KidneySeq™ CAKUT		
Cost: $2000 | CPT Codes: 81404, 81405, 81406, 81407, 81479		
Disease	Inheritance Pattern	Gene(s)
Alagille syndrome	AD	*JAG1, NOTCH2*
Axenfeld-Rieger Syndrome*	AD	*FOXC1**
Bilateral renal agenesis*	AR	*GFRA1**
Bladder dysfunction, autonomic, with impaired pupillary reflex and secondary CAKUT*	AR	*CHRNA3**
Branchiooculofacial syndrome	AD	*TFAP2A*
Branchio-oto-renal syndrome	AD	*EYA1, SIX1, SIX5*
CAKUT with VACTERL	AR	*TRAP1*
CHARGE syndrome	AD	*CHD7, SEMA3E*
Common CAKUT	AD	*ACTG1, AGTR1, CHD1L, DLG1, DLG5*, DSTYK, ETV4, EYA1, FOXP1, GATA3, GDNF, GFRA1*, GREB1L, HNF1B, KAT6B, KIF12, KMT2D, NRIP1, PAX2, PBX1, RET, ROBO2, SALL1, SIX2, SIX5, SLIT2, SRGAP1, TBX18, ZMYM2**
	AR	*CTU2, FAT4, HPSE2, TRAP1, TRPS1*
Congenial lipoid adrenal hyperplasia (lipoid CAH)*	AR	*STAR**
Fraser syndrome	AR	*FRAS1, FREM1, FREM2, GREM1, GRIP1*
Genitopatellar syndrome	AD	*KAT6B*
Hypoparathyroidism, sensorineural deafness, and renal dysplasia	AD	*GATA3*
Isolated renal hypo-dysplasia	AD	*BMP4, DSTYK, HNF1B, PAX2, RET, SALL1, SIX2*
	AR	*DACH1, FGF20, ITGA8*
Isolated renal hypoplasia: renal adysplasia	AR	*RET, UPK3A*
Hypogonadotropic hypogonadism with or without anosmia (Kallmann syndrome)	AD	*CHD7, FGFR1*
	XL	*ANOS1*
Lower urinary tract obstruction, congenital*	AD	*BNC2**
Mayer-Rokitansky-Küster-Hauser syndrome	AD	*WNT4*
Multicystic dysplastic kidney	AD	*CHD1L, DLG5*, HNF1B, ROBO2, SALL1*
Primary Macronodular Adrenal Hyperplasia*		*GNAS**
Posterior urethral valves	AD	*CHD1L, HNF1B, ROBO2, SALL1, SIX2*
Renal-coloboma syndrome	AR	*PAX2*
Renal cysts and diabetes syndrome	AD	*HNF1B*
Renal fibrosis	AD	*PARN*
Renal-hepatic-pancreatic dysplasia 2	AR	*NEK8, NPHP3*
Renal tubular dysgenesis	AR	*ACE, AGT, AGTR1, REN*
Townes-Brocks syndrome	AD	*SALL1*
Unilateral renal agenesis	AD	*DSTYK, HNF1B, RET, SALL1*
UPJ obstruction	AD	*DSTYK, EYA1, HNF1B, RET, ROBO2, SALL1*
UVJ obstruction	AD	*CHD1L, DLG5*, PAX2, SIX5*
Vesicoureteral reflux	AD	*DSTYK, EYA1, GATA3, HNF1B, RET, ROBO2, SALL1, SOX17, TNXB, UPK3A, COL4A1*

*New to KidneySeq™ Version 5