

Inherited Disease Panel: List of Inherited Diseases and associated genes tested

DISEASE	GENE SYMBOL	DISEASE	GENE SYMBOL
Agammaglobulinemia, X-Linked, Type 1	<i>BTK</i>	Hydroxymethylbilan Synthase (HMBS) Deficiency	<i>HMBS</i>
Alagille Syndrome	<i>JAG1</i>	Hypochondroplasia	<i>FGFR3</i>
Alopecia Universalis Congenita (ALUNC)	<i>HR</i>	Hypophosphatasia	<i>ALPL</i>
Alpers Syndrome	<i>POLG</i>	Inclusion Body Myopathy 2	<i>GNE</i>
Alpha-1-Antitrypsin Deficiency	<i>SERPINA1</i>	Inherited Deafness	<i>COL11A2, KCNQ4</i>
Alpha-Thalassemia - Southeast Asia	<i>HBA2</i>	Inherited Deafness, Top Genes	<i>GJB2, GJB3, GJB6</i>
Alport Syndrome	<i>COL4A5</i>	Juvenile Polyposis Syndrome	<i>BMPR1A, SMAD4</i>
Amyotrophic Lateral Sclerosis (Lou Gehrig's Disease)	<i>SOD1</i>	Leber Congenital Amaurosis	<i>AIP1, CEP290, CRB1, GUCY2D, IMPDH1, RDH12, RPE65, RPGRIP1</i>
Androgen Insensitivity Syndrome	<i>AKR1B1</i>	Li-Fraumeni Syndrome	<i>CHEK2, TP53</i>
Angioedema, Hereditary, Types I and II	<i>SERPING1</i>	Limb-Girdle Muscular Dystrophy Type 2A - Calpainopathy	<i>CAPN3</i>
Aniridia	<i>PAX6</i>	Limb-Girdle Muscular Dystrophy, Type 1B	<i>LMNA</i>
APC-Associated Polyposis Conditions	<i>APC</i>	Lissencephaly 1	<i>PFAH1B1</i>
Argininosuccinate Lyase Deficiency	<i>ASL</i>	Long QT Syndrome, Autosomal Dominant	<i>AKAP9, KCNE1, KCNE2, KCNH2, KCNQ1, SCN4B, SNTA1, ANK2</i>
Arrhythmogenic Right Ventricular Dysplasia/Cardiomyopathy	<i>DSC2, DSG2, DSP, JUP, PKP2, RYR2, TMEM43</i>	Lowe Syndrome	<i>OCRL</i>
Arylsulfatase A Deficiency	<i>ARSA</i>	Malignant Hyperthermia Susceptibility	<i>RYR1</i>
Ataxia with Oculomotor Apraxia Type 2	<i>APTX</i>	Maple Syrup Urine Disease	<i>BCKDHA, BCKDHB, DBT, DLD</i>
Ataxia with Vitamin E Deficiency	<i>TTPA</i>	Marfan Syndrome	<i>FBN1</i>
Ataxia-Telangiectasia	<i>ATM</i>	MECP2-Rett Syndrome	<i>MECP2</i>
Atrial Septal Defect	<i>GATA4</i>	Menkes/ATP7A-Related Copper Transport Disease	<i>ATP7A</i>
Autoimmune Polyendocrine Syndrome	<i>AIRE</i>	Methylmalonic Acidemia	<i>MMAA, MMB, MMACHC, MUT</i>
Beta-Hydroxyisobutyryl CoA Deacylase Deficiency (HIBCH Deficiency)	<i>HIBCH</i>	Mucopolipidosis II	<i>GNPTAB</i>
Biotinidase Deficiency	<i>BTD</i>	Multiple Endocrine Neoplasia Type 1	<i>MEN1</i>
Blepharophimosis-Ptosis-Epicanthus Inversus	<i>FOXL2</i>	Multiple Endocrine Neoplasia Type 2	<i>RET</i>
Brachydactyly	<i>GDF5</i>	Myotonia Congenita	<i>CLCN1</i>
Brachydactyly, Type B1	<i>ROR2</i>	Nemaline Myopathy	<i>TNNT1</i>
Branchiootrenal Spectrum Disorders	<i>EYA1, SIX1, SIX5</i>	Neonatal Adrenoleucodystrophy	<i>PEX5</i>
Brugada Syndrome	<i>CACNA1C, CACNB2, GPD1L, HCN4, KCNE3, SCN1B, SCN3B, SCN5A</i>	Neurofibromatosis Type 1	<i>NF1</i>
Campomelic Dysplasia	<i>SOX9</i>	Neurofibromatosis Type 2	<i>NF2</i>
Canavan	<i>ASPA</i>	Niemann-Pick Disease Type C1	<i>NPC1</i>
Cardiomyopathy (Dilated)	<i>STARD3, TAZ</i>	Niemann-Pick Disease Type C2	<i>NPC2</i>
Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT)	<i>CASQ2</i>	Noonan Syndrome	<i>KRAS, NRAS, PTPN11, RAF1, SOS1</i>
Cerebrotendinous Xanthomatosis	<i>CYP27A1</i>	Ocular Albinism, X-Linked	<i>GPR143</i>
Ceroid Lipofuscinoses (Batten Disease)	<i>PPT1</i>	Oculocutaneous Albinism Type 1	<i>TYR</i>
Charcot-Marie-Tooth Disease Type 2B	<i>DNM2</i>	Oculocutaneous Albinism Type 2	<i>MCR1, OCA2</i>
Charcot-Marie-Tooth Neuropathy Type 1A	<i>PMP22</i>	Oculopharyngeal Muscular Dystrophy	<i>PABPN1</i>
Charcot-Marie-Tooth Neuropathy Type 1B	<i>MPZ</i>	Ornithine Transcarbamylase Deficiency	<i>OTC</i>
Charcot-Marie-Tooth Neuropathy Type 2A	<i>MFN2</i>	Osteogenesis Imperfecta	<i>COL1A1, COL1A2</i>
Charge Syndrome	<i>CHD7</i>	Parkinson Disease	<i>FBXO7, LRRK2, PINK1, SNCA</i>
Cherubism	<i>SH3BP2</i>	Parkinson-Dementia Syndrome	<i>MAPT</i>
Choroideremia	<i>CHM</i>	Pendred Syndrome/Syndromic Deafness	<i>SLC26A4</i>
Citrin Deficiency	<i>SLC25A13</i>	Peroxisome Biogenesis, Zellweger	<i>PEX10, PEX13, PEX14, PEX19, PEX26, PEX3</i>
Coffin-Lowry Syndrome	<i>RPS6KA3</i>	Phenylketonuria (PKU)	<i>PAH</i>
Congenital Cataracts, Facial Dysmorphism, and Neuropathy	<i>CTDP1</i>	Polycystic Kidney Disease, Autosomal Dominant	<i>PKD1, PKD2, PKHD1</i>
Congenital Disorder of Glycosylation Type 1a	<i>PMM2</i>	Pompe Disease - GSD II	<i>GAA</i>
Congenital Myasthenic Syndromes	<i>CHRNA1, CHRNB1, CHRND, CHRNE, DOK7, RAPSN, CHAT</i>	Primary Ciliary Dyskinesia	<i>CCDC39, CCDC40, DNAH11, DNAH5, DNAH9, DNAI1, DNAI2, RSPH4A, RSPH9, TXNDC3</i>
Cornelia de Lange Syndrome	<i>NIPBL</i>	Retinitis Pigmentosa	<i>ABCA4, ARL6, BEST1, CA4, CERKL, CNGB1, CRX, EYS, FSCN2, KLHL7, LRAT, MAPRE2, MERTK, NR2E3, NUND119, PRCD, PROM1, PRPF31, PRPF8, PRPH2, RHO, RPO, RPGR, SEMA4A, SNRNP200, TOPORS, TULP1</i>
Familial Hypertrophic Cardiomyopathy	<i>ACTC1, CALR3, CAV3, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYLK, MYOZ2, PRKAG2, RPS7, SLC25A4, TNNT2, TPM1, VCL</i>	Retinoblastoma0	<i>RB1</i>
Cystinosis	<i>CTNS</i>	Saethre-Chotzen Syndrome	<i>TWIST1</i>
Darier Disease	<i>ATP2A2</i>	SCN9A-Related Inherited Erythromelalgia	<i>SCN9A</i>
Diamond-Blackfan Anemia	<i>RPL11, RPL35A, RPS10, RPS19, RPS24, RPS26</i>	Severe Combined Immunodeficiency	<i>ADA, RAG1, RAG2</i>
Dilated Cardiomyopathy	<i>DES, LAMP2, LDB3, SGCD, TNNC1, TNNT3</i>	Short QT Syndrome	<i>KCNJ2</i>
Dilated Cardiomyopathy 1AA	<i>ACTN2</i>	Sickle Cell Disease Beta-Thalassemia	<i>HBB</i>
Dilated Cardiomyopathy 1HH	<i>BAG3</i>	Smith-Lemli-Opitz Syndrome	<i>DHCR7</i>
Dilated Cardiomyopathy 1O	<i>ABCC9</i>	Smith-Magenis Syndrome	<i>RAI1</i>
Dilated Cardiomyopathy 1P	<i>PLN</i>	Sotos Syndrome	<i>NSD1</i>
Double Cortex Syndrome	<i>DCX</i>	Spastic Paraplegia 7	<i>SPG7</i>
Duane Syndrome - Autosomal Dominant	<i>SALL4</i>	Spastic Paraplegia 8	<i>KIAA0196</i>
Duchenne/Becker Muscular Dystrophy	<i>DMD</i>	Spastic Paraplegia Type 1 - L1 Syndrome	<i>L1CAM</i>
Dysferlinopathy	<i>DYSF</i>	Spastic Paraplegia-3A	<i>ATL1</i>
Dyskeratosis Congenita	<i>DKC1</i>	Spinocerebellar Ataxia 1	<i>ATXN1, ATXN2, ATXN7</i>
Early-Onset Familial Alzheimer Disease	<i>APP, PSEN1, PSEN2</i>	Stickler Syndrome	<i>COL9A1</i>
Ehlers-Danlos Syndrome	<i>COL3A1, COL5A1, COL5A2</i>	Stickler Syndrome, AD	<i>COL11A1, COL2A1</i>
Ehlers-Danlos Syndrome, Hypermobility Type	<i>TNXB, PLOD1, EMD</i>	Supravalvular Aortic Stenosis	<i>ELN</i>
Epidermolysis Bullosa Simplex	<i>COL7A1, ITGB4, KRT14, KRT5, LAMB3, PLEC</i>	Tetralogy of Fallot	<i>NKX2-5</i>
Exostoses, Multiple, Type 1	<i>EXT1</i>	Thoracic Aortic Aneurysms and Aortic Dissections	<i>ACTA2, COL4A1, MYH11, SMAD3, TGFBF1, TGFBF2</i>
Fabry Disease	<i>GLA</i>	Treacher Collins Syndrome	<i>TCOF1</i>
Facioscapulohumeral Muscular Dystrophy	<i>FRG1</i>	Trimethylaminuria	<i>FMO3</i>
Familial Dysautonomia (HSAN III)	<i>IKBKAP</i>	Tuberous Sclerosis Complex	<i>TSC1, TSC2</i>
Familial Transthyretin Amyloidosis	<i>TTR</i>	Turcot Syndrome	<i>MLH1, MSH2</i>
Fanconi Anemia	<i>FANCA, FANCC, FANCF, FANCG</i>	Usher Syndrome Type 1	<i>CDH23, MYO7A, PCDH15, USH1C</i>
FGFR-Related Craniosynostosis Syndromes	<i>FGFR1</i>	Usher Syndrome Type 2	<i>USH2A</i>
Friedreich Ataxia	<i>FXN</i>	Very Long Chain Acyl-Coenzyme A Dehydrogenase Deficiency	<i>ACADVL</i>
FRMD7-Related Infantile Nystagmus	<i>FRMD7</i>	von Hippel-Lindau Syndrome	<i>VHL</i>
Fryns Syndrome	<i>MED12</i>	Waardenburg Syndrome, Type 1	<i>PAX3</i>
Galactosemia	<i>GALT</i>	Werner Syndrome	<i>WRN</i>
Gaucher Disease	<i>GBA</i>	Wilms Tumor, Classic	<i>WT1, GPC3</i>
Glycine Encephalopathy	<i>AMT, GCSH, GLDC</i>	Wilson Disease	<i>ATP7B</i>
Glycogen Storage Disease Type VI	<i>GBE1</i>	Wiskott-Aldrich Syndrome	<i>WAS</i>
Hemophilia A	<i>F8</i>	X-Linked Adrenoleukodystrophy	<i>ABCD1</i>
Hemophilia B	<i>F9</i>	X-Linked Dystonia-Parkinsonism	<i>TAF1</i>
Hereditary Hemorrhagic Telangiectasia	<i>ENG</i>	X-Linked Juvenile Retinoschisis	<i>RS1</i>
Hexosaminidase A Deficiency	<i>HEXA</i>	X-Linked Myotubular Myopathy	<i>MTM1</i>
HFE-Associated Hereditary Hemochromatosis	<i>HFE</i>	X-Linked SCIDS	<i>IL2RG</i>
Holoprosencephaly-7 & Basal Cell Nevus Syndrome	<i>PTCH1</i>	Zellweger Syndrome	<i>PEX1</i>
Holt-Oram Syndrome	<i>TBX5</i>		
Hunter Syndrome (MPSII)	<i>IDS, IDUA</i>		