

"Canine Genetic Tests and Laboratories

Because of the increased awareness of diagnostic tests that can be used to make better decisions the most current DNA tests and laboratories that administer tests for genetic disorders and some conformation traits are listed"

CANINE GENETIC TESTS - 2008

Disorder	BREED	Test Type	Test Org
Canine Leukocyte Adhesion Deficiency (CLAD)	Irish Red & White Setter Irish Setter	Direct	Optigen
Cataract, juvenile (Early onset Hereditary Cataract – EHD)	Boston Terrier French Bulldog Staffordshire Bull Terrier	Direct	Optigen
Ceroid lipofuscinosis	Border Collie	Direct	Optigen
Ceroid lipofuscinosis	American Bulldog Dachshund England Setter	Direct	U Missouri
Coat Color and Nose Color variations	Australian Shepherd Border Collie Brittany Belgian Shepherd Belgian Tervuren Cardigan Welsh Corgi Collie (Rough Smooth) Cocker Spaniel Curly-Coated Retriever Belgian Malinois Dachshund Dalmatian Doberman Pinscher English Cocker Spaniel English Setter English Springer Spaniel Field Spaniel Flat-coated Retriever French Bulldog German Shepherd Dog German long haired Pointer German Wirehaired Pointer Great Dane Greyhound Groenendael Labrador Retriever Laekenois Large Munsterlander Lowchen Newfoundland Pointe Pomeranian Poodle Portuguese Water Dog Pudelpointer Shetland Sheepdog Staffordshire Bull Terrier Whippet Wirehaired Pointing Griffon	Direct	HealthGene

Disorder	BREED	Test Type	Test Org
Coat Length (FGF 5)	Weimeraner	Direct	Animal Health Trust
Cobalamin Malabsorption(Methylmalonic Aciduria)	Australian Shepherd Giant Schnauzer	Direct	PennGen
Collie Eye Anomaly (Choroidal Hypoplasia)	Australian Shepherd Border Collie Lancashire Heeler Nova Scotia Duck Tolling Retriever Rough Coated Collie Shetland Sheepdog Smooth Coated Collie Whippet Longhair	Direct	Optigen
Cobalamin Malabsorption (Methylmalonic Aciduria)	Beagle Border Collie DSH Shar Pei	Phenotypic	Penn Gen
Cone (Retinal) Degeneration	German Shorthaired pointer	Direct	Optigen
Congenital Hypothyroidism With Goiter (CHG)	Rat Terrier Toy Fox Terrier	Direct	Michigan State U. Fyfe Lab PennGen
Congenital Stationary Night Blindness (RPE65-CSNB)	Briard	Direct	Optigen Animal Health Trust
Cystinuria	Newfoundland Labrador Retriever	Direct	Optigen (Newf only) PennGen VetGen (Newf only)
Degenerative myelopathy (DM)	German Shepherd Dog (Flash test) Boxer (RAPD) Pembroke Welsh Corgi (RAPD) Rhodesian Ridgeback (RAPD)	Direct Susceptibility loci)	U-Florida – Neuro Service
Factor VII Deficiency	Alaskan Klee Kai Beale Scottish Deerhound	Direct	PennGen
Factor IX Deficiency	Kerry Blue Terrier	Direct	PennGen
Fanconi Syndrome	Basenji	Linked Marker	U-Missouri
Fanconi Syndrome	Basenji Norwegian Elkhound	Phenotypic	PennGen
Fucosidosis	English Springer Spaniel	Direct	PennGen Animal Health Trust
Glanzmann's Thrombasthenia (Type I)	Great Pyrenees Otterhound	Direct	Auburn U – Boudreaux Lab

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Globoid cell leukodystrophy	Cairn Terrier West highland White Terrier	Direct	Jefferson Medical College
Glycogenosis (GSD) Type IIIa	Curly Coated Retriever	Direct	Mich. State U Fyfe Lab
Glycogenosis (GSD) Type IV	Norwegian Forest Cat	Direct	PennGen
GM1-Gangliosidosis	Portuguese Water Dog	Direct	NY U, Neurogenetics Lab
Hypertrophic Cardiomyopathy	Maine Coon Cat Ragdoll	Direct	Washington State U., Meurs Lab
Ivermectin Sensitivity (MDR-1)	Australian Shepherd Collie Old English Sheepdog Shetland Sheepdog	Direct	Washington State U., Pharm Lab
L-2-HGA (L-2-hydroxyglutaric aciduria)	Staffordshire Bull Terrier	Direct	Animal Health Trust
Mannosidosis	DSH Persian	Direct	PennGen
Merle Gene (SILV)	Australian Shepherds Beauceron Shepherd Border Collie CARDian Welsh Corgi Catahoula Leopard Dog Chihuahua Cocker Spaniel Collie Dachshund Great Danes Norwegian Hound Pitt Bull Pomeranian Pyrenean Shepherd Shetland Sheepdogs	Direct	GenMark
Mucopolipidosis II (I-Cell Disease)	DSH	Direct	PennGen
Mucopolysaccharidosis (MPS)	DSH German Shepherd Dog Miniature Pinscher Miniature Schnauzer Schipperke Siamese	Direct	PennGen
Muscular Myopathy (Centronuclear Myopathy)	Labrador Retriever	Direct	Alfort School of Vet Medicine, France
Myotonia Congenita	Miniature Schnauzer	Direct	Optigen, PennGen
Narcolepsy	Dachshund Doberman Pinscher Labrador Retriever	Direct	Optigen
Neonatal Encephalopathy	Standard Poodle	Direct	U Missouri

Disorder	BREED	Test Type	Test Org
Neophropathy (Hereditary N., Familial N.)	English Cocker Spaniel	Direct	Optigen
Phosphofructokinase Deficiency (PFK)	American Cocker Spaniel English Springer Spaniel	Direct	Optigen PennGen VetGen Animal Health Trust
Polycystic Kidney Disease (PKD)	American Shorthair Himalayan Persian Scottish Fold	Direct	UC-Davis – Lyons Lab. Animal Health Trust
Primary Hyperparathyroidism	Keeshond	Direct	Cornell – Goldstein Lab.
Progressive Retinal Atrophy (cord1)	Dachshund, Miniature Longhaired English Springer Spaniel	Direct	Animal Health Trust U Missouri
Progressive Retinal Atrophy Dominant	Bullmastiff English Mastiff	Direct	Optigen
Progressive Retinal Atrophy (prcd)	American Cocker Spaniel American Eskimo Dog Australian Cattle Dog Chesapeake Bay Retriever Chinese Crested Cockapoo English Cocker Spaniel Entelbacher Mt. Dog Finnish Lapphund Golden Retriever Kuvasz Labradoodle Labrador retriever Lapponian Herder Nova Scotia Duck Trolling Retriever Poodle (miniature, toy) Portuguese Water Dog Spanish Water Dog Stumpy Tail Cattle Dog Swedish Lapphund	Direct	Optigen
Progressive Retinal Atrophy (rcd1)	Irish Red & White Setter Irish Setter	Direct	Optigen Animal Health Trust
Progressive Retinal Atrophy (rcd3)	Cardigan Welsh Corgi	Direct	Mich. State U. - Peterson-Jones Lab. Optigen VetGen
Progressive Retinal Atrophy (rcd1a)	Sloughi	Direct	VetGen (Irish Setter)
Progressive Retinal Atrophy – Type A	Miniature Schnauzer	Direct	Optigen
Progressive Retinal Atrophy – X-Linked	Samoyed Siberian Husky	Direct	Optigen

Disorder	BREED	Test Type	Test Org
Pyruvate Dehydrogenase Phosphatase Deficiency (PDH or PDP 1)	Clumber Spaniel Sussex Spaniel	Direct	U Missouri Animal Health Trust
Pyruvate Kinase Deficiency (PK)	Abyssinian American Eskimo Dog Basenji Beagle Cairn Terrier Chihuahua Dachshund DSH Somali West highland White Terrier	Direct	Optigen (Basenji) PennGen (All) VetGen (Basenji) Animal Health Trust (Westies)
Renal Dysplasia	Lhasa Apso Shih Tzu Soft Coated Wheaten Terrier	Linkage	VetGen
Retinal Dysplasia – Canine Multi-focal retinopathy (CMR)	Bullmastiff Coton de Tulear Dogue de Bordeaux Great Pyrenees Mastiff (English & French)	Direct	Optigen
Severe Dysplasia – Canine Multi-focal Retinopathy (CMR)	Bullmastiff Coton de Tulear Dogue de Bordeaux Great Pyrenees Mastiff (English & French)	Direct	PennGen
Severe Muscular Atrophy	Maine Coon Cat	Direct	Michigan State U – Fyfe Lab.
Thrombopathia	Basset Hound Landseer Sptiz	Direct	Auburn U – Boudreaux Lab.
Trapped Neutrophil Syndrome (TNS)	Border Collie	Linkage	U. New South Wales
Von Willibrand's Disease	Bernese Mt Dog Doberman Pinscher Drentsche Patrijshound German Pinscher Kerry Blue Terrier Manchester Terrier Papillion Pembroke Welsh Corgi Poodle Scottish Terrier Shetland Sheepdog	Direct	VetGen
Von Willibrand's Disease	Irish Red & White Setter	Direct	Animal Health Trust

LABORATORY CONTACTS:

Alfort School of Veterinary Medicine: France, <http://www.labradorcnm.com/>
Animal Helath Trust: (England): http://www.aht.org.uk/sci_disc_genetics_dna.html#canine
Auburn University – Boudreaux Lab: http://www.vetmed.auburn.edu/index.pl/Boudreaux_mk (334) 844-2692
Cornell – Goldstein Lab.: <http://www.vet.cornell.edu/labgoldstein/> (607) 253-4480
Cornell Univ. Comparative Coagulation Lab. <http://www.diaglab.vet.cornell.edu/coag/test/hemopwh.asp> (607) 275-0622
GenMark: http://www.genmarkag.com/home_companion.php (877) 766-3446
Health Gene: <http://www.healthgene.com> (877) 371-1551
Jefferson Medical College: David.wenger@mail.tju.edu
Michigan State University – Peterson-Jones Lab: <http://www.cardiganorgis.com/PRAPressRelease.asp> (517) 353-3278
New York University Neurogenetics lab: <http://pwdca.org/GM1app.html> (212) 263-2943
Optigen:<http://www.optigen.com> (607) 257-0301
PennGen: <http://www.vet.upenn.edu/RyanHospital/SpecialtyCareServices/PennGen.aspx> (215) 898-8894
UC Davis – Lyons Lab: <http://www.vgl.ucdavis.edu/service/catPKD.html> (530) 752-2211
U Missouri – Johnson Lab:<http://www.caninegeneticdiseases.net> (573) 884-3712
U New South Wales- Wilton Lab: a.wilton@unsw.edu.au
U Florida – Neuro Service: http://neuro.vetmed.ufl.edu/dm_flash_test_web/index.html (352) 392-4700 x 4700
VetGen: <http://www.vetgen.com> (800) 483-8436
Washington State U – Meurs Lab:<http://www.vetmed.wsu.edu/deptsVCGL> (509) 335-6038
Washington State U – Pham Lab: <http://www.vetmed.wsu.edu/announcements/ivermectin/ownerInfo.asp>