

Appendix 2.

Gene loci studied in Arab individuals as indexed in the CTGA Database (June, 2008).

OMIM #	Name	Country*
100640	Aldehyde Dehydrogenase 1 Family, Member A1	Eg
100730	Cholinergic Receptor, Nicotinic, Gamma Polypeptide	Le O Sa U
102600	Adenine Phosphoribosyltransferase	?
102700	Severe Combined Immunodeficiency, Autosomal Recessive, T Cell-Negative, B Cell-Negative, Nk Cell-Negative, Due To Adenosine Deaminase Deficiency	Sa
103000	Adenylate Kinase 1	?
103600	Albumin	I
104170	N-Acetyl-Alpha-D-Galactosaminidase	Mo
104210	Alpha-2A-Adrenergic Receptor	A
106150	Angiotensin I	U
106180	Angiotensin I-Converting Enzyme	B K O So Su U
107269	CD44 Antigen	Eg
107470	Interferon, Gamma, Receptor 1	A Su T
107680	Apolipoprotein A-I	K O U
107730	Apolipoprotein B	K Le Sy U
107777	Aquaporin 2	P
108780	Natriuretic Peptide Precursor A	U
109535	CD40 Antigen	Sa
110300	ABO Blood Group	B C
110700	Blood Group--Duffy System	Y
111000	Blood Group--Kidd System	T
111680	Rhesus Blood Group, D Antigen	B O
113705	Breast Cancer 1 Gene	Eg I J Mo Sa Sy T U Y
113811	Collagen, Type XVII, Alpha-1	P Su
114240	Calpain 3	Le
114830	Carbonyl Reductase 1	Su
114890	Carcinoembryonic Antigen-Related Cell Adhesion Molecule 5	Eg K
116899	Cyclin-Dependent Kinase Inhibitor 1A	O
120131	Collagen, Type IV, Alpha-4	A
120160	Collagen, Type I, Alpha-2	Le Li
120250	Collagen, Type VI, Alpha-3	Mo
120290	Collagen, Type XI, Alpha-2	Mo
120700	Complement Component 3	K Le O P
120810	Complement Component 4A	O T
121011	Gap Junction Protein, Beta-2	A Eg J Le Li O Mo P T
124030	Cytochrome P450, Subfamily IID, Polypeptide 6	Sa
124092	Interleukin 10	A Eg O
126455	Solute Carrier Family 6 (Neurotransmitter Transporter, Dopamine), Member 3	O
126650	Solute Carrier Family 26, Member 3	K Sa
130500	Erythrocyte Membrane Protein Band 4.1	A
131244	Endothelin Receptor, Type B	Mo T
133530	Excision-Repair, Complementing Defective, in Chinese Hamster, 5	Mo
134370	Complement Factor H	P
134570	Factor XIII, A1 Subunit	Mo Sy
134637	Tumor Necrosis Factor Receptor Superfamily, Member 6	Eg O
134790	Ferritin Light Chain	Eg
134934	Fibroblast Growth Factor Receptor 3	Eg O P U
136435	Follicle-Stimulating Hormone Receptor	Mo
136850	Fumarate Hydratase	Mo
137167	Gamma-Glutamyl Carboxylase	Le
137290	Tumor-Associated Calcium Signal Transducer 2	T
138350	Glutathione S-Transferase, MU-1	Sa
139130	Guanine Nucleotide-Binding Protein, Beta-3	U
139191	Growth Hormone-Releasing Hormone Receptor	Mo
139250	Growth Hormone 1	Sa
140100	Haptoglobin	Sa
140560	Heat-Shock 70-Kd Protein 2	T
141850	Hemoglobin--Alpha Locus 2	A B I K Sa T U Y
142200	Hemoglobin, Gamma A	T
142461	Heparan Sulfate Proteoglycan of Basement Membrane	T
142800	Major Histocompatibility Complex, Class I, A	Eg O Sa
142830	Major Histocompatibility Complex, Class I, B	O Sa
142840	Major Histocompatibility Complex, Class I, C	O
142857	Major Histocompatibility Complex, Class II, DR Beta-1	C
142860	Major Histocompatibility Complex, Class II, DR Alpha	O Sa
142993	CEH10 Homeodomain-Containing Homolog	Q
146930	Interleukin 8	O Su
147000	IgA Constant Heavy Chain 2	T
147100	IgG Heavy Chain Locus	T

OMIM #	Name	Country*
147120	Immunoglobulin GM3	T
147570	Interferon, Gamma	O U
147620	Interleukin 6	O T
147670	Insulin Receptor	Mo Q U Y
147679	Interleukin 1 Receptor Antagonist	Eg O
147680	Interleukin 2	O
147720	Interleukin 1-Beta	O T
147730	Interleukin 2 Receptor, Alpha	U
147760	Interleukin 1-Alpha	O T
147780	Interleukin 4	O T
150330	Lamin A/C	A Mo
151443	Leukemia Inhibitory Factor Receptor	O U Y
153440	Lymphotoxin-Alpha	O
153454	Procollagen-Lysine, 2-Oxoglutarate 5-Dioxygenase	Q U
154045	Lens Intrinsic Membrane Protein 2, 19-kD	I
154550	Mannosephosphate Isomerase	Le
156225	Laminin, Alpha-2	Sa
157660	Mitochondrial RNA-Processing Endoribonuclease, RNA Component of	Sa
161561	Interleukin 12B	Sa
163890	Synuclein, Alpha	U
164160	Leptin	T
164761	Rearranged during Transfection Protooncogene	Mo
164831	Leukemia Viral BMI-1 Oncogene, Mouse, Homolog of	Mo
164870	V-ERB-B2 Avian Erythroblastic Leukemia Viral Oncogene Homolog 2	O
164920	V-KIT Hardy-Zuckerman 4 Feline Sarcoma Viral Oncogene Homolog	Eg
170200	Peptidase E	Sy
170261	Transporter, ATP-Binding Cassette, Major Histocompatibility Complex, 2	Mo
170280	Perforin 1	O
173470	Integrin, Beta-3	I
176640	Prion Protein	Li Mo T
176741	Proliferation-Related Ki-67 Antigen	O
176930	Coagulation Factor II	B I Le Sa T
177070	Protein 4.2, Erythrocytic	T
179820	Renin	U
180090	Retinaldehyde-Binding Protein	Sa
180901	Ryanodine Receptor 1	A
182205	Sex Hormone-Binding Globulin	K O
182380	Solute Carrier Family 5 (Sodium/Glucose Cotransporter), Member 1	Le Sy
186970	T-Cell Antigen Receptor, Gamma Subunit	Le T
187011	Chemokine, CC Motif, Ligand 5	B U
188250	Thymidine Kinase, Mitochondrial	P
188540	Thyroid-Stimulating Hormone, Beta Chain	Eg
188570	Thyroid Hormone Resistance , Generalized, Autosomal Dominant	A
190180	Transforming Growth Factor, Beta-1	U
190195	Transglutaminase 1	Eg
191160	Tumor Necrosis Factor	Eg O T
191170	Tumor Protein p53	O Su
191191	Tumor Necrosis Factor Receptor Subfamily, Member 1B	T
191315	Neurotrophic Tyrosine Kinase, Receptor, Type 1	K U
191720	5-Prime,3-Prime-@Nucleotidase, Cytosolic	Sy
191740	UDP-Glycosyltransferase 1 Family, Polypeptide A1	K T
192340	Arginine Vasopressin	P
227400	Factor V Deficiency	B I J Le Mo Sa Sy T
238300	Glycine Decarboxylase	P
238310	Aminomethyltransferase	P
243400	Isoniazid Inactivation	Eg O Sa T U
252800	Alpha-L-Iduronidase	Eg Le Li Mo Sy
300126	Dyskerin	Eg U
300265	Zinc Finger Protein of Cerebellum, 3	Le
300371	ATP-Binding Cassette, Subfamily D, Member 1	U
300383	Properdin P Factor, Complement	T
300392	WAS Gene	Le Sy
300415	Myotubularin	O Y
300463	Polyglutamine-Binding Protein 1	Mo
300535	OCRL Gene	Le
308840	L1 Cell Adhesion Molecule	U
313430	SRY-BOX 3	Q
313700	Androgen Receptor	Eg K
400003	Deleted in Azoospermia	Eg O
480000	Sex-Determining Region Y	Eg
561000	Ribosomal RNA, Mitochondrial, 12S	P
600065	Integrin, Beta-2	T Y
600073	Low Density Lipoprotein Receptor-Related Protein2	Q U
600119	Sarcoglycan, Alpha	Sa T
600160	Cyclin-Dependent Kinase Inhibitor 2A	Eg Mo T
600179	Guanylate Cyclase 2D, Membrane	A T
600185	BRCA2 Gene	P Sa U Y

OMIM #	Name	Country*
600262	Prostaglandin-Endoperoxide Synthase 2	A
600266	Solute Carrier Family 11 (Proton-Coupled Divalent Metal Ion Transporter), Member 1	Su
600301	Acyl-CoA Dehydrogenase, Short/Branched Chain	Er So
600354	Survival of Motor Neuron 1, Telomeric	B K O Sa
600355	Baculoviral IAP Repeat-Containing Protein 1	B K O Sa
600374	BBS4 Gene	Sa
600431	Cyclin-Dependent Kinase Inhibitor 2B	Eg
600502	Immunoglobulin MU Binding Protein 2	Le
600509	ATP-Binding Cassette, Subfamily C, Member 8	Sa
600514	Reelin	Sa
600529	AU-Specific RNA-Binding Protein	Le Mo
600617	Steroidogenic Acute Regulatory Protein	J K P Q
600650	Carnitine Palmitoyltransferase II	Mo
600760	Sodium Channel, Nonvoltage-Gated 1, Beta Subunit	P
600778	Cyclin-Dependent Kinase Inhibitor 1B	O
600805	Laminin, Alpha-3	Sa
600818	Transgelin	A
600863	Casein Kinase I, Epsilon	Sy
600900	Sarcoglycan, Beta	T
600923	Protoporphyrinogen Oxidase	Le
600957	Anti-Mullerian Hormone	Mo
601007	Leptin Receptor	A T
601015	NPC2 Gene	A
601105	Cathepsin K	Mo
601107	ATP-Binding Cassette, Subfamily C, Member 2	Mo
601145	Cystatin B	P
601146	Growth/Differentiation Factor 5	O
601441	Diacylglycerol Kinase, Zeta, 104-KD	J
601601	Transcription Factor AP2-Beta	P
601604	Interleukin 12 Receptor, Beta-1	Mo
601623	Ubiquitin-Protein Ligase E3A	I
601627	Survival of Motor Neuron 2, Centromeric	B K O Sa
601691	ATP-Binding Cassette, Subfamily A, Member 4	Sa
601769	Vitamin D Receptor	Sa
601771	Cytochrome P450, Subfamily I, Polypeptide 1	Mo Sa
601843	Solute Carrier Family 5 (Sodium Iodide Symporter), Member 5	A
602023	Chloride Channel, Kidney, B	P
602109	Matrilin 3	?
602201	Extracellular Matrix Protein 1	K
602229	SRY-Box 10	Y
602302	Hairless, Mouse, Homolog of	O P
602337	Receptor Tyrosine Kinase-Like Orphan Receptor 2	J O
602365	Cathepsin C	J Q
602419	Early Growth Response 3	Sy
602421	Cystic Fibrosis Transmembrane Conductance Regulator	B J Le O P Sa Sy T U
602438	Heat-Shock Transcription Factor 4	T
602536	RAB3 GTPase-Activating Protein, Catalytic Subunit	Le Mo
602544	Parkin	A T
602574	Tectorin, Alpha	Le
602593	Corneodesmosin	Y
602643	Tumor Necrosis Factor Receptor Superfamily, Member 11B	I
602744	Glyceronephosphate O-Acyltransferase	U Y
602753	Aristalless Homeo Box, Drosophila, Homolog of	Sa
602768	Delta-Like 3	P
602956	X-Ray Repair, Complementing Defective, in Chinese Hamster, 9	Le P
602976	Max-Like Protein X	Eg
603009	Dysferlin	Li P Y
603033	Collagenic Tail of Endplate Acetylcholinesterase	I P
603100	1-@Acylglycerol-3-Phosphate O-Acyltransferase 2	O P U
603202	Lactase	Su
603335	Dynein, Axonemal, Heavy Chain 5	Le
603400	WNT1-Inducible Signaling Pathway Protein 3	J Sa
603557	Myotubularin-Related Protein 2	Sa
603593	Solute Carrier Family 7, Member 7	T
603681	Otoferlin	Le U
603707	Molybdenum Cofactor Synthesis 1	P
603708	Molybdenum Cofactor Synthesis 2	Eg
603799	Carbohydrate Sulfotransferase 3	O
603824	UDP-N-Acetylglucosamine 2-Epimerase/N-Acetylmannosamine Kinase	P
603868	Ras-Associated Protein RAB27A	P
603968	Polymerase, DNA, ETA	Le
604032	Eukaryotic Translation Initiation Factor 2-Alpha Kinase 3	K O Sa T U
604110	G Protein-Coupled Receptor 56	P Q
604134	A Disintegrin-Like and Metalloprotein with Thrombospondin Type 1 Motif, 13	Y
604144	Solute Carrier Family 7, Member 9	Li
604161	G Protein-Coupled Receptor 54	Sa
604285	Alanine-Glyoxylate Aminotransferase	Li P

OMIM #	Name	Country*
604327	Xylosylprotein 4-Beta-Galactosyltransferase, Polypeptide 7	Q
604457	Nuclear Body Protein SP110	Le
604490	Sacsin	T
604559	Progressive Familial Heart Block, Type I, Locus 1	Le
604591	Phosphatidylethanolamine-Binding Protein	K
604592	T Cell Immune Regulator 1	Le Sy
604595	Cholesterol Level Quantitative Trait Locus on Chromosome 13	Sy
604611	RECO Protein-Like 2	Sy
604615	Eomesodermin, Xenopus, Homolog of	Mo
604777	Ichthyosis, Lamellar, 3	A Le
604780	Comparative Gene Identification 58	A Mo T
604934	Tubulin-Specific Chaperone E	?
604936	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Long Cytoplasmic Tail, 1	C P
604937	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Long Cytoplasmic Tail, 2	C
604938	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Long Cytoplasmic Tail, 3	C
604945	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Long Cytoplasmic Tail, 4	C O
604952	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Short Cytoplasmic Tail, 1	C
604953	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Short Cytoplasmic Tail, 2	C
604954	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Short Cytoplasmic Tail, 3	C
604955	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Short Cytoplasmic Tail, 4	C
605195	Mesoderm Posterior 2	Le
605239	ATPase, H+ Transporting, Lysosomal, V0 Subunit A, Isoform 4	Le Sa
605242	USH1C Gene	Le
605248	Mucolipin 1	P
605305	Killer Cell Immunoglobulin-Like Receptor, Two Domains, Long Cytoplasmic Tail, 5	C
605378	AAAS Gene	A
605379	GAN Gene	T
605511	Transmembrane Protease, Serine 3	P T
605573	17-@Beta Hydroxysteroid Dehydrogenase III	Sy
605597	Forkhead Transcription Factor FOXL2	A
605646	Solute Carrier Family 26, Member 4	P T
605678	Williams-Beuren Syndrome Chromosome Region 14	Eg
605725	Periaxin	Le
605747	ARHGene	Le Sy
605799	Amnionless, Mouse, Homolog of	T
605802	Zinc Finger E Box-Binding Homeobox 2	U
605828	Epidermodysplasia Verruciformis Gene 1	A
605829	Epidermodysplasia Verruciformis Gene 2	A
605881	Solute Carrier Family 35, Member C1	P
605908	Megalencephalic Leukoencephalopathy with Subcortical Cysts Gene 1	Li
605925	Pericentrin 2	I Le O P
606119	Secreted LY6/PLAUR Domain-Containing Protein 1	A P T U
606125	Tripartite Motif-Containing Protein 8	Eg
606154	Mucin 16	B
606158	BSCL2 Gene	Le O P
606201	Wolfram Syndrome Gene 1	Sa
606352	Alsin	K T
606397	USH3A Gene	Y
606412	BSND Gene	Le P
606416	CIAS1 Gene	A
606463	Glucosidase, Beta, Acid	Le Sa
606530	Cytochrome P450, Subfamily XXVIIA, Polypeptide 1	Mo
606555	Tripartite Motif-Containing Protein 9	Eg
606556	Tripartite Motif-Containing Protein 14	Eg
606559	Tripartite Motif-Containing Protein 22	Eg
606580	OPA3 Gene	I
606596	Fukutin-Related Protein	A Li T
606597	Paired Box Gene 3	Y
606598	Ganglioside-Induced Differentiation-Associated Protein 1	A Le Mo T
606709	Protease, Serine, 12	A
606808	Myosin IIIA	I
606810	Proline Dehydrogenase	A
606844	ALMS1 Gene	A
606869	Hexosaminidase A	A I Le Mo
606873	Hexosaminidase B	P
606879	Phosphoglycerate Dehydrogenase	Mo
606883	Interleukin 1 Receptor-Associated Kinase 4	Sa
606890	Galactosylceramidase	P
606897	Lysosomal Trafficking Regulator	K
606933	Tyrosinase	J Le Q
606938	Uroporphyrinogen III Synthase	P
606945	Low Density Lipoprotein Receptor	B Le P Sy T
607009	Transient Receptor Potential Cation Channel, Subfamily M, Member 6	P
607038	Otoancorin	P
607042	CLN3 Gene	Mo
607059	Solute Carrier Family 39 (Zinc Transporter), Member 4	Eg T
607067	Saitohin	A

OMIM #	Name	Country*
607093	5,10-Methylenetetrahydrofolate Reductase	B Le O P U
607139	FANCA Gene	Mo P T
607198	Tyrosyl-DNA Phosphodiesterase 1	Sa
607306	Steroid 5-Alpha-Reductase 2	Le
607358	Autoimmune Regulator	Eg
607461	Dymeclin	Le Mo T
607564	Tripartite Motif-Containing Protein 6	Eg
607574	Arylsulfatase A	Le Sa
607585	Ataxia-Telangiectasia Mutated Gene	Mo P T
607590	BBS7 Gene	Sa
607649	Osteopetrosis-Associated Transmembrane Protein 1	K Le
607690	Sar1A, S. Cerevisiae, Homolog 2	A
607696	USH1G Gene	J T
607697	SET-Binding Factor 2	Mo T
607759	Integrin, Alpha-2B	I
607764	3-Beta-Hydroxy-Delta-5-C27-Steroid Oxidoreductase	Sa
607800	ATP-Binding Cassette, Subfamily A, Member 12	A Mo
607817	COH1 Gene	Le O Sa U
607868	Tripartite Motif-Containing Protein 11	Eg
607900	Kindlin 1	A O Sa T
607928	Whirlin	J
608034	Aspartoacylase	? J
608041	Anthrax Toxin Receptor 2	Mo
608107	Familial Mediterranean Fever Gene	A I J Le Mo Sy T
608132	Tetratricopeptide Repeat Domain 8	Sa
608222	Adenylosuccinate Lyase	Mo
608367	Myopia 4	A
608465	Senataxin	A
608487	Tripartite Motif-Containing Protein 5	Eg
608515	Neutrophil Cytosolic Factor 2	J P
608547	Vitamin K Epoxide Reductase Complex, Subunit 1	Le
608630	Roundabout, Drosophila, Homolog of, 3	?
608801	Glutaryl-CoA Dehydrogenase	P
608845	ADP-Ribosylation Factor-Like 6	Sa
608896	Sarcoglycan, Gamma	Mo T
608990	A Disintegrin-Like and Metalloproteinase with Thrombospondin Type 1 Motif, 10	Le Sa
609023	Myofibrillogenesis Regulator 1	O
609383	Ichthyin	A Sy
609708	Lipoprotein Lipase	Le Mo
609712	Pyruvate Kinase, Liver and Red Blood Cell	J Le
609884	Transmembrane Protein 67	O
610148	BBS10 Gene	Le O
610604	Killer Cell Immunoglobulin-Like Receptor, Three Domains, Pseudogene 1	C
611458	Galactosidase, Beta-1	Sa U
611716	ATPase, H+ Transporting, Lysosomal, V0 Subunit A2	O

*A: Algeria, B: Bahrain, C: Comoros, D: Djibouti, Eg: Egypt, Er: Eritrea, I: Iraq, J: Jordan, K: Kuwait, Le: Lebanon, Li: Libya, Ma: Mauritania, Mo: Morocco, O: Oman, P: Palestine, Q: Qatar, Sa: Saudi Arabia, So: Somalia, Su: Sudan, Sy: Syria, T: Tunisia, U: United Arab Emirates, Y: Yemen, ?: country not specified.