

Table 5 Uncommon mutations for inherited diseases of domestic cats*

Disease	OMIA entry link	Gene	Mutation†
11 β -hydroxylase deficiency (congenital adrenal hypoplasia) ⁹⁵	001661-9685	<i>CYP11B1</i>	Exon 7 G>A
Dihydropyrimidinase deficiency ⁹⁶	001776-9685	<i>DPYS</i>	c.1303G>A
Factor XII deficiency ⁹⁷	000364-9685	<i>FXII</i>	c.1321delC
Fibrodysplasia ossificans progressiva	000388-9685	unpublished	unpublished
Gangliosidosis 1 ⁹⁸	000402-9685	<i>GLB1</i>	c.1448G>C
Gangliosidosis 2 ^{99,100}	001462-9685	<i>HEXB</i>	c.1467_1491inv c.667C>T
Gangliosidosis 2 ⁷⁴	001427-9685	<i>GM2A</i>	c.390_393GGTC
Hemophilia B ¹⁰¹	000438-9685	<i>F9</i>	c.247G>A c.1014C>T
Hyperoxaluria ¹⁰²	000821-9685	<i>GRHPR</i>	G>A I4 acceptor site
Hypothyroidism	000536-9685	unpublished	unpublished
Lipoprotein lipase deficiency ¹⁰³	001210-9685	<i>LPL</i>	c.1234G>A
Mucopolipidosis II ¹⁰⁴	001248-9685	<i>GNPTAB</i>	c.2655C>T
Mannosidosis, alpha ¹⁰⁵	000625-9685	<i>LAMAN</i>	c.1748_1751delCCAG
Mucopolysaccharidosis I ¹⁰⁶	000664-9685	<i>IDUA</i>	c.1107_1109delICGA c.1108_1110GAC
Mucopolysaccharidosis VI ⁹⁴	000666-9685	<i>ARSB</i>	c.1427T>C
Mucopolysaccharidosis VI ^{93,107}	000666-9685	<i>ARSB</i>	c.1558G>A
Mucopolysaccharidosis VII ¹⁰⁸	000667-9685	<i>GUSB</i>	c.1052A>G
Muscular dystrophy ⁶⁸	001081-9685	<i>DMD</i>	900bp del M promoter – exon 1
Niemann–Pick C ¹⁰⁹	000725-9685	<i>NPC</i>	c.2864G>C
Polydactyly ¹⁷	000810-9685	<i>SHH</i>	c.479A>G c.257G>C c.481A>T
Porphyria (congenital erythropoietic) ^{110‡}	001175-9685	<i>UROS</i>	c.140C>T c.331G>A
Porphyria (acute intermittent) ^{111‡}	001493-9685	<i>HMBS</i>	c.842_844delGAG c.189dupT c.250G>A c.445C>T
Vitamin D resistant rickets ^{112,113}	000837-9685	<i>CYP27B1</i>	c.223G>A c.731delG c.637G>T

*The presented conditions are not prevalent in breeds or populations but may have been established into research colonies. †Not all transcripts for a given gene may have been discovered or well documented in the cat; mutations presented as interpreted from original publication. ‡A variety of mutations have been identified, yet unpublished, for porphyrias in domestic cats. Contact PennGen at the University of Pennsylvania for additional information. OMIA: Online Mendelian Inheritance in Animals (omia.angis.org.au) entries provide links to citations and clinical descriptions of the phenotypes and the diseases. Listed citations are for the causative variant discovery