

擴展性和全外顯子組
遺傳病攜帶者基因篩查

List of Disorders Screened by the Expanded Carrier Test

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| 11-beta-hydroxylase-deficient congenital adrenal hyperplasia | Asparagine synthetase deficiency | Charcot-Marie-Tooth disease (NDRG1-related) | Congenital myasthenic syndrome (RAPSN-related) |
| 17-alpha-hydroxylase-deficient congenital adrenal hyperplasia | Aspartylglucosaminuria | Charcot-Marie-Tooth disease, X-linked (GJB1-related) | Congenital neutropenia (HAX1-related) |
| 3-beta-hydroxysteroid dehydrogenase type II deficiency (Congenital adrenal hyperplasia) | Ataxia with vitamin E deficiency | Chorea-acanthocytosis | Corneal dystrophy and perceptive deafness |
| 3-hydroxy-3-methylglutaryl-CoA (HMG-CoA) lyase deficiency | Ataxia-telangiectasia | Choroideremia | Cystic fibrosis/ CFTR-related disorders |
| 3-methylcrotonyl-CoA carboxylase (3-MCC) deficiency (MCCC1-related) | Autoimmune polyendocrinopathy with candidiasis and ectodermal dysplasia | Chronic granulomatous disease (CYBA-related) | Cystinosis |
| 3-methylcrotonyl-CoA carboxylase (3-MCC) deficiency (MCCC2-related) | Autosomal recessive deafness 77 (DFNB77) | Chronic granulomatous disease (CYBB-related) | D-bifunctional protein deficiency |
| 3-methylglutaconic aciduria type III (Costeff optic atrophy) | Autosomal recessive spastic ataxia of Charlevoix-Saguenay (ARSACS) | Citrin deficiency | DHDDS-related disorders (including Congenital disorder of glycosylation/ Retinitis pigmentosa 59) |
| Abetalipoproteinemia | Bardet-Biedl syndrome (BBS10-related) | Citrullinemia type 1 | Dihydroliipoamide dehydrogenase deficiency (DLD) |
| ACAD9 deficiency | Bardet-Biedl syndrome (BBS12-related) | Cockayne syndrome type A | DMD-related dystrophinopathy (Including Duchenne/Becker muscular dystrophy and Dilated cardiomyopathy) |
| Achromatopsia (CNGB3-related) | Bardet-Biedl syndrome (BBS1-related) | Cockayne syndrome type B | Dystrophic epidermolysis bullosa (COL7A1-related) |
| Acrodermatitis enteropathica | Bardet-Biedl syndrome (BBS2-related) | Cohen syndrome | Ehlers-Danlos syndrome, dermatosparaxis type |
| Adenosine deaminase deficiency | Bartter syndrome type IV (BSND-related) | Combined malonic and methylmalonic aciduria (ACSF3-related) | Ellis-van Creveld syndrome (EVC2-related) |
| Aicardi-Goutieres syndrome (SAMHD1-related) | Bernard-Soulier syndrome (GP1BA-related) | Combined oxidative phosphorylation deficiency (GFM1-related) | Ellis-van Creveld syndrome (EVC-related) |
| Aldosterone synthase deficiency | Bernard-Soulier syndrome (GP9-related) | Combined oxidative phosphorylation deficiency (TSFM-related) | Emery-Dreifuss muscular dystrophy (EMD-related) |
| Alkaptonuria | Bernard-Soulier syndrome (GP9-related) | Combined pituitary hormone deficiency (LHX3-related) | Enhanced S-cone syndrome/ Retinitis pigmentosa 37 |
| Alpha-1 antitrypsin deficiency | Beta-ketothiolase deficiency | Combined pituitary hormone deficiency (PROP1-related) | Ethylmalonic encephalopathy |
| Alpha-mannosidosis | Biotinidase deficiency | Combined SAP Deficiency | Fabry disease |
| Alpha-thalassemia | Bloom syndrome | Congenital amegakaryocytic thrombocytopenia | Factor IX deficiency (Hemophilia B) |
| Alpha-thalassemia X-linked intellectual disability syndrome | Canavan disease | Congenital disorder of glycosylation (ALG6-related) | Factor V Leiden thrombophilia |
| Alport Syndrome (COL4A3-related) | Carbamoylphosphate synthetase I deficiency | Congenital disorder of glycosylation (MPI-related) | Factor XI deficiency (Hemophilia C) |
| Alport Syndrome (COL4A4-related) | Carnitine palmitoyltransferase I deficiency | Congenital disorder of glycosylation (PMM2-related) | Familial dysautonomia |
| Alport Syndrome, X-linked (COL4A5-related) | Carnitine palmitoyltransferase II deficiency | Congenital ichthyosis (TGM1-related) | Familial hypercholesterolemia (LDLRAP1-related) |
| Alström syndrome | Carpenter syndrome (RAB23-related) | Congenital insensitivity to pain with anhidrosis | Familial hypercholesterolemia (LDLR-related) |
| Andermann syndrome | Cartilage-hair hypoplasia-anauxetic dysplasia spectrum disorders | Congenital myasthenic syndrome (CHRNE-related) | |
| Arginase deficiency | Cerebrotendinous xanthomatosis | | |
| Argininosuccinic aciduria | | | |
| Aromatase deficiency | | | |

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| Familial hyperinsulinism (ABCC8-related) | Hermansky-Pudlak syndrome (HPS1-related) | Lipoprotein lipase deficiency | Mucopolysaccharidosis type I (includes Hurler, Hurler-Scheie, and Scheie syndromes) |
| Familial hyperinsulinism (KCNJ11-related) | Hermansky-Pudlak syndrome (HPS3-related) | Long chain 3-hydroxyacyl-CoA dehydrogenase (LCHAD) deficiency | Mucopolysaccharidosis type II (Hunter syndrome) |
| Familial mediterranean fever | Holocarboxylase synthetase deficiency | Lysinuric protein intolerance | Mucopolysaccharidosis type IX |
| Fanconi anemia type A | Homocystinuria (CBS-related) | Lysosomal acid lipase deficiency (includes Wolman disease and Cholesterol ester storage disease) | Mucopolysaccharidosis type VI (Maroteaux-Lamy syndrome) |
| Fanconi anemia type C | Homocystinuria due to MTHFR deficiency | Major histocompatibility complex class II deficiency (CIITA-related) | Mucopolysaccharidosis type IIIA (Sanfilippo A syndrome) |
| Fanconi anemia type G | Homocystinuria, cobalamin E type | Maple syrup urine disease (MSUD) type 1A | Mucopolysaccharidosis type IIIB |
| Fragile X syndrome | Hydrolethalus syndrome type 1 | Maple syrup urine disease (MSUD) type 1B | Mucopolysaccharidosis type IIIC (Sanfilippo syndrome)/ Retinitis pigmentosa 73 |
| Fumarate hydratase deficiency | Hyperornithinemia-hyperammonemia-homocitrullinuria (HHH) syndrome | Maple syrup urine disease (MSUD) type 2 | Mucopolysaccharidosis type IIID (Sanfilippo syndrome) |
| Galactokinase deficiency galactosemia | Hypohidrotic ectodermal dysplasia (EDA-related) | Medium chain acyl-CoA dehydrogenase (MCAD) deficiency | Mucopolysaccharidosis type IVB (Morquio B syndrome)/ GM1 gangliosidosis |
| Galactosemia (GALT-related) | Hypophosphatasia | Megalencephalic leukoencephalopathy with subcortical cysts type 1 | Multiple sulfatase deficiency |
| Gaucher disease | Inclusion body myopathy 2 | Menkes disease/ ATP7A-related disorders (including Occipital horn syndrome and Distal hereditary motor neuropathy) | N-Acetylglutamate synthase deficiency |
| Gitelman syndrome (SLC12A3-related) | Isovaleric acidemia | Metachromatic leukodystrophy (ARSA-related) | Nemaline myopathy 2 |
| GJB2-related DFNB1 nonsyndromic hearing loss and deafness | Joubert syndrome 2/ TMEM216-related disorders | Methylmalonic acidemia (MMAA-related) | Nephrogenic diabetes insipidus (AQP2-related) |
| Glucose-6-phosphate dehydrogenase (G6PD) deficiency | Junctional epidermolysis bullosa (LAMA3-related) | Methylmalonic acidemia (MMAB-related) | Nephrotic syndrome/ Congenital Finnish nephrosis (NPHS1-related) |
| Glutaric acidemia type I | Junctional epidermolysis bullosa (LAMB3-related) | Methylmalonic acidemia (MUT-related) | Nephrotic syndrome/Steroid-resistant nephrotic syndrome (NPHS2-related) |
| Glutaric acidemia type II (ETF A-related) | Junctional epidermolysis bullosa (LAMC2-related) | Methylmalonic acidemia with homocystinuria, cobalamin C type | Neuronal ceroid lipofuscinosis (TPP1-related) |
| Glutaric acidemia type II (ETFDH-related) | Krabbe disease | Methylmalonic acidemia with homocystinuria, cobalamin D type | Neuronal ceroid-lipofuscinosis (CLN3-related) |
| Glycine encephalopathy (AMT-related) | LAMA2-related muscular dystrophy | Microphthalmia / clinical anophthalmia (VSX2-related) | Neuronal ceroid-lipofuscinosis (CLN5-related) |
| Glycine encephalopathy (GLDC-related) | Leber congenital amaurosis 10/ CEP290-related disorders | Mitochondrial complex I deficiency/ Leigh syndrome (NDUFAF5-related) | Neuronal ceroid-lipofuscinosis (CLN6-related) |
| Glycogen storage disease type Ia | Leber congenital amaurosis 13 | Mitochondrial complex I deficiency/ Leigh syndrome (NDUFS6-related) | Neuronal ceroid-lipofuscinosis (MFSD8-related) |
| Glycogen storage disease type Ib | Leber congenital amaurosis 2 | Mitochondrial myopathy and sideroblastic anemia 1 | Neuronal ceroid-lipofuscinosis (PPT1-related) |
| Glycogen storage disease type II (Pompe disease) | Leber congenital amaurosis 5 | Mitochondrial neurogastrointestinal encephalopathy (MNGIE) disease | Neuronal ceroid-lipofuscinosis/ Northern epilepsy (CLN8-related) |
| Glycogen storage disease type IV/ Adult polyglucosan body disease | Leber congenital amaurosis 8/ CRB1-related disorders | Mitochondrial DNA depletion syndrome (MPV17-related) | Niemann-Pick disease type A/B |
| Glycogen storage disease type V | Leigh syndrome, French Canadian type | MKS1-related disorders | Niemann-Pick disease type C (NPC1-related) |
| Glycogen storage disease type III | Lethal congenital contracture syndrome 1 / Lethal arthrogryposis with anterior horn cell disease | Mucopolipidosis type II/III (GNPTAB-related) | Niemann-Pick disease type C (NPC2-related) |
| Glycogen storage disease type VII | Lethal congenital contracture syndrome 1 / Lethal arthrogryposis with anterior horn cell disease | Mucopolipidosis type IV | Nijmegen breakage syndrome |
| GRACILE syndrome/ BCS1L-related disorders (including Mitochondrial complex III deficiency, Bjornstad syndrome, Leigh syndrome) | Leukoencephalopathy with vanishing white matter (EIF2B5-related) | Mucopolipidosis type III (GNPTG-related) | Ornithine aminotransferase deficiency |
| Guanidinoacetate methyltransferase deficiency | Limb-girdle muscular dystrophy type 2A (calpainopathy) | | Ornithine transcarbamylase (OTC) deficiency |
| HBB-related hemoglobinopathies (including Beta-thalassemia and Sickle cell disease) | Limb-girdle muscular dystrophy type 2B (dysferlinopathy) | | Osteopetrosis (TCIRG1-related) |
| Hereditary fructose intolerance | Limb-girdle muscular dystrophy type 2C | | Pendred syndrome |
| Hereditary hemochromatosis (HFE-related) | Limb-girdle muscular dystrophy type 2D | | |
| Hereditary hemochromatosis (HJV-related) | Limb-girdle muscular dystrophy type 2E | | |
| Hereditary hemochromatosis (TFR2-related) | Lipoid congenital adrenal hyperplasia (STAR-related) | | |

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| Peroxisomal acyl-CoA oxidase deficiency | Propionic acidemia (PCCB-related) | Severe congenital neutropenia (VPS45-related) | dehydrogenase (VLCAD) deficiency |
| Phenylalanine hydroxylase deficiency (including Phenylketonuria (PKU)) | Propionic acidemia (PCCB-related) | Sialic acid storage disorders | Walker-Warburg syndrome/ FKRP-related disorders |
| Phosphoglycerate dehydrogenase deficiency/ Neu-Laxova syndrome | PRPS1-related disorders (including Charcot-Marie-Tooth disease type 5 and Arts syndrome) | Sjögren-Larsson syndrome | Walker-Warburg syndrome/ FKTN-related disorders |
| Polycystic kidney disease (PKHD1-related) | Pycnodysostosis | SLC26A2-related disorders (including Diatrophic dysplasia, Atelosteogenesis type 2, Achondrogenesis type 1B/ Multiple metaphyseal dysplasia) | Wilson disease |
| Polymicrogyria (ADGRG1-related) | Pyruvate carboxylase deficiency | SLC35A3-related disorder | WNT10A-related disorders (including Odonto-onycho-dermal dysplasia and Schopf-Schulz-Passarge syndrome) |
| POMGNT1-related disorders (including Muscle eye brain disease) | Pyruvate dehydrogenase deficiency (PDHA1-related) | Smith-Lemli-Opitz syndrome | Xeroderma pigmentosum complementation group A |
| Pontocerebellar hypoplasia (RARS2-related) | Pyruvate dehydrogenase deficiency (PDHB-related) | Spastic paraplegia type 15 | Xeroderma pigmentosum complementation group C |
| Pontocerebellar hypoplasia (SEPSECS-related) | Renal tubular acidosis with deafness (ATP6V1B1-related) | Spastic paraplegia type 49 | X-linked adrenoleukodystrophy |
| Pontocerebellar hypoplasia (VRK1-related) | Retinitis pigmentosa 25 | Spinal muscular atrophy | X-linked creatine transporter deficiency |
| Postnatal progressive microcephaly with seizures and brain atrophy/ Infantile cerebral and cerebellar atrophy (MED17-related) | Retinitis pigmentosa 26 | Spondylothoracic dysostosis | X-linked juvenile retinoschisis |
| Primary carnitine deficiency | Retinitis Pigmentosa 28 | Steel Syndrome | X-linked myotubular myopathy |
| Primary Ciliary Dyskinesia (DNAH5-related) | Rhizomelic chondrodysplasia punctata type 1/ Refsum disease (PEX7-related) | Stüve-Wiedemann syndrome | X-linked severe combined immunodeficiency (X-SCID) |
| Primary Ciliary Dyskinesia (DNAI1-related) | Rhizomelic chondrodysplasia punctata type 3 | Tay-Sachs disease/ Hexosaminidase A deficiency | Zellweger spectrum disorder (PEX10-related) |
| Primary Ciliary Dyskinesia (DNAI2-related) | Roberts syndrome | Tetrahydrobiopterin deficiency (PTS-related) | Zellweger spectrum disorder (PEX12-related) |
| Primary hyperoxaluria type 1 | RPGRIP1L-related disorders (including Joubert syndrome 7, COACH syndrome and Meckel syndrome 5) | Transient infantile liver failure (TRMU-related) | Zellweger spectrum disorder (PEX1-related) |
| Primary hyperoxaluria type 2 | RTEL-1-related disorders (including Dyskeratosis congenita) | Tyrosine hydroxylase deficiency | Zellweger spectrum disorder (PEX2-related) |
| Primary hyperoxaluria type 3 | Sandhoff disease | Tyrosinemia type I | Zellweger spectrum disorder (PEX6-related) |
| Progressive familial intrahepatic cholestasis type 2 | Schimke immuno-osseous dysplasia | Tyrosinemia type II | |
| Propionic acidemia (PCCA-related) | Severe combined immune deficiency (DCLRE1C-related) | Usher syndrome type IB/ MYO7A-related disorders | |
| | Severe combined immunodeficiency/ Omenn syndrome (RAG2-related) | Usher syndrome type IC/ USH1C-related disorders | |
| | | Usher syndrome type ID | |
| | | Usher syndrome type IF/ PCDH15-related disorders | |
| | | Usher syndrome type IIA/ USH2A-related disorders | |
| | | Usher syndrome type IIIA | |
| | | Very long-chain acyl-CoA | |

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