 49404), (144, 49431), (145, 49437), (147, 49452), (149, 49464),

Gene: LaterM_73 Start: 49344, Stop: 50534, Start Num: 22

Candidate Starts for LaterM_73:

(Start: 22 @49344 has 111 MA's), (23, 49350), (Start: 31 @49470 has 1 MA's), (36, 49497), (45, 49554), (47, 49575), (48, 49578), (51, 49599), (57, 49674), (58, 49692), (59, 49701), (60, 49707), (62, 49728), (64, 49749), (65, 49752), (67, 49770), (76, 49854), (77, 49857), (80, 49893), (82, 49923), (83, 49932), (86, 49974), (92, 49989), (122, 50163), (129, 50223), (132, 50259), (133, 50265), (136, 50286), (139, 50358), (143, 50382), (144, 50409),

Gene: LilPharaoh_61 Start: 45463, Stop: 46644, Start Num: 22

Candidate Starts for LilPharaoh_61:

(Start: 22 @45463 has 111 MA's), (23, 45469), (24, 45481), (Start: 31 @45577 has 1 MA's), (35, 45601), (39, 45613), (42, 45637), (43, 45643), (45, 45655), (46, 45670), (47, 45676), (48, 45679), (51, 45700), (52, 45709), (53, 45712), (56, 45766), (57, 45772), (58, 45790), (60, 45805), (62, 45826), (63, 45829), (65, 45850), (68, 45877), (70, 45883), (72, 45901), (74, 45931), (76, 45952), (77, 45955), (79, 45982), (80, 45991), (82, 46021), (83, 46030), (84, 46042), (91, 46087), (99, 46114), (101, 46117), (108, 46150), (110, 46165), (112, 46171), (116, 46195), (117, 46204), (119, 46213), (121, 46246), (122, 46267), (123, 46276), (124, 46279), (127, 46300), (129, 46327), (132, 46366), (133, 46372), (135, 46390), (136, 46393), (137, 46402), (138, 46438), (139, 46465), (140, 46468), (141, 46474), (143, 46489), (144, 46516), (147, 46537), (148, 46540), (149, 46549), (159, 46633), (160, 46636),

Gene: LindNT_72 Start: 49236, Stop: 50336, Start Num: 22

Candidate Starts for LindNT_72:

(15, 49158), (16, 49167), (Start: 22 @49236 has 111 MA's), (23, 49242), (Start: 31 @49350 has 1 MA's), (36, 49377), (45, 49434), (47, 49455), (48, 49458), (51, 49479), (53, 49491), (57, 49554), (59, 49581), (60, 49587), (62, 49608), (64, 49629), (65, 49632), (67, 49650), (76, 49734), (77, 49737), (80, 49773), (81, 49776), (82, 49803), (83, 49812), (86, 49854), (99, 49890), (111, 49941), (119, 49986), (122, 50043), (127, 50076), (129, 50103), (132, 50142), (135, 50166), (154, 50286),

Gene: Llorens_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Llorens_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: Lunahalos_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Lunahalos_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: MarkPhew_74 Start: 48544, Stop: 49581, Start Num: 27

Candidate Starts for MarkPhew_74:

(19, 48469), (20, 48484), (Start: 27 @48544 has 1 MA's), (30, 48550), (37, 48628), (41, 48646), (47, 48697), (51, 48721), (57, 48796), (58, 48814), (63, 48853), (66, 48880), (70, 48907), (75, 48964), (77, 48979), (81, 49018), (83, 49054), (93, 49126), (102, 49138), (108, 49171), (117, 49225), (122, 49288), (127, 49321), (134, 49399), (135, 49411), (154, 49528), (156, 49543), (159, 49570),

Gene: McMater_74 Start: 49082, Stop: 50047, Start Num: 35

Candidate Starts for McMater_74:

(Start: 22 @48944 has 111 MA's), (23, 48950), (Start: 27 @48995 has 1 MA's), (Start: 31 @49058 has 1 MA's), (35, 49082), (43, 49124), (46, 49151), (47, 49157), (48, 49160), (51, 49181), (57, 49253), (59, 49280), (60, 49286), (65, 49331), (74, 49412), (75, 49421), (76, 49433), (77, 49436), (78, 49439), (80, 49472), (82, 49502), (83, 49511), (94, 49589), (95, 49592), (107, 49628), (112, 49655), (116, 49679), (118, 49694), (122, 49754), (126, 49775), (127, 49787), (129, 49814), (132, 49850), (133, 49856), (150, 49961),

Gene: Mdavu_61 Start: 45739, Stop: 46920, Start Num: 22

Candidate Starts for Mdavu_61:

(Start: 22 @45739 has 111 MA's), (23, 45745), (24, 45757), (Start: 31 @45853 has 1 MA's), (35, 45877), (39, 45889), (42, 45913), (43, 45919), (45, 45931), (46, 45946), (47, 45952), (48, 45955), (51, 45976), (52, 45985), (53, 45988), (56, 46042), (57, 46048), (58, 46066), (60, 46081), (62, 46102), (63, 46105), (65, 46126), (68, 46153), (70, 46159), (72, 46177), (74, 46207), (76, 46228), (77, 46231), (79, 46258), (80, 46267), (82, 46297), (83, 46306), (84, 46318), (91, 46363), (99, 46390), (101, 46393), (108, 46426), (110, 46441), (112, 46447), (116, 46471), (117, 46480), (119, 46489), (121, 46522), (122, 46543), (123, 46552), (124, 46555), (127, 46576), (129, 46603), (132, 46642), (133, 46648), (135, 46666), (136, 46669), (137, 46678), (138, 46714), (139, 46741), (140, 46744), (141, 46750), (143, 46765), (144, 46792), (147, 46813), (148, 46816), (149, 46825), (159, 46909), (160, 46912),

Gene: MeaningOfLife_75 Start: 49638, Stop: 50825, Start Num: 22

Candidate Starts for MeaningOfLife_75:

(Start: 22 @49638 has 111 MA's), (23, 49644), (29, 49695), (Start: 31 @49764 has 1 MA's), (32, 49770), (33, 49779), (36, 49788), (41, 49812), (46, 49857), (47, 49863), (48, 49866), (51, 49887), (53, 49899), (57, 49962), (58, 49980), (59, 49989), (60, 49995), (62, 50016), (65, 50040), (67, 50058), (76, 50142), (77, 50145), (80, 50181), (81, 50184), (82, 50211), (83, 50220), (86, 50262), (92, 50277), (97, 50295), (119, 50394), (122, 50451), (129, 50511), (133, 50556), (134, 50562), (135, 50574), (139, 50649), (143, 50673), (144, 50700), (145, 50706), (147, 50721), (149, 50733), (154, 50775),

Gene: Megsy_75 Start: 48863, Stop: 49963, Start Num: 22

Candidate Starts for Megsy_75:

(2, 48695), (7, 48725), (8, 48728), (12, 48746), (15, 48785), (Start: 22 @48863 has 111 MA's), (23, 48869), (Start: 31 @48977 has 1 MA's), (36, 49004), (45, 49061), (47, 49082), (48, 49085), (51, 49106), (53, 49118), (57, 49181), (58, 49199), (59, 49208), (60, 49214), (61, 49220), (62, 49235), (64, 49256), (65, 49259), (67, 49277), (76, 49361), (77, 49364), (79, 49391), (80, 49400), (82, 49430), (83, 49439), (86, 49481), (99, 49517), (111, 49568), (119, 49613), (122, 49670), (127, 49703), (129, 49730), (132, 49769), (135, 49793), (154, 49913),

Gene: Murucutumbu_74 Start: 49919, Stop: 51109, Start Num: 22

Candidate Starts for Murucutumbu_74:

(Start: 22 @49919 has 111 MA's), (23, 49925), (Start: 31 @50045 has 1 MA's), (36, 50072), (45, 50129), (47, 50150), (48, 50153), (51, 50174), (57, 50249), (59, 50276), (62, 50303), (64, 50324), (65, 50327), (67, 50345), (76, 50429), (77, 50432), (80, 50468), (82, 50498), (83, 50507), (86, 50549), (92, 50564), (122, 50738), (129, 50798), (132, 50834), (133, 50840), (136, 50861), (139, 50933), (143, 50957), (144, 50984), (149, 51017),

Gene: Mynx_75 Start: 49498, Stop: 50604, Start Num: 22

Candidate Starts for Mynx_75:

(Start: 22 @49498 has 111 MA's), (23, 49504), (29, 49555), (Start: 31 @49624 has 1 MA's), (32, 49630), (36, 49648), (41, 49672), (46, 49717), (47, 49723), (48, 49726), (51, 49747), (53, 49759), (57, 49822), (58, 49840), (59, 49849), (60, 49855), (62, 49876), (65, 49900), (67, 49918), (76, 50002), (77, 50005), (80, 50041), (81, 50044), (82, 50071), (83, 50080), (86, 50122), (92, 50137), (97, 50155), (122, 50311), (127, 50344), (129, 50371), (133, 50416), (135, 50434), (154, 50554),

Gene: Nikao_63 Start: 48348, Stop: 49529, Start Num: 22

Candidate Starts for Nikao_63:

(Start: 22 @48348 has 111 MA's), (23, 48354), (24, 48366), (Start: 31 @48462 has 1 MA's), (35, 48486), (39, 48498), (42, 48522), (43, 48528), (45, 48540), (46, 48555), (47, 48561), (48, 48564), (51, 48585), (52, 48594), (53, 48597), (56, 48651), (57, 48657), (58, 48675), (60, 48690), (62, 48711), (63, 48714), (65, 48735), (68, 48762), (70, 48768), (72, 48786), (74, 48816), (76, 48837), (77, 48840), (79,

48867), (80, 48876), (82, 48906), (83, 48915), (84, 48927), (91, 48972), (99, 48999), (101, 49002), (108, 49035), (110, 49050), (112, 49056), (116, 49080), (117, 49089), (119, 49098), (121, 49131), (122, 49152), (123, 49161), (124, 49164), (127, 49185), (129, 49212), (132, 49251), (133, 49257), (135, 49275), (136, 49278), (137, 49287), (138, 49323), (139, 49350), (140, 49353), (141, 49359), (143, 49374), (144, 49401), (147, 49422), (148, 49425), (149, 49434), (159, 49518), (160, 49521),

Gene: Niklas_75 Start: 49005, Stop: 50108, Start Num: 22

Candidate Starts for Niklas_75:

(Start: 22 @49005 has 111 MA's), (23, 49011), (Start: 27 @49056 has 1 MA's), (Start: 31 @49119 has 1 MA's), (35, 49143), (43, 49185), (46, 49212), (47, 49218), (48, 49221), (51, 49242), (57, 49314), (59, 49341), (60, 49347), (65, 49392), (74, 49473), (75, 49482), (76, 49494), (77, 49497), (78, 49500), (80, 49533), (82, 49563), (83, 49572), (94, 49650), (95, 49653), (107, 49689), (112, 49716), (116, 49740), (118, 49755), (122, 49815), (126, 49836), (127, 49848), (129, 49875), (132, 49911), (133, 49917),

Gene: Nutello_60 Start: 45735, Stop: 46916, Start Num: 22

Candidate Starts for Nutello_60:

(Start: 22 @45735 has 111 MA's), (23, 45741), (24, 45753), (Start: 31 @45849 has 1 MA's), (35, 45873), (39, 45885), (42, 45909), (43, 45915), (45, 45927), (46, 45942), (47, 45948), (48, 45951), (51, 45972), (52, 45981), (53, 45984), (56, 46038), (57, 46044), (58, 46062), (60, 46077), (62, 46098), (63, 46101), (65, 46122), (68, 46149), (70, 46155), (72, 46173), (74, 46203), (76, 46224), (77, 46227), (79, 46254), (80, 46263), (82, 46293), (83, 46302), (84, 46314), (91, 46359), (99, 46386), (101, 46389), (108, 46422), (110, 46437), (112, 46443), (116, 46467), (117, 46476), (119, 46485), (121, 46518), (122, 46539), (123, 46548), (124, 46551), (127, 46572), (129, 46599), (132, 46638), (133, 46644), (135, 46662), (136, 46665), (137, 46674), (138, 46710), (139, 46737), (140, 46740), (141, 46746), (143, 46761), (144, 46788), (147, 46809), (148, 46812), (149, 46821), (159, 46905), (160, 46908),

Gene: Padfoot_73 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for Padfoot_73:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59, 49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: Padpat_77 Start: 49203, Stop: 50309, Start Num: 22

Candidate Starts for Padpat_77:

(Start: 22 @49203 has 111 MA's), (23, 49209), (Start: 31 @49329 has 1 MA's), (32, 49335), (33, 49344), (36, 49353), (41, 49377), (46, 49422), (47, 49428), (48, 49431), (51, 49452), (53, 49464), (57, 49527), (58, 49545), (59, 49554), (60, 49560), (62, 49581), (65, 49605), (76, 49707), (77, 49710), (80, 49746), (81, 49749), (82, 49776), (83, 49785), (86, 49827), (119, 49959), (122, 50016), (127, 50049), (129, 50076), (133, 50121), (135, 50139), (154, 50259),

Gene: Peanam_75 Start: 48963, Stop: 50066, Start Num: 22

Candidate Starts for Peanam_75:

(Start: 22 @48963 has 111 MA's), (23, 48969), (Start: 27 @49014 has 1 MA's), (Start: 31 @49077 has 1 MA's), (35, 49101), (43, 49143), (46, 49170), (47, 49176), (48, 49179), (51, 49200), (57, 49272), (59, 49299), (60, 49305), (65, 49350), (74, 49431), (75, 49440), (76, 49452), (77, 49455), (78, 49458), (80, 49491), (82, 49521), (94, 49608), (95, 49611), (112, 49674), (116, 49698), (118, 49713), (122, 49773), (126, 49794), (127, 49806), (129, 49833), (133, 49875),

Gene: Peel_73 Start: 48688, Stop: 49875, Start Num: 22

Candidate Starts for Peel_73:

(Start: 22 @48688 has 111 MA's), (23, 48694), (Start: 31 @48814 has 1 MA's), (32, 48820), (36, 48838), (41, 48862), (46, 48907), (47, 48913), (48, 48916), (51, 48937), (53, 48949), (57, 49012), (59, 49039), (60, 49045), (62, 49066), (65, 49090), (67, 49108), (76, 49192), (77, 49195), (80, 49231), (81, 49234), (82, 49261), (83, 49270), (86, 49312), (119, 49444), (122, 49501), (129, 49561), (133, 49606), (134, 49612), (135, 49624), (139, 49699), (143, 49723), (144, 49750), (145, 49756), (147, 49771), (149, 49783), (154, 49825),

Gene: PhelpsODU_76 Start: 48713, Stop: 49819, Start Num: 22

Candidate Starts for PhelpsODU_76:

(Start: 22 @48713 has 111 MA's), (23, 48719), (Start: 27 @48764 has 1 MA's), (Start: 31 @48827 has 1 MA's), (35, 48851), (41, 48875), (46, 48920), (48, 48929), (50, 48941), (51, 48950), (53, 48962), (57, 49022), (62, 49076), (63, 49079), (65, 49100), (76, 49202), (80, 49241), (83, 49280), (95, 49361), (96, 49367), (98, 49370), (106, 49391), (107, 49397), (112, 49424), (117, 49457), (119, 49466), (122, 49523), (123, 49532), (125, 49541), (126, 49544), (127, 49556), (129, 49583), (133, 49625),

Gene: Phrank_77 Start: 48576, Stop: 49679, Start Num: 22

Candidate Starts for Phrank_77:

(15, 48498), (Start: 22 @48576 has 111 MA's), (23, 48582), (28, 48633), (Start: 31 @48690 has 1 MA's), (35, 48714), (42, 48750), (48, 48792), (51, 48813), (53, 48825), (54, 48834), (57, 48885), (62, 48939), (63, 48942), (74, 49044), (76, 49065), (83, 49143), (95, 49221), (107, 49260), (119, 49329), (120, 49353), (122, 49383), (123, 49392), (125, 49401), (126, 49404), (127, 49416), (129, 49443), (133, 49485), (150, 49590), (158, 49653),

Gene: Piatt_72 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for Piatt_72:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59, 49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: Pokerus_74 Start: 49212, Stop: 50318, Start Num: 22

Candidate Starts for Pokerus_74:

(Start: 22 @49212 has 111 MA's), (23, 49218), (29, 49269), (Start: 31 @49338 has 1 MA's), (32, 49344), (36, 49362), (41, 49386), (46, 49431), (47, 49437), (48, 49440), (51, 49461), (53, 49473), (57, 49536), (58, 49554), (59, 49563), (60, 49569), (62, 49590), (65, 49614), (67, 49632), (76, 49716), (77, 49719), (80, 49755), (81, 49758), (82, 49785), (83, 49794), (86, 49836), (92, 49851), (97, 49869), (122, 50025), (127, 50058), (129, 50085), (133, 50130), (135, 50148), (154, 50268),

Gene: Prithvi_76 Start: 49236, Stop: 50336, Start Num: 22

Candidate Starts for Prithvi_76:

(15, 49158), (16, 49167), (Start: 22 @49236 has 111 MA's), (23, 49242), (Start: 31 @49350 has 1 MA's), (36, 49377), (45, 49434), (47, 49455), (48, 49458), (51, 49479), (53, 49491), (57, 49554), (59, 49581), (60, 49587), (62, 49608), (64, 49629), (65, 49632), (67, 49650), (76, 49734), (77, 49737), (80, 49773), (81, 49776), (82, 49803), (83, 49812), (86, 49854), (99, 49890), (111, 49941), (119, 49986), (122, 50043), (127, 50076), (129, 50103), (132, 50142), (135, 50166), (154, 50286),

Gene: QuincyRose_71 Start: 49093, Stop: 50280, Start Num: 22

Candidate Starts for QuincyRose_71:

(Start: 22 @49093 has 111 MA's), (23, 49099), (Start: 31 @49219 has 1 MA's), (32, 49225), (41, 49267), (46, 49312), (47, 49318), (48, 49321), (51, 49342), (53, 49354), (57, 49417), (59, 49444), (60, 49450), (62, 49471), (65, 49495), (67, 49513), (76, 49597), (77, 49600), (80, 49636), (81, 49639), (82,

49666), (83, 49675), (86, 49717), (122, 49906), (129, 49966), (133, 50011), (134, 50017), (135, 50029), (139, 50104), (143, 50128), (144, 50155), (145, 50161), (147, 50176), (149, 50188), (154, 50230),

Gene: Ramen_74 Start: 48533, Stop: 49639, Start Num: 22

Candidate Starts for Ramen_74:

(2, 48365), (5, 48389), (8, 48398), (11, 48410), (12, 48416), (15, 48455), (Start: 22 @48533 has 111 MA's), (23, 48539), (Start: 31 @48659 has 1 MA's), (32, 48665), (33, 48674), (36, 48683), (41, 48707), (46, 48752), (47, 48758), (48, 48761), (51, 48782), (53, 48794), (57, 48857), (59, 48884), (60, 48890), (62, 48911), (65, 48935), (67, 48953), (73, 48989), (76, 49037), (77, 49040), (80, 49076), (81, 49079), (82, 49106), (83, 49115), (86, 49157), (92, 49172), (97, 49190), (119, 49289), (122, 49346), (127, 49379), (129, 49406), (133, 49451), (135, 49469), (154, 49589),

Gene: Rapunzel97_76 Start: 49184, Stop: 50290, Start Num: 22

Candidate Starts for Rapunzel97_76:

(Start: 22 @49184 has 111 MA's), (23, 49190), (29, 49241), (Start: 31 @49310 has 1 MA's), (32, 49316), (36, 49334), (41, 49358), (46, 49403), (47, 49409), (48, 49412), (51, 49433), (53, 49445), (57, 49508), (58, 49526), (59, 49535), (60, 49541), (62, 49562), (65, 49586), (67, 49604), (76, 49688), (77, 49691), (80, 49727), (81, 49730), (82, 49757), (83, 49766), (86, 49808), (92, 49823), (97, 49841), (119, 49940), (122, 49997), (127, 50030), (129, 50057), (133, 50102), (135, 50120), (154, 50240),

Gene: Richo_74 Start: 49082, Stop: 50047, Start Num: 35

Candidate Starts for Richo_74:

(Start: 22 @48944 has 111 MA's), (23, 48950), (Start: 27 @48995 has 1 MA's), (Start: 31 @49058 has 1 MA's), (35, 49082), (43, 49124), (46, 49151), (47, 49157), (48, 49160), (51, 49181), (57, 49253), (59, 49280), (60, 49286), (65, 49331), (74, 49412), (75, 49421), (76, 49433), (77, 49436), (78, 49439), (80, 49472), (82, 49502), (83, 49511), (94, 49589), (95, 49592), (107, 49628), (112, 49655), (116, 49679), (118, 49694), (122, 49754), (126, 49775), (127, 49787), (129, 49814), (132, 49850), (133, 49856), (150, 49961),

Gene: Rosmarinus_73 Start: 48674, Stop: 49861, Start Num: 22

Candidate Starts for Rosmarinus_73:

(Start: 22 @48674 has 111 MA's), (23, 48680), (Start: 31 @48800 has 1 MA's), (32, 48806), (36, 48824), (41, 48848), (46, 48893), (47, 48899), (48, 48902), (51, 48923), (53, 48935), (57, 48998), (59, 49025), (60, 49031), (62, 49052), (65, 49076), (67, 49094), (76, 49178), (77, 49181), (80, 49217), (81, 49220), (82, 49247), (83, 49256), (86, 49298), (119, 49430), (122, 49487), (129, 49547), (133, 49592), (134, 49598), (135, 49610), (139, 49685), (143, 49709), (144, 49736), (145, 49742), (147, 49757), (149, 49769), (154, 49811),

Gene: SamuelLPlaqson_73 Start: 49181, Stop: 50269, Start Num: 22

Candidate Starts for SamuelLPlaqson_73:

(Start: 22 @49181 has 111 MA's), (23, 49187), (Start: 31 @49307 has 1 MA's), (36, 49334), (45, 49391), (47, 49412), (48, 49415), (51, 49436), (57, 49511), (59, 49538), (60, 49544), (62, 49565), (64, 49586), (65, 49589), (67, 49607), (76, 49691), (77, 49694), (80, 49730), (81, 49733), (82, 49760), (83, 49769), (104, 49835), (115, 49901), (119, 49922), (122, 49979), (127, 50012), (129, 50039), (135, 50099), (136, 50102), (154, 50219),

Gene: SgtBeansprout_61 Start: 45735, Stop: 46916, Start Num: 22

Candidate Starts for SgtBeansprout_61:

(Start: 22 @45735 has 111 MA's), (23, 45741), (24, 45753), (Start: 31 @45849 has 1 MA's), (35, 45873), (39, 45885), (42, 45909), (43, 45915), (45, 45927), (46, 45942), (47, 45948), (48, 45951), (51, 45972), (52, 45981), (53, 45984), (56, 46038), (57, 46044), (58, 46062), (60, 46077), (62, 46098), (63, 46101), (65, 46122), (68, 46149), (70, 46155), (72, 46173), (74, 46203), (76, 46224), (77, 46227), (79,

46254), (80, 46263), (82, 46293), (83, 46302), (84, 46314), (91, 46359), (99, 46386), (101, 46389), (108, 46422), (110, 46437), (112, 46443), (116, 46467), (117, 46476), (119, 46485), (121, 46518), (122, 46539), (123, 46548), (124, 46551), (127, 46572), (129, 46599), (132, 46638), (133, 46644), (135, 46662), (136, 46665), (137, 46674), (138, 46710), (139, 46737), (140, 46740), (141, 46746), (143, 46761), (144, 46788), (147, 46809), (148, 46812), (149, 46821), (159, 46905), (160, 46908),

Gene: Shadow1_77 Start: 48873, Stop: 49973, Start Num: 22

Candidate Starts for Shadow1_77:

(Start: 22 @48873 has 111 MA's), (23, 48879), (Start: 27 @48924 has 1 MA's), (Start: 31 @48987 has 1 MA's), (35, 49011), (49, 49098), (51, 49110), (57, 49182), (60, 49215), (62, 49236), (63, 49239), (67, 49278), (76, 49362), (80, 49401), (95, 49518), (98, 49527), (109, 49572), (112, 49584), (122, 49680), (123, 49689), (125, 49698), (126, 49701), (127, 49713), (129, 49740), (130, 49758), (133, 49782), (150, 49887), (152, 49908), (156, 49935),

Gene: Shaobing_74 Start: 48980, Stop: 50083, Start Num: 22

Candidate Starts for Shaobing_74:

(Start: 22 @48980 has 111 MA's), (23, 48986), (Start: 27 @49031 has 1 MA's), (Start: 31 @49094 has 1 MA's), (35, 49118), (43, 49160), (46, 49187), (47, 49193), (48, 49196), (51, 49217), (57, 49289), (59, 49316), (60, 49322), (65, 49367), (74, 49448), (75, 49457), (76, 49469), (77, 49472), (78, 49475), (80, 49508), (82, 49538), (83, 49547), (94, 49625), (95, 49628), (107, 49664), (112, 49691), (116, 49715), (118, 49730), (122, 49790), (126, 49811), (127, 49823), (129, 49850), (132, 49886), (133, 49892),

Gene: ShiaSurprise_74 Start: 48883, Stop: 50070, Start Num: 22

Candidate Starts for ShiaSurprise_74:

(Start: 22 @48883 has 111 MA's), (23, 48889), (Start: 31 @49009 has 1 MA's), (32, 49015), (36, 49033), (41, 49057), (46, 49102), (47, 49108), (48, 49111), (51, 49132), (53, 49144), (57, 49207), (59, 49234), (60, 49240), (62, 49261), (65, 49285), (67, 49303), (76, 49387), (77, 49390), (80, 49426), (81, 49429), (82, 49456), (83, 49465), (86, 49507), (119, 49639), (122, 49696), (129, 49756), (133, 49801), (134, 49807), (135, 49819), (139, 49894), (143, 49918), (144, 49945), (145, 49951), (147, 49966), (149, 49978), (154, 50020),

Gene: SirPhilip_72 Start: 49101, Stop: 50201, Start Num: 22

Candidate Starts for SirPhilip_72:

(15, 49023), (Start: 22 @49101 has 111 MA's), (23, 49107), (Start: 27 @49152 has 1 MA's), (35, 49239), (37, 49245), (41, 49263), (43, 49281), (47, 49314), (49, 49326), (51, 49338), (53, 49350), (54, 49359), (57, 49413), (62, 49467), (64, 49488), (65, 49491), (76, 49593), (79, 49623), (83, 49671), (90, 49725), (94, 49743), (98, 49755), (122, 49905), (125, 49923), (127, 49938), (128, 49962), (129, 49965), (133, 50010), (156, 50163),

Gene: Slimphazie_75 Start: 49184, Stop: 50290, Start Num: 22

Candidate Starts for Slimphazie_75:

(Start: 22 @49184 has 111 MA's), (23, 49190), (29, 49241), (Start: 31 @49310 has 1 MA's), (32, 49316), (36, 49334), (41, 49358), (46, 49403), (47, 49409), (48, 49412), (51, 49433), (53, 49445), (57, 49508), (58, 49526), (59, 49535), (60, 49541), (62, 49562), (65, 49586), (67, 49604), (76, 49688), (77, 49691), (80, 49727), (81, 49730), (82, 49757), (83, 49766), (86, 49808), (92, 49823), (97, 49841), (119, 49940), (122, 49997), (127, 50030), (129, 50057), (133, 50102), (135, 50120), (154, 50240),

Gene: Spock_73 Start: 48687, Stop: 49874, Start Num: 22

Candidate Starts for Spock_73:

(Start: 22 @48687 has 111 MA's), (23, 48693), (Start: 31 @48813 has 1 MA's), (32, 48819), (36, 48837), (41, 48861), (46, 48906), (47, 48912), (48, 48915), (51, 48936), (53, 48948), (57, 49011), (59, 49038), (60, 49044), (62, 49065), (65, 49089), (67, 49107), (76, 49191), (77, 49194), (80, 49230), (81, 49233), (82, 49260), (83, 49269), (86, 49311), (119, 49443), (122, 49500), (129, 49560), (133, 49605),

(134, 49611), (135, 49623), (139, 49698), (143, 49722), (144, 49749), (145, 49755), (147, 49770), (149, 49782), (154, 49824),

Gene: Stinson_74 Start: 49279, Stop: 50469, Start Num: 22

Candidate Starts for Stinson_74:

(Start: 22 @49279 has 111 MA's), (23, 49285), (Start: 31 @49405 has 1 MA's), (36, 49432), (45, 49489), (47, 49510), (48, 49513), (51, 49534), (53, 49546), (57, 49609), (58, 49627), (59, 49636), (60, 49642), (61, 49648), (62, 49663), (64, 49684), (65, 49687), (67, 49705), (76, 49789), (77, 49792), (80, 49828), (82, 49858), (83, 49867), (86, 49909), (92, 49924), (122, 50098), (129, 50158), (132, 50194), (133, 50200), (136, 50221), (139, 50293), (143, 50317), (144, 50344), (149, 50377),

Gene: Sulley_72 Start: 48714, Stop: 49901, Start Num: 22

Candidate Starts for Sulley_72:

(Start: 22 @48714 has 111 MA's), (23, 48720), (29, 48771), (Start: 31 @48840 has 1 MA's), (32, 48846), (36, 48864), (41, 48888), (46, 48933), (47, 48939), (48, 48942), (51, 48963), (53, 48975), (57, 49038), (58, 49056), (59, 49065), (60, 49071), (62, 49092), (65, 49116), (67, 49134), (76, 49218), (77, 49221), (80, 49257), (81, 49260), (82, 49287), (83, 49296), (86, 49338), (122, 49527), (129, 49587), (133, 49632), (134, 49638), (135, 49650), (139, 49725), (143, 49749), (144, 49776), (145, 49782), (147, 49797), (149, 49809), (154, 49851),

Gene: Sunflower1121_78 Start: 49019, Stop: 50119, Start Num: 22

Candidate Starts for Sunflower1121_78:

(Start: 22 @49019 has 111 MA's), (23, 49025), (Start: 27 @49070 has 1 MA's), (Start: 31 @49133 has 1 MA's), (35, 49157), (49, 49244), (51, 49256), (57, 49328), (60, 49361), (62, 49382), (63, 49385), (67, 49424), (76, 49508), (80, 49547), (95, 49664), (98, 49673), (109, 49718), (112, 49730), (122, 49826), (123, 49835), (125, 49844), (126, 49847), (127, 49859), (129, 49886), (130, 49904), (133, 49928), (150, 50033), (152, 50054), (156, 50081),

Gene: Syra333_76 Start: 48747, Stop: 49847, Start Num: 22

Candidate Starts for Syra333_76:

(15, 48669), (Start: 22 @48747 has 111 MA's), (23, 48753), (Start: 27 @48798 has 1 MA's), (Start: 31 @48861 has 1 MA's), (35, 48885), (51, 48984), (57, 49056), (60, 49089), (62, 49110), (63, 49113), (76, 49236), (80, 49275), (95, 49392), (98, 49401), (109, 49446), (112, 49458), (122, 49554), (123, 49563), (125, 49572), (126, 49575), (127, 49587), (129, 49614), (133, 49656), (156, 49809),

Gene: TClif_74 Start: 48506, Stop: 49597, Start Num: 22

Candidate Starts for TClif_74:

(15, 48431), (18, 48446), (Start: 22 @48506 has 111 MA's), (23, 48512), (Start: 27 @48557 has 1 MA's), (49, 48731), (51, 48743), (57, 48815), (59, 48842), (60, 48848), (62, 48869), (65, 48893), (69, 48920), (74, 48974), (77, 48998), (78, 49001), (83, 49073), (84, 49085), (85, 49115), (98, 49148), (117, 49238), (122, 49301), (127, 49334), (129, 49361), (135, 49424), (156, 49559),

Gene: Tachez_73 Start: 48531, Stop: 49718, Start Num: 22

Candidate Starts for Tachez_73:

(Start: 22 @48531 has 111 MA's), (23, 48537), (Start: 31 @48657 has 1 MA's), (32, 48663), (36, 48681), (41, 48705), (46, 48750), (47, 48756), (48, 48759), (51, 48780), (53, 48792), (57, 48855), (59, 48882), (60, 48888), (62, 48909), (65, 48933), (67, 48951), (76, 49035), (77, 49038), (80, 49074), (81, 49077), (82, 49104), (83, 49113), (86, 49155), (119, 49287), (122, 49344), (129, 49404), (133, 49449), (134, 49455), (135, 49467), (139, 49542), (143, 49566), (144, 49593), (145, 49599), (147, 49614), (149, 49626), (154, 49668),

Gene: TaiwanKao_75 Start: 49281, Stop: 50393, Start Num: 22

Candidate Starts for TaiwanKao_75:

(Start: 22 @49281 has 111 MA's), (23, 49287), (Start: 31 @49407 has 1 MA's), (36, 49434), (45, 49491), (47, 49512), (48, 49515), (51, 49536), (57, 49611), (59, 49638), (62, 49665), (64, 49686), (65, 49689), (67, 49707), (76, 49791), (77, 49794), (80, 49830), (82, 49860), (83, 49869), (86, 49911), (92, 49926), (99, 49947), (111, 49998), (119, 50043), (122, 50100), (127, 50133), (129, 50160), (132, 50199), (135, 50223), (151, 50322), (154, 50343),

Gene: Tierra_77 Start: 49387, Stop: 50490, Start Num: 22

Candidate Starts for Tierra_77:

(Start: 22 @49387 has 111 MA's), (23, 49393), (28, 49444), (Start: 31 @49501 has 1 MA's), (35, 49525), (42, 49561), (48, 49603), (51, 49624), (53, 49636), (54, 49645), (57, 49696), (62, 49750), (63, 49753), (74, 49855), (76, 49876), (83, 49954), (95, 50032), (107, 50071), (119, 50140), (120, 50164), (122, 50194), (123, 50203), (125, 50212), (126, 50215), (127, 50227), (129, 50254), (133, 50296), (158, 50464),

Gene: TingHuaYa_76 Start: 48446, Stop: 49630, Start Num: 22

Candidate Starts for TingHuaYa_76:

(Start: 22 @48446 has 111 MA's), (23, 48452), (25, 48470), (26, 48494), (Start: 27 @48497 has 1 MA's), (30, 48509), (Start: 31 @48560 has 1 MA's), (32, 48566), (36, 48587), (45, 48644), (47, 48665), (48, 48668), (51, 48689), (57, 48764), (58, 48782), (59, 48791), (60, 48797), (62, 48818), (64, 48839), (65, 48842), (67, 48860), (71, 48884), (76, 48944), (77, 48947), (80, 48983), (82, 49013), (83, 49022), (86, 49064), (92, 49079), (110, 49148), (116, 49178), (117, 49187), (119, 49196), (122, 49253), (129, 49313), (133, 49358), (134, 49364), (135, 49376), (139, 49451), (143, 49475), (144, 49502), (145, 49508), (147, 49523), (149, 49535), (157, 49601),

Gene: TiniBug_73 Start: 49181, Stop: 50269, Start Num: 22

Candidate Starts for TiniBug_73:

(Start: 22 @49181 has 111 MA's), (23, 49187), (29, 49238), (30, 49244), (Start: 31 @49307 has 1 MA's), (34, 49328), (36, 49334), (45, 49391), (47, 49412), (48, 49415), (51, 49436), (53, 49448), (55, 49487), (57, 49511), (58, 49529), (59, 49538), (60, 49544), (62, 49565), (64, 49586), (65, 49589), (67, 49607), (74, 49670), (76, 49691), (77, 49694), (80, 49730), (81, 49733), (82, 49760), (83, 49769), (104, 49835), (111, 49877), (122, 49979), (127, 50012), (129, 50039), (135, 50099), (136, 50102), (154, 50219),

Gene: Tiri_73 Start: 48587, Stop: 49774, Start Num: 22

Candidate Starts for Tiri_73:

(Start: 22 @48587 has 111 MA's), (23, 48593), (Start: 31 @48713 has 1 MA's), (32, 48719), (41, 48761), (46, 48806), (47, 48812), (48, 48815), (51, 48836), (53, 48848), (57, 48911), (59, 48938), (60, 48944), (62, 48965), (65, 48989), (67, 49007), (76, 49091), (77, 49094), (80, 49130), (81, 49133), (82, 49160), (83, 49169), (86, 49211), (119, 49343), (122, 49400), (129, 49460), (133, 49505), (134, 49511), (135, 49523), (139, 49598), (143, 49622), (144, 49649), (145, 49655), (147, 49670), (149, 49682), (154, 49724),

Gene: Topper_73 Start: 48686, Stop: 49873, Start Num: 22

Candidate Starts for Topper_73:

(Start: 22 @48686 has 111 MA's), (23, 48692), (Start: 31 @48812 has 1 MA's), (32, 48818), (36, 48836), (41, 48860), (46, 48905), (47, 48911), (48, 48914), (51, 48935), (53, 48947), (57, 49010), (59, 49037), (60, 49043), (62, 49064), (65, 49088), (67, 49106), (76, 49190), (77, 49193), (80, 49229), (81, 49232), (82, 49259), (83, 49268), (86, 49310), (119, 49442), (122, 49499), (129, 49559), (133, 49604), (134, 49610), (135, 49622), (139, 49697), (143, 49721), (144, 49748), (145, 49754), (147, 49769), (149, 49781), (154, 49823),

Gene: Torres_62 Start: 48349, Stop: 49530, Start Num: 22

Candidate Starts for Torres_62:

(Start: 22 @48349 has 111 MA's), (23, 48355), (24, 48367), (Start: 31 @48463 has 1 MA's), (35, 48487), (39, 48499), (42, 48523), (43, 48529), (45, 48541), (46, 48556), (47, 48562), (48, 48565), (51, 48586), (52, 48595), (53, 48598), (56, 48652), (57, 48658), (58, 48676), (60, 48691), (62, 48712), (63, 48715), (65, 48736), (68, 48763), (70, 48769), (72, 48787), (74, 48817), (76, 48838), (77, 48841), (79, 48868), (80, 48877), (82, 48907), (83, 48916), (84, 48928), (91, 48973), (99, 49000), (101, 49003), (108, 49036), (110, 49051), (112, 49057), (116, 49081), (117, 49090), (119, 49099), (121, 49132), (122, 49153), (123, 49162), (124, 49165), (127, 49186), (129, 49213), (132, 49252), (133, 49258), (135, 49276), (136, 49279), (137, 49288), (138, 49324), (139, 49351), (140, 49354), (141, 49360), (143, 49375), (144, 49402), (147, 49423), (148, 49426), (149, 49435), (159, 49519), (160, 49522),

Gene: TreyKay_76 Start: 49236, Stop: 50336, Start Num: 22

Candidate Starts for TreyKay_76:

(15, 49158), (16, 49167), (Start: 22 @49236 has 111 MA's), (23, 49242), (Start: 31 @49350 has 1 MA's), (36, 49377), (45, 49434), (47, 49455), (48, 49458), (51, 49479), (53, 49491), (57, 49554), (59, 49581), (60, 49587), (62, 49608), (64, 49629), (65, 49632), (67, 49650), (76, 49734), (77, 49737), (80, 49773), (81, 49776), (82, 49803), (83, 49812), (86, 49854), (99, 49890), (111, 49941), (119, 49986), (122, 50043), (127, 50076), (129, 50103), (132, 50142), (135, 50166), (154, 50286),

Gene: TruffulaTree_75 Start: 49180, Stop: 50286, Start Num: 22

Candidate Starts for TruffulaTree_75:

(Start: 22 @49180 has 111 MA's), (23, 49186), (29, 49237), (Start: 31 @49306 has 1 MA's), (32, 49312), (36, 49330), (41, 49354), (46, 49399), (47, 49405), (48, 49408), (51, 49429), (53, 49441), (57, 49504), (58, 49522), (59, 49531), (60, 49537), (62, 49558), (65, 49582), (67, 49600), (73, 49636), (76, 49684), (77, 49687), (80, 49723), (81, 49726), (82, 49753), (83, 49762), (86, 49804), (92, 49819), (97, 49837), (119, 49936), (122, 49993), (127, 50026), (129, 50053), (133, 50098), (154, 50236),

Gene: Twitch_73 Start: 48688, Stop: 49875, Start Num: 22

Candidate Starts for Twitch_73:

(Start: 22 @48688 has 111 MA's), (23, 48694), (Start: 31 @48814 has 1 MA's), (32, 48820), (36, 48838), (41, 48862), (46, 48907), (47, 48913), (48, 48916), (51, 48937), (53, 48949), (57, 49012), (59, 49039), (60, 49045), (62, 49066), (65, 49090), (67, 49108), (76, 49192), (77, 49195), (80, 49231), (81, 49234), (82, 49261), (83, 49270), (86, 49312), (119, 49444), (122, 49501), (129, 49561), (133, 49606), (134, 49612), (135, 49624), (139, 49699), (143, 49723), (144, 49750), (145, 49756), (147, 49771), (149, 49783), (154, 49825),

Gene: Unicorn_76 Start: 48713, Stop: 49819, Start Num: 22

Candidate Starts for Unicorn_76:

(Start: 22 @48713 has 111 MA's), (23, 48719), (Start: 27 @48764 has 1 MA's), (Start: 31 @48827 has 1 MA's), (35, 48851), (41, 48875), (46, 48920), (48, 48929), (50, 48941), (51, 48950), (53, 48962), (57, 49022), (62, 49076), (63, 49079), (65, 49100), (76, 49202), (80, 49241), (83, 49280), (95, 49361), (96, 49367), (98, 49370), (106, 49391), (107, 49397), (112, 49424), (117, 49457), (119, 49466), (122, 49523), (123, 49532), (125, 49541), (126, 49544), (127, 49556), (129, 49583), (133, 49625),

Gene: Urkel_73 Start: 49181, Stop: 50269, Start Num: 22

Candidate Starts for Urkel_73:

(Start: 22 @49181 has 111 MA's), (23, 49187), (Start: 31 @49307 has 1 MA's), (36, 49334), (45, 49391), (47, 49412), (48, 49415), (51, 49436), (57, 49511), (59, 49538), (60, 49544), (62, 49565), (64, 49586), (65, 49589), (67, 49607), (76, 49691), (77, 49694), (80, 49730), (81, 49733), (82, 49760), (83, 49769), (104, 49835), (115, 49901), (119, 49922), (122, 49979), (127, 50012), (129, 50039), (135, 50099), (136, 50102), (154, 50219),

Gene: Validus_78 Start: 49542, Stop: 50633, Start Num: 22

Candidate Starts for Validus_78:

(Start: 22 @49542 has 111 MA's), (23, 49548), (25, 49566), (26, 49590), (Start: 27 @49593 has 1 MA's), (30, 49605), (Start: 31 @49656 has 1 MA's), (32, 49662), (39, 49692), (46, 49749), (47, 49755), (48, 49758), (51, 49779), (57, 49851), (59, 49878), (60, 49884), (61, 49890), (62, 49905), (65, 49929), (67, 49947), (76, 50031), (77, 50034), (78, 50037), (79, 50061), (82, 50100), (83, 50109), (86, 50151), (99, 50187), (105, 50199), (117, 50274), (119, 50283), (122, 50340), (126, 50361), (127, 50373), (129, 50400), (133, 50442), (135, 50460),

Gene: Veliki_74 Start: 48720, Stop: 49826, Start Num: 22

Candidate Starts for Veliki_74:

(2, 48552), (5, 48576), (8, 48585), (11, 48597), (12, 48603), (15, 48642), (Start: 22 @48720 has 111 MA's), (23, 48726), (Start: 31 @48846 has 1 MA's), (32, 48852), (33, 48861), (36, 48870), (41, 48894), (46, 48939), (47, 48945), (48, 48948), (51, 48969), (53, 48981), (57, 49044), (59, 49071), (60, 49077), (62, 49098), (65, 49122), (67, 49140), (73, 49176), (76, 49224), (77, 49227), (80, 49263), (81, 49266), (82, 49293), (83, 49302), (86, 49344), (92, 49359), (97, 49377), (119, 49476), (122, 49533), (127, 49566), (129, 49593), (133, 49638), (135, 49656), (154, 49776),

Gene: Ximenita_78 Start: 49071, Stop: 50171, Start Num: 22

Candidate Starts for Ximenita_78:

(Start: 22 @49071 has 111 MA's), (23, 49077), (Start: 27 @49122 has 1 MA's), (Start: 31 @49185 has 1 MA's), (35, 49209), (51, 49308), (57, 49380), (62, 49434), (63, 49437), (76, 49560), (80, 49599), (95, 49716), (98, 49725), (109, 49770), (112, 49782), (122, 49878), (123, 49887), (125, 49896), (126, 49899), (127, 49911), (129, 49938), (133, 49980), (156, 50133),

Gene: YoureAdopted_73 Start: 49050, Stop: 50237, Start Num: 22

Candidate Starts for YoureAdopted_73:

(Start: 22 @49050 has 111 MA's), (23, 49056), (29, 49107), (Start: 31 @49176 has 1 MA's), (32, 49182), (36, 49200), (39, 49212), (41, 49224), (46, 49269), (47, 49275), (48, 49278), (51, 49299), (53, 49311), (57, 49374), (58, 49392), (59, 49401), (60, 49407), (62, 49428), (65, 49452), (67, 49470), (76, 49554), (77, 49557), (80, 49593), (81, 49596), (82, 49623), (83, 49632), (86, 49674), (119, 49806), (122, 49863), (129, 49923), (133, 49968), (134, 49974), (135, 49986), (139, 50061), (143, 50085), (144, 50112), (145, 50118), (147, 50133), (149, 50145), (154, 50187),

Gene: Yuna_76 Start: 50152, Stop: 51321, Start Num: 21

Candidate Starts for Yuna_76:

(15, 50080), (Start: 21 @50152 has 5 MA's), (23, 50161), (Start: 27 @50206 has 1 MA's), (Start: 31 @50269 has 1 MA's), (43, 50335), (47, 50368), (49, 50380), (51, 50392), (57, 50467), (65, 50545), (76, 50647), (80, 50686), (100, 50797), (121, 50926), (122, 50947), (126, 50968), (127, 50980), (129, 51007), (133, 51052), (135, 51070), (142, 51130), (146, 51145), (153, 51202), (161, 51250),

Gene: Yunkel11_79 Start: 49270, Stop: 50454, Start Num: 22

Candidate Starts for Yunkel11_79:

(Start: 22 @49270 has 111 MA's), (23, 49276), (26, 49318), (Start: 27 @49321 has 1 MA's), (30, 49333), (Start: 31 @49384 has 1 MA's), (32, 49390), (36, 49411), (38, 49420), (40, 49432), (47, 49489), (48, 49492), (51, 49513), (57, 49588), (59, 49615), (60, 49621), (62, 49642), (64, 49663), (65, 49666), (76, 49768), (77, 49771), (80, 49807), (81, 49810), (82, 49837), (83, 49846), (86, 49888), (92, 49903), (99, 49924), (111, 49975), (112, 49978), (113, 49981), (122, 50077), (126, 50098), (127, 50110), (129, 50137), (133, 50182), (135, 50200), (139, 50275), (144, 50326), (147, 50347), (148, 50350), (151, 50380), (157, 50425),

Gene: Zabiza_69 Start: 45036, Stop: 46223, Start Num: 22

Candidate Starts for Zabiza_69:

(Start: 22 @45036 has 111 MA's), (23, 45042), (Start: 31 @45162 has 1 MA's), (32, 45168), (39, 45198), (41, 45210), (46, 45255), (47, 45261), (48, 45264), (51, 45285), (53, 45297), (57, 45360), (58,

45378), (59, 45387), (60, 45393), (62, 45414), (65, 45438), (67, 45456), (76, 45540), (77, 45543), (80, 45579), (81, 45582), (82, 45609), (83, 45618), (86, 45660), (119, 45792), (122, 45849), (129, 45909), (133, 45954), (134, 45960), (135, 45972), (139, 46047), (143, 46071), (144, 46098), (145, 46104), (147, 46119), (149, 46131), (154, 46173),

Gene: Zavala_76 Start: 49258, Stop: 50364, Start Num: 22

Candidate Starts for Zavala_76:

(2, 49090), (5, 49114), (8, 49123), (12, 49141), (15, 49180), (Start: 22 @49258 has 111 MA's), (23, 49264), (29, 49315), (Start: 31 @49384 has 1 MA's), (32, 49390), (36, 49408), (41, 49432), (46, 49477), (47, 49483), (48, 49486), (51, 49507), (53, 49519), (57, 49582), (58, 49600), (59, 49609), (60, 49615), (62, 49636), (65, 49660), (67, 49678), (76, 49762), (77, 49765), (80, 49801), (81, 49804), (82, 49831), (83, 49840), (86, 49882), (92, 49897), (97, 49915), (122, 50071), (127, 50104), (129, 50131), (133, 50176), (135, 50194), (154, 50314),