



**MyDogDNA™**

The most comprehensive view on  
your dog's genetic health

## SIMULTANEOUS TESTING OF 100+ GENETIC DISORDERS AND TRAITS - THE INCLUDED GENE TESTS

### GENETIC DISORDERS

#### Blood Disorders

- Bleeding disorder due to P2RY12 defect
- Canine Cyclic Neutropenia (Gray Collie Syndrome)
- Factor IX Deficiency or Haemophilia B, Gly379Glu mutation
- Factor IX Deficiency or Haemophilia B; mutation originally found in Lhasa Apso
- Factor VII Deficiency
- Factor VIII Deficiency or Haemophilia A; mutation originally found in German Shepherd
- Glanzmann Thrombasthenia (GT), Type I; mutation originally found in Pyrenean Mountain Dog
- Glycogen Storage Disease VII or Hereditary Phosphofructokinase (PFK) Deficiency
- May-Hegglin Anomaly (MHA)
- Pyruvate Kinase Deficiency of Erythrocyte; mutation originally found in Beagle
- Pyruvate Kinase Deficiency of Erythrocyte; mutation originally found in Labrador Retriever
- Pyruvate Kinase Deficiency of Erythrocyte; mutation originally found in Pug
- Pyruvate Kinase Deficiency of Erythrocyte; mutation originally found in West Highland White Terrier
- Trapped Neutrophil Syndrome (TNS)

#### Cardiological Disorders

- Dilated Cardiomyopathy; mutation originally found in American Doberman Pinscher

#### Endocrine Disorders

- Hypothyroidism; mutation originally found in Tenterfield Terrier
- Hypothyroidism; mutation originally found in Toy Fox- and Rat Terrier

#### Eye Disorders

- Achromatopsia or Cone Degeneration (CD); mutation originally found in German Shorthaired Pointer
- Autosomal Dominant Progressive Retinal Atrophy (ADPRA)
- Canine Multifocal Retinopathy 1 (cmr1), Mastiff-related breeds mutation
- Canine Multifocal Retinopathy 2 (cmr2); mutation originally found in Coton de Tulear
- Canine Multifocal Retinopathy 3 (cmr3); mutation 1 originally found in Lapponian Herder
- Cone-Rod Dystrophy 1 (cord1-PRA)
- Cone-rod dystrophy (crd SWD); mutation originally found in Standard Wire-haired Dachshund
- Generalized Progressive Retinal Atrophy; mutation originally found in Schapendoes
- Golden Retriever Progressive Retinal Atrophy (GR\_PRA 1)
- Primary Hereditary Cataract (PHC); mutation originally found in Australian Shepherd
- Primary Lens Luxation (PLL)
- Primary Open Angle Glaucoma, mutation originally found in Beagle
- Rod-Cone Dysplasia 1 (rcd1); mutation originally found in Irish Setter
- Rod-Cone Dysplasia 1a (rcd1a); mutation originally found in Sloughi
- Rod-Cone Dysplasia 3 (rcd3)
- X-Linked Progressive Retinal Atrophy 1 (XLPRA1)

## GENETIC DISORDERS

### Immunological Disorders

- Autosomal Recessive Severe Combined Immunodeficiency (ARSCID)
- C3 deficiency
- X-linked Severe Combined Immunodeficiency (XSCID); mutation originally found in Basset Hound
- X-linked Severe Combined Immunodeficiency (XSCID); mutation originally found in Cardigan Welsh Corgi

### Kidney Disorders

- Hyperuricosuria and Hyperuricemia (huu) or Urolithiasis
- Polycystic Kidney Disease (PKD); mutation originally found in Bull Terrier
- Primary hyperoxaluria (PH); mutation originally found in Coton de Tulear
- X-linked Hereditary Nephropathy (XLHN)

### Metabolic Disorders

- Glycogen Storage Disease, Type Ia (GSDIa)
- Glycogen Storage Disease, type II or Pompe's disease
- Glycogen Storage Disease, type IIIa (GSDIIIa)
- Hypocatalasia or Acatalasemia
- Mucopolysaccharidosis Type IIIA (MPSIIIA); mutation originally found in Dachshund
- Mucopolysaccharidosis Type VI (MPSVI); mutation originally found in Poodle
- Mucopolysaccharidosis Type VII; mutation originally found in Brazilian Terrier
- Pyruvate Dehydrogenase Deficiency

### Muscular Disorders

- Cavalier King Charles Spaniel Muscular Dystrophy (CKCS-MD)
- Duchenne-like Muscular Dystrophy, Pembroke Welsh Corgi-type
- Muscular Dystrophy, Duchenne type or Golden Retriever Muscular Dystrophy (GRMD)
- Myotonia; mutation originally found in Miniature Schnauzer
- Myotubular Myopathy 1 or X-linked Myotubular Myopathy

### Neurological Disorders

- Adult-onset Neuronal Ceroid Lipofuscinosis, mutation originally found in Tibetan terrier
- Benign Familial Juvenile Epilepsy or Remitting Focal Epilepsy
- Cerebellar abiotrophy or neonatal cerebellar cortical degeneration (NCCD)
- L-2-hydroxyglutaric Aciduria (L2HGA); mutation originally found in Staffordshire Bull Terrier
- Fetal-onset Neuroaxonal Dystrophy (FNAD)
- Neonatal Encephalopathy with Seizures (NEWS)
- Neuronal Ceroid Lipofuscinosis 1 (NCL1)
- Neuronal Ceroid Lipofuscinosis 2 (NCL2)
- Neuronal Ceroid Lipofuscinosis 6 (NCL6)
- Neuronal Ceroid Lipofuscinosis 10 (NCL10)
- Polyneuropathy; mutation originally found in Alaskan Malamute
- Polyneuropathy; mutation originally found in Greyhound
- Progressive early-onset cerebellar ataxia; mutation originally found in Finnish Hound

### Neuromuscular Disorders

- Alpha Fucosidosis
- Episodic falling (EF)
- GM1 Gangliosidosis; mutation originally found in Alaskan Husky
- GM1 Gangliosidosis; mutation originally found in Portuguese Water Dog
- GM1 Gangliosidosis; mutation originally found in Shiba Dog
- GM2 Gangliosidosis
- Globoid Cell Leukodystrophy (GLD) or Krabbe's disease; Terrier mutation
- Hyperekplexia or Startle Disease

## GENETIC DISORDERS

### Skeletal Disorders

- Chondrodysplasia; mutation originally found in Norwegian Elkhound and Karelian Bear Dog
- Craniomandibular Osteopathy (CMO)
- Osteogenesis imperfecta (OI); mutation originally found in Dachshund
- Skeletal Dysplasia 2 (SD2)

### Skin Disorders

- Ectodermal dysplasia or Skin Fragility Syndrome (ED-SFS)
- Epidermolysis bullosa, dystrophic
- Epidermolytic Hyperkeratosis
- Musladin-Lueke Syndrome (MLS)

### Other Disorders

- Gallbladder Mucocele Formation
- Narcolepsy; mutation originally found in Dobermann
- Congenital Keratoconjunctivitis Sicca and Ichthyosiform Dermatitis (CKCSID) or Dry Eye Curly Coat Syndrome
- Persistent Müllerian Duct Syndrome (PMDS); mutation originally found in Miniature Schnauzer
- Primary Ciliary Dyskinesia (PCD)

### Pharmacogenetics

- Malignant Hyperthermia (MH)

## GENETIC TRAITS

### Coat colour

- Coat Colour A-locus (ASIP gene): yellow-tan coat, fawn, sable (a<sup>y</sup>-allele)
- Coat Colour A-locus (ASIP gene): black and tan, saddle-tan (a<sup>t</sup>-allele)
- Coat Colour B-locus variant (TYRP1 gene): brown, liver (b<sup>c</sup>-allele)
- Coat Colour B-locus variant (TYRP1 gene): brown, liver (b<sup>s</sup>-allele)
- Coat Colour E-locus (MC1R gene): recessive red, yellow, cream (e-allele)
- Coat Colour E-locus (MC1R gene): grizzle, domino (E<sup>g</sup>-allele)
- Coat Colour E-locus (MC1R gene): dark mask (E<sup>m</sup>-allele)
- Coat patterning H-locus (PSMB7 gene): harlequin spots
- Coat Colour K-locus (CBD103 gene)

### Coat type

- Coat length
- Curly coat
- Furnishings / Improper Coat in Portuguese Water Dog (marker test)

### Morphology

- Natural Bobtail
- Body mass, insulin-like growth factor 1 (IGF1) gene variant
- Snout/skull length (shortened head versus elongated head), bone morphogenetic protein (BP3) gene variant
- Tiny size, insulin-like growth factor 1 receptor (IGF1R) gene variant
- Ear erectness (procked ears versus floppy ears), variant chr10:11072007