Kidney Panel

The table shows the list of 103 genes related to kidney conditions analyzed in this test.

Bumrungrad International HOSPITAL

Gene	Gene Associated Condition
ACTN4	Focal segmental glomerulosclerosis 1
ADA2	Sneddon syndrome, Vasculitis autoinflammation immunodeficiency and hematologic defects syndrome
ADAMTS13	Hereditary thrombotic thrombocytopenic purpura
AGXT	Primary hyperoxaluria type 1
ALPL	Hypophosphatasia, Odontohypophosphatasia
APOL1	Susceptibility to focal segmental glomerulosclerosis, APOL1 mediated kidney disease
APRT	Adenine phosphoribosyltransferase deficiency
AQP2	Nephrogenic diabetes insipidus 2
ATP6V0A4	Distal renal tubular acidosis 3 with or without sensorineural hearing loss
ATP6V1B1	Distal renal tubular acidosis 2 with progressive sensorineural hearing loss
ATP6V1C2	Distal renal tubular acidosis
ATP7B	Wilson disease
AVP	Neurohypopheseal diabetes insipidus
AVPR2	Nephrogenic diabetes insipidus 1, Nephrogenic syndrome of inappropriate antidiuresis
BSND	Bartter syndrome type 4a, Sensorineural deafness with mild renal dysfunction
C3	Susceptibility to Atypical Hemolytic Uremic Syndrome 5, Age-related macular degeneration 9, C3 deficiency
CACNA1S	Susceptibility to Malignant hyperthermia 5, Susceptibility to Thyrotoxic periodic paralysis 1, Congenital myopathy 18 due to dihydropyridine receptor defect, Hypokalemic periodic paralysis type 1
CASR	Susceptibility to Idiopathic Generalized Epilepsy 8, Neonatal Hyperparathyroidism, Hypocalcemia, Hypocalcemia with Bartter syndrome, Hypocalciuric hypercalcemia type I
CD46	Susceptibility to Hemolytic uremic syndrome atypical 2
CFB	Complement factor B deficiency, susceptibility to atypical Hemolytic uremic syndrome 4
CFH	Susceptibility to Atypical hemolytic uremic syndrome 1, Age-related macular degeneration 4, Basal laminar drusen, Complement factor H deficiency
CFHR5	Nephropathy due to CFHR5 deficiency
CFI	Susceptibility to Atypical hemolytic uremic syndrome 3, Susceptibility to Age-related macular degeneration 13, Complement factor I deficiency
CLCN5	Dent disease 1, Hypophosphatemic rickets, Nephrolithiasis type I, Low molecular weight proteinuria associated with hypercalciuria and nephrocalcinosis
CLCNKA	Bartter syndrome type 4b
CLCNKB	Bartter syndrome type 3, Bartter syndrome type 4b
CLDN16	Renal hypomagnesemia 3
CLDN19	Renal hypomagnesemia 5 with ocular involvement
CNNM2	Renal hypomagnesemia 6, Seizures related to Hypomagnesemia and impaired intellectual development 1
COL4A1	Hereditary angiopathy with nephropathy aneurysms and muscle cramps, Brain small vessel disease with or without ocular anomalies, Pontine microangiopathy and leukoencephalopathy
COL4A3	Alport syndrome 3A, Alport syndrome 3B, Familial benign hematuria 2
COL4A4	Alport syndrome 2, Familial benign hematuria 1
COL4A5	Alport syndrome 1
COQ2	Primary coenzyme Q10 deficiency 1
COQ6	Primary Coenzyme Q10 deficiency 6
CPT2	Susceptibility to Encephalopathy acute infection-induced 4, Infantile CPT II deficiency, Lethal neonatal CPT II deficiency, Myopathic stress-induced CPT II deficiency
CTNS	Atypical nephropathic cystinosis, Late-onset juvenile cystinosis or adolescent nephropathic, Nephropathic cystinosis, Ocular nonnephropathic cystinosis
CUBN	Chronic benign proteinuria, Imerslund-Grasbeck syndrome 1
CUL3	Neurodevelopmental disorder with or without autism or seizures, Pseudohypoaldosteronism type IIE
DGKE	Susceptibility to Atypical hemolytic uremic syndrome 7, Nephrotic syndrome type 7
DNAJB11	Polycystic kidney disease 6 with or without polycystic liver disease
DNASE1L3	Systemic lupus erythematosus 16
EGF	Renal hypomagnesemia 4
EYA1	Anterior segment anomalies with or without cataract, Branchiootic syndrome 1, Branchiootorenal syndrome 1 with or without cataracts
FGF23	Hypophosphatemic rickets, Familial hyperphosphatemic tumoral calcinosis 2
FLCN	Birt-Hogg-Dube syndrome
FN1	Glomerulopathy with fibronectin deposits 2
FXYD2	Renal hypomagnesemia 2
G6PD	Hemolytic anemia
GANAB	Polycystic kidney disease 3
GATA3	Hypoparathyroidism, Sensorineural deafness, Renal dysplasia
GLA	Fabry disease
GRHPR	Primary hyperoxaluria type II
HGD	Alkaptonuria
HNF1A	Insulin-dependent diabetes mellitus MODY type III, Renal cell carcinoma
HNF1B	Renal cell carcinoma, Renal cysts and diabetes syndrome
HNF4A	Noninsulin-dependent diabetes mellitus, Fanconi renotubular syndrome 4 with maturity-onset diabetes of the young, MODY type I
HOGA1	Primary Hyperoxaluria type III
IFT140	Retinitis pigmentosa 80, Short-rib thoracic dysplasia 9 with or without polydactyly, Cystic kidney disease
INF2	Dominant Intermediate Charcot-Marie-Tooth Disease E, Focal Segmental Glomerulosclerosis 5
KCNJ1	Bartter syndrome type 2
KLHL3	Pseudohypoaldosteronism type IID
LAMB2	Nephrotic syndrome type 5 with or without ocular abnormalities, Pierson syndrome
LMX1B	Focal segmental glomerulosclerosis 10, Nail-patella syndrome
MC4R	Obesity, Resistance to Obesity
MMACHC	Methylmalonic aciduria and homocystinuria cblC type
MYH9	Macrothrombocytopenia and granulocyte inclusions with or without nephritis or sensorineural hearing loss
MYO1E	Focal segmental glomerulosclerosis 6
NPHS1	Nephrotic syndrome type 1
NPHS2	Nephrotic syndrome type 2
OCRL	Dent disease 2, Lowe syndrome
PAX2	Focal segmental glomerulosclerosis 7, Papillorenal syndrome
PDX1	Susceptibility to Diabetes mellitus type II, MODY type IV,Pancreatic agenesis 1
PHEX	Hypophosphatemic rickets
PKD2	Polycystic kidney disease 2
PKHD1	Polycystic kidney disease 4 with or without hepatic disease
PLG	Hereditary angioedema 4, Dysplasminogenemia,Plasminogen deficiency type I
PRKCSH	Polycystic liver disease 1
REN	Hyperproreninemia, Renal tubular dysgenesis,Tubulointerstitial kidney disease 4
RET	Medullary thyroid carcinoma, Multiple endocrine neoplasia IIA, Multiple endocrine neoplasia IIB, Pheochromocytoma
SCNN1A	Liddle syndrome 3, Bronchiectasis with or without elevated sweat chloride 2, Pseudohypoaldosteronism type IB1
SCNN1B	Bronchiectasis with or without elevated sweat chloride 1, Liddle syndrome 1, Pseudohypoaldosteronism type IB2
SCNN1G	Bronchiectasis with or without elevated sweat chloride 3, Liddle syndrome 2, Pseudohypoaldosteronism type IB3
SLC12A1	Bartter syndrome type 1
SLC12A3	Gitelman syndrome
SLC22A12	Renal hypouricemia
SLC2A9	Renal Hypouricemia 2
SLC34A1	Fanconi renotubular syndrome 2, Infantile Hypercalcemia 2, Nephrolithiasis/osteoporosis hypophosphatemic 1
SLC34A3	Hypophosphatemic rickets with hypercalciuria
SLC3A1	Cystinuria
SLC4A1	Cryohydrocytosis, Distal renal tubular acidosis 1, Distal renal tubular acidosis 4 with hemolytic anemia, Southeast Asian Ovalocytosis, Spherocytosis type 4
SLC5A2	Renal glucosuria
SLC7A9	Cystinuria
THBD	Susceptibility to Atypical hemolytic uremic syndrome 6, Thrombophilia 12 due to thrombomodulin defect
TRPC6	Focal segmental glomerulosclerosis 2
TSC1	Lymphangioleiomyomatosis, Tuberous sclerosis-1
TSC2	Lymphangioleiomyomatosis somatic, Tuberous sclerosis-2
TTR	Dystransthyretinemic hyperthyroxinemia, Transthyretin-related Amyloidosis, Familial carpal tunnel syndrome
UMOD	Tubulointerstitial kidney disease 1
VHL	Erythrocytosis familial 2, Pheochromocytoma, von Hippel-Lindau syndrome
WNK1	Hereditary neuropathysensory and autonomic type II, Pseudohypoaldosteronism type IIC
WNK4	Pseudohypoaldosteronism type IIB
WT1	Denys-Drash syndrome, Frasier syndrome, Meacham syndrome, Mesothelioma somatic, Nephrotic syndrome type 4, Wilms tumor type 1