

Customer & Pet Information

Registered Name Hiro Z Wilczego Wzgorza Registration # DN81919401

Breed German Shepherd Dog - -

Sex Male Microchip

At-Risk / Affected

No Result

DOB Oct 22, 2020 Lab Sample ID 53596315

AKC Sample ID 10183056

Explanation of Results

Normal A 'Normal' result means that your dog does not have the mutation that causes the associated genetic disease.

Report Date

A 'Carrier' result indicates that your dog has inherited one copy of the mutation that has been reported to cause this genetic disease. Your dog may not be clinically affected by this mutation because two copies of the mutation are usually required to cause disease.

Jul 21, 2025

Carrier / At-Risk

A 'Carrier / At-Risk' result indicates that your dog inherited one copy of the mutation that has been reported to cause this genetic disease. Based on the mode of genetic inheritance for this particular disease, inheriting one mutant copy of the gene may result in the disease. Dogs with one copy of the mutation may have a milder phenotype as compared to dogs with two copies of this mutation.

An 'At–Risk / Affected' result indicates that your dog inherited one or two copies of the mutation that has been reported to cause this genetic disease. Based on the mode of genetic inheritance for this particular disease, inheriting one or two mutant copies of the gene may result in the disease.

'No Result' indicates that we were unable to obtain a genotype for your dog for this specific disease or trait and does not mean that your dog is a carrier or at-risk for this disease. There are a variety of reasons why a specific test may not provide a reportable result. Unique variations in the genetic code of some individuals may exist and cause certain regions of the genome to not perform properly with a specific test. In addition, suboptimal sampling of the dog's cheek cells could also result in poor sample performance due to inadequate cell counts, bacterial and fungal growth, or the presence of other test inhibitors. Dogs with at least 90% of the test results are determined to be acceptable and reportable. If your dog has an unacceptable level of tests with no results, you will be contacted for a new sample to repeat the testing.

Please review our testing terms and disclaimers regarding your results.

1 of 14

WT: (wild type (normal)) M: (mutant) Y: (Y chromosome (male)	WT: wild type (normal)	M: mutant	Y: (Y chromosome (male)
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Breed Profile		
Disease Name	Genotype	Interpretation
Canine Scott Syndrome	WT/WT	Normal (Clear)
Chondrodystrophy with Intervertebral Disc Disease Risk Factor (CDDY with IVDD)	WT/WT	Normal (Clear) - No CDDY or Increased IVDD Risk
Cone Degeneration (German Shepherd Dog Type)	WT/WT	Normal (Clear)
Degenerative Myelopathy (Bernese Mountain Dog Variant)	WT/WT	Normal (Clear)
Degenerative Myelopathy (Common Variant)	WT/M	Carrier
Ectodermal Dysplasia, X-Linked (Shepherd Type)	WT/Y	X-Linked Male Normal
Hemophilia A (German Shepherd Dog, Type 1)	WT/Y	X-Linked Male Normal
Hemophilia A (German Shepherd Dog, Type 2)	WT/Y	X-Linked Male Normal
Hyperuricosuria	WT/WT	Normal (Clear)
Leukocyte Adhesion Deficiency, Type III	WT/WT	Normal (Clear)
Mucopolysaccharidosis VII (Shepherd Type)	WT/WT	Normal (Clear)
Multidrug Resistance 1	WT/WT	Normal (Clear)
Pituitary Dwarfism (Shepherd Type)	WT/WT	Normal (Clear)
Renal Cystadenocarcinoma and Nodular Dermatofibrosis	WT/WT	Normal (Clear)

	WT: wild type (nor	rmal) M: mutant Y: (Y chromosome (male))
Coat Colors & Traits		
Trait Name	Genotype	Interpretation
A Locus (Agouti)	a ^t /a ^t	Black and tan
As Locus (Saddle Tan)	A ^s /A ^s	Saddle tan/creeping tan
B Locus (Brown)	В/В	Black coat, nose and foot pads (does not carry brown)
B Locus (Brown) - b ^a	0	
B Locus (Brown) - b ^c	0	
B Locus (Brown) - b ^d	0	
B Locus (Brown) - b ^h	0	
B Locus (Brown) - be	0	
B Locus (Brown) - b ^s	0	
Brachycephaly	BR/BR	Likely medium to long muzzle
Chondrodysplasia (CDPA)	cd/cd	No Leg Shortening Associated with CDPA

Co Locus (Cocoa, French Bulldog Type)	CO/CO	Black coat, nose and foot pads (does not carry cocoa)
Cu Locus (Curly Hair)	Cu/Cu	Straight coat
D Locus (Dilute)	D/D	Non-dilute (does not carry dilute)
D Locus (Dilute) - d ¹	0	
D Locus (Dilute) - d ²	0	
D Locus (Dilute) - d ³	0	
E Locus	E ^m /E ^m	Melanistic Mask
E Locus - E ^m (Melanistic Mask)	2	
E Locus - E ⁹ (Grizzle, Afghan Hound Type)	0	
E Locus - E ^h (Sable, Cocker Spaniel Type)	0	
E Locus - e ^a (Ancient Red, Spitz and Scent Hound Type)	0	
E Locus - e ¹ (Yellow/Red)	0	
E Locus - e ² (Cream, Australian Cattle Dog Type)	0	
E Locus - e ³ (White, Alaskan and Siberian Husky Type)	0	
H Locus (Harlequin, Great Dane type)	h/h	No harlequin
Hairlessness	Rh/Rh	Coated
Hairlessness (American Hairless Terrier Type) - rh ¹	0	
Hairlessness (Scottish Deerhound Type) - rh ²	0	
Hr Locus (FOXI3 Hairless Gene Test, Mexican Hairless, Peruvian Hairless and Chinese Crested Type)	hr/hr	Coated
I Locus (Intensity)	1/1	Normal intensity
IC locus (Improper Coat/Furnishings)	IC/IC	No furnishings, improper coat
K Locus (Dominant Black)	K ^B /k ^y	No agouti expression allowed (carrier)
L Locus (Long Hair/Fluffy)	Lh¹/Lh¹	Longhaired (carries two copies of long hair)
L Locus (Long Hair/Fluffy) - Lh ¹	2	
L Locus (Long Hair/Fluffy) - Lh ²	0	
L Locus (Long Hair/Fluffy) - Lh ³	0	
L Locus (Long Hair/Fluffy) - Lh ⁴	0	
M Locus (Merle)	m/m	Non merle
Polydactyly (Common Variant)	pd/pd	Normal (typical) toes (likely no hind dewclaws)
Polydactyly (Great Pyrenees Type)	pd/pd	Normal (typical) toes (likely no double hind dewclaws)
R Locus (Roan/Ticked)	R/R	Roan
R Locus (Roan/Ticked) - R ^{Ti}	0	
R Locus (Roan/Ticked) - R	2	

S Locus (White Spotting, Parti, or Piebald)	S/S	No white spotting, flash, parti, or piebald
SD Locus (Shedding)	SD/SD	High shedding
Sex Determination - ZFXY	X/Y	Male
Social Behavior	WT/M, WT/WT	May demonstrate more social behavior
Social Behavior, Variant 1	1	
Social Behavior, Variant 2	0	
T locus (Natural Bobtail)	t/t	Normal tail

Determinants of coat colors and traits are complex. Many of these variants are known and many of the genes screened by AKC DNA interact. In addition, not all the genetic factors that contribute to a dog's coat color and traits are known. Because of the complexities in gene-gene interactions, the coat colors and traits reported in your AKC DNA results may vary from your dog's actual appearance. Individual differences in genes throughout the canine genome, not tested in this genetic screen, may also affect the final coat color or traits seen in your dog.

Genotype	Interpretation
WT/WT	Normal (Clear)
No Result	No Result
WT/WT	Normal (Clear)
	WT/WT

Cerebellar Ataxia (Finnish Hound Type)	WT/WT	Normal (Clear)
Cerebellar Ataxia 1 (Belgian Shepherd Type)	WT/WT	Normal (Clear)
Cerebellar Ataxia 2 (Belgian Shepherd Type)	WT/WT	Normal (Clear)
Cerebellar Cortical Degeneration	WT/WT	Normal (Clear)
Cerebellar Degeneration	WT/WT	Normal (Clear)
Charcot-Marie-Tooth Disease	WT/WT	Normal (Clear)
Chondrodysplasia (Karelian Bear Dog and Norwegian Elkhound type)	WT/WT	Normal (Clear)
Chondrodystrophy with Intervertebral Disc Disease Risk Factor (CDDY with IVDD)	WT/WT	Normal (Clear) - No CDDY or Increased IVDD Risk
Cleft Palate and Syndactyly (Nova Scotia Duck Tolling Retriever Type)	WT/WT	Normal (Clear)
Coagulation Factor VII Deficiency	WT/WT	Normal (Clear)
Collie Eye Anomaly	No Result	No Result
Complement 3 Deficiency	WT/WT	Normal (Clear)
Cone Degeneration	No Result	No Result
Cone Degeneration (German Shepherd Dog Type)	WT/WT	Normal (Clear)
Cone Degeneration (German Shorthaired Pointer Type)	WT/WT	Normal (Clear)
Cone Degeneration (Labrador Retriever Type)	WT/WT	Normal (Clear)
Congenital Hypothyroidism with Goiter (Terrier Type)	WT/WT	Normal (Clear)
Congenital Macrothrombocytopenia (Cairn and Norfolk Terrier Type)	WT/WT	Normal (Clear)
Congenital Methemoglobinemia	WT/WT	Normal (Clear)
Congenital Myasthenic Syndrome (Golden Retriever Type)	WT/WT	Normal (Clear)
Congenital Myasthenic Syndrome (Jack Russell Terrier Type)	WT/WT	Normal (Clear)
Congenital Myasthenic Syndrome (Labrador Retriever Type)	WT/WT	Normal (Clear)
Congenital Myasthenic Syndrome (Old Danish Pointer Type)	WT/WT	Normal (Clear)
Congenital Stationary Night Blindness	WT/WT	Normal (Clear)
Copper Storage Disease	No Result	No Result
Craniomandibular Osteopathy	WT/WT	Normal (Clear)
Cyclic Neutropenia	WT/WT	Normal (Clear)
Cystinuria (Australian Cattle Dog Type)	WT/WT	Normal (Clear)
Cystinuria (Labrador Retriever Type)	WT/WT	Normal (Clear)
Cystinuria (Miniature Pinscher Type)	WT/WT	Normal (Clear)

Cystinuria (Newfoundland Type)	WT/WT	Normal (Clear)
Cystinuria Type 3 (Bulldog Type Risk Factor, Variant 3)	WT/WT	Normal (Clear)
Cystinuria Type 3 (Bulldog Type Risk Factor, Variants 1 and 2)	WT/WT	Normal (Clear)
Cystinuria Type 3 (Bulldog Type Risk Factor, Variants 1)	0	
Cystinuria Type 3 (Bulldog Type Risk Factor, Variants 2)	0	
Dandy-Walker-Like Malformation	WT/WT	Normal (Clear)
Darier Disease and Associated Infundibular Cyst Formation	WT/WT	Normal (Clear)
Deafness and Vestibular Dysfunction (Doberman Pinscher Type), Variant 2	WT/WT	Normal (Clear)
Degenerative Myelopathy (Bernese Mountain Dog Variant)	WT/WT	Normal (Clear)
Degenerative Myelopathy (Common Variant)	WT/M	Carrier
Degenerative Myelopathy Early-Onset Risk Modifier (Pembroke Welsh Corgi Type)	WT/WT	Normal (Clear)
Dental Hypomineralization	WT/WT	Normal (Clear)
Diffuse Cystic Renal Dysplasia and Hepatic Fibrosis	WT/WT	Normal (Clear)
Dilated Cardiomyopathy (Doberman Pinscher Type Risk Factor, Variant 1)	WT/WT	Normal (Clear)
Dilated Cardiomyopathy (Doberman Pinscher Type Risk Factor, Variant 2)	WT/WT	Normal (Clear)
Dilated Cardiomyopathy (Schnauzer Type)	WT/WT	Normal (Clear)
Dry Eye Curly Coat Syndrome	WT/WT	Normal (Clear)
Dystrophic Epidermolysis Bullosa (Basset Hound Type)	WT/WT	Normal (Clear)
Dystrophic Epidermolysis Bullosa (Golden Retriever Type)	WT/WT	Normal (Clear)
Early Onset Adult Deafness (Rhodesian Ridgeback Type)	WT/WT	Normal (Clear)
Early Retinal Degeneration	WT/WT	Normal (Clear)
Early-Onset Epilepsy (Parson Russell Terrier Type)	WT/WT	Normal (Clear)
Ectodermal Dysplasia (Chesapeake Bay Retriever Type)	WT/WT	Normal (Clear)
Ectodermal Dysplasia, X-Linked (Dachshund Type)	WT/Y	X-Linked Male Normal
Ectodermal Dysplasia, X-Linked (Shepherd Type)	WT/Y	X-Linked Male Normal
Ehlers-Danlos Syndrome (Doberman Pinscher Type)	WT/WT	Normal (Clear)
Ehlers-Danlos Syndrome (Labrador Retriever Type), Variant 1	WT/WT	Normal (Clear)
Ehlers-Danlos Syndrome (Labrador Retriever Type), Variant 2	WT/WT	Normal (Clear)
Ehlers-Danlos Syndrome (Poodle Type, Variants 1 and 2)	WT/WT	Normal (Clear)
	0	

Ehlers-Danlos Syndrome (Poodle Type), Variant 2	0	
Elliptocytosis	WT/WT	Normal (Clear)
Epidermolytic Hyperkeratosis	WT/WT	Normal (Clear)
Episodic Falling Syndrome	No Result	No Result
Exercise-Induced Collapse	WT/WT	Normal (Clear)
Exfoliative Cutaneous Lupus Erythematosus (ECLE)	WT/WT	Normal (Clear)
Factor XI Deficiency	WT/WT	Normal (Clear)
Familial Nephropathy (Cocker Spaniel Type)	WT/WT	Normal (Clear)
Familial Nephropathy (English Springer Spaniel Type)	WT/WT	Normal (Clear)
Fucosidosis	WT/WT	Normal (Clear)
Gallbladder Mucoceles	WT/WT	Normal (Clear)
Glanzmann's Thrombasthenia (Great Pyrenees Type)	WT/WT	Normal (Clear)
Glanzmann's Thrombasthenia (Otterhound Type)	WT/WT	Normal (Clear)
Glaucoma (Border Collie Type)	WT/WT	Normal (Clear)
Globoid Cell Leukodystrophy (Irish Setter type)	WT/WT	Normal (Clear)
Globoid Cell Leukodystrophy (Terrier type)	WT/WT	Normal (Clear)
Glycogen Storage Disease Ia	WT/WT	Normal (Clear)
Glycogen Storage Disease Illa	WT/WT	Normal (Clear)
Glycogen Storage Disease VII (Wachtelhund type)	WT/WT	Normal (Clear)
Glycogen Storage Disease VII, PFK Deficiency	WT/WT	Normal (Clear)
GM1 Gangliosidosis (Alaskan Husky Type)	WT/WT	Normal (Clear)
GM1 Gangliosidosis (Portuguese Water Dog Type)	WT/WT	Normal (Clear)
GM1 Gangliosidosis (Shiba Inu type)	WT/WT	Normal (Clear)
GM2 Gangliosidosis (Japanese Chin type)	WT/WT	Normal (Clear)
GM2 Gangliosidosis (Poodle Type)	WT/WT	Normal (Clear)
GM2 Gangliosidosis (Shiba Inu Type)	WT/WT	Normal (Clear)
Greyhound Polyneuropathy	WT/WT	Normal (Clear)
Hemophilia A (Boxer Type)	WT/Y	X-Linked Male Normal
Hemophilia A (German Shepherd Dog, Type 1)	WT/Y	X-Linked Male Normal
Hemophilia A (German Shepherd Dog, Type 2)	WT/Y	X-Linked Male Normal

Hemophilia A (Rhodesian Ridgeback Type)	WT/Y	X-Linked Male Normal
Hemophilia B (Cairn Terrier Type)	WT/Y	X-Linked Male Normal
Hemophilia B (Lhasa Apso type)	WT/Y	X-Linked Male Normal
Hemophilia B (Rhodesian Ridgeback Type)	WT/Y	X-Linked Male Normal
Hereditary Ataxia (Australian Shepherd Type)	WT/WT	Normal (Clear)
Hereditary Cataracts	WT/WT	Normal (Clear)
Hereditary Cataracts (Australian Shepherd Type)	WT/WT	Normal (Clear)
Hereditary Cataracts (Wirehaired Pointing Griffon Type)	WT/WT	Normal (Clear)
Hereditary Footpad Hyperkeratosis (Irish Terrier and Kromfohrlander Type)	WT/WT	Normal (Clear)
Hereditary Footpad Hyperkeratosis (Rottweiler Type)	WT/WT	Normal (Clear)
Hereditary Nasal Parakeratosis (Greyhound Type)	WT/WT	Normal (Clear)
Hereditary Nasal Parakeratosis (Labrador Retriever Type)	WT/WT	Normal (Clear)
Hereditary Nephritis (Samoyed type)	WT/Y	X-Linked Male Normal
Hyperuricosuria	WT/WT	Normal (Clear)
Hypomyelination (Weimaraner Type)	WT/WT	Normal (Clear)
Ichthyosis (American Bulldog Type)	WT/WT	Normal (Clear)
Ichthyosis (Golden Retriever Type 1)	WT/WT	Normal (Clear)
Ichthyosis (Golden Retriever Type 2)	WT/WT	Normal (Clear)
Ichthyosis (Great Dane Type)	WT/WT	Normal (Clear)
Ichthyosis (Jack Russell Terrier Type)	WT/WT	Normal (Clear)
Inflammatory Myopathy (Shepherd Type)	WT/WT	Normal (Clear)
Inherited Myopathy of Great Danes	WT/WT	Normal (Clear)
Intestinal Cobalamin Malabsorption (Beagle Type)	WT/WT	Normal (Clear)
Intestinal Cobalamin Malabsorption (Border Collie Type)	WT/WT	Normal (Clear)
Intestinal Cobalamin Malabsorption (Giant Schnauzer Type)	WT/WT	Normal (Clear)
Intestinal Lipid Malabsorption	No Result	No Result
Junctional Epidermolysis Bullosa (Australian Shepherd Type)	WT/WT	Normal (Clear)
Juvenile Laryngeal Paralysis and Polyneuropathy (Black Russian Terrier Type)	WT/WT	Normal (Clear)
Juvenile Myoclonic Epilepsy (Rhodesian Ridgeback Type)	WT/WT	Normal (Clear)

L-2-Hydroxyglutaric Aciduria (Yorkshire Terrier Type) Lagotto Storage Disorder Laryngeal Paralysis and Polyneuropathy (Leonberger Type 3) Late Onset Ataxia Lethal Acrodermatitis Lethal Acrodermatitis Leukocyte Adhesion Deficiency, Type II Leukocyte Adhesion Deficiency, Type III Leukocyte Adhesion Deficiency, Type III Ligneous Membranitis Limb-Girdle Muscular Dystrophy (Dachshund Type) Limb-Girdle Muscular Dystrophy (Dachshund Type) MT/WT Mormal (Clear) Lundehund Syndrome WT/WT Mormal (Clear) Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Mormal (Clear) Mammary Tumors (English Springer Spaniel Type Risk Factor) Miry MT/WT Mormal (Clear) Miry MT/WT Mormal (Clear) Miry MT/WT Mormal (Clear) Miry MT/WT Mormal (Clear) Miry May-Hegglin Anomaly WT/WT Mormal (Clear) Miry Mormal (Clear) Multidrug Resistance 1 Miry Mormal (Clear) Multifocal Retinopathy 1 Miry Mormal (Clear) Miry X-Linked Male Normal Muscular Dystrophy (Golden Retriever Type) WT/WT Mormal (Clear) Miry X-Linked Male Normal Mustaddin-Lucke Syndrome Wyostatin Deficiency (Whippet Type) WT/WT Mormal (Clear)	L-2-Hydroxyglutaric Aciduria (Staffordshire Bull Terrier type)	WT/WT	Normal (Clear)
Laryngeal Paralysis and Polyneuropathy (Leonberger Type 3) Late Onset Ataxia Lethal Acrodermatitis WT/WT Normal (Clear) Leukocyte Adhesion Deficiency, Type III WT/WT Normal (Clear) Leukocyte Adhesion Deficiency, Type III WT/WT Normal (Clear) Leukocyte Adhesion Deficiency, Type III WT/WT Normal (Clear) Ligneous Membranitis WT/WT Normal (Clear) Limb-Girdle Muscular Dystrophy (Dachshund Type) WT/WT Normal (Clear) Lundehund Syndrome WT/WT Normal (Clear) Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Normal (Clear) Mammary Tumors (English Springer Spaniel Type Risk Factor) MT/WT Normal (Clear) May-Hegglin Anomaly WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Boston Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Plott Hound Type) WT/WT Normal (Clear) Mucopolysaccharidosis III (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis III (Rothishund Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Brazilian Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Mutifocal Retinopathy 1 Multifocal Retinopathy 2 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear)	L-2-Hydroxyglutaric Aciduria (Yorkshire Terrier Type)	WT/WT	Normal (Clear)
Late Onset Ataxia WT/WT Normal (Clear) Lethal Acrodermatitis WT/WT Normal (Clear) Leukocyte Adhesion Deficiency, Type I WT/WT Normal (Clear) Leukocyte Adhesion Deficiency, Type III WT/WT Normal (Clear) Ligneous Membranitis WT/WT Normal (Clear) Limb-Girdle Muscular Dystrophy (Dachshund Type) WT/WT Normal (Clear) Lundehund Syndrome WT/WT Normal (Clear) Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Normal (Clear) Mammary Tumors (English Springer Spaniel Type Risk Factor) WT/WT Normal (Clear) May-Hegglin Anomaly WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Boston Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Plott Hound Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIA (Dachshund Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIII (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis IIII (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Mutidrug Resistance 1 WT/WT Normal (Clear) Multidrug Resistance 1 WT/WT Normal (Clear) Multidrug Resistance 1 WT/WT Normal (Clear) Multidrocal Retinopathy 2 WT/WT Normal (Clear) Multidrocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear)	Lagotto Storage Disorder	WT/WT	Normal (Clear)
Lethal Acrodermatitis WT/WT Normal (Clear) Leukocyte Adhesion Deficiency, Type I WT/WT Normal (Clear) Ligneous Membranitis WT/WT Normal (Clear) Ligneous Membranitis WT/WT Normal (Clear) Limb-Girdle Muscular Dystrophy (Dachshund Type) WT/WT Normal (Clear) Lundehund Syndrome WT/WT Normal (Clear) Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Normal (Clear) Mammary Tumors (English Springer Spaniel Type Risk Factor) WT/WT Normal (Clear) May-Hegglin Anomaly WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Boston Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Plott Hound Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIA (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIB (Schipperke Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIB (Schipperke Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Stepherd Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Stepherd Type) WT/WT Normal (Clear) Mutidrug Resistance 1 WT/WT Normal (Clear) Multidrug Resistance 1 WT/WT Normal (Clear) Multidrug Resistance 1 WT/WT Normal (Clear) Multidroal Retinopathy 1 WT/WT Normal (Clear) Multidroal Retinopathy 3 WT/WT Normal (Clear) Multidroal Retinopathy 3 WT/WT Normal (Clear)	Laryngeal Paralysis and Polyneuropathy (Leonberger Type 3)	WT/WT	Normal (Clear)
Leukocyte Adhesion Deficiency, Type I Leukocyte Adhesion Deficiency, Type III WT/WT Normal (Clear) Limb-Girdle Muscular Dystrophy (Dachshund Type) WT/WT Normal (Clear) Limb-Girdle Muscular Dystrophy (Dachshund Type) WT/WT Normal (Clear) Lundehund Syndrome WT/WT Normal (Clear) Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Normal (Clear) Marmary Turnors (English Springer Spaniel Type Risk Factor) WT/WT Normal (Clear) May-Hegglin Anomaly WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Boston Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis II(A (Dachshund Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIII (Dachshund Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIII (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis IIII (Schipperke Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Shepherd Type) WT/WT Normal (Clear) Mutidrug Resistance 1 WT/WT Normal (Clear) Multidrug Resistance 1 WT/WT Normal (Clear) Multidroal Retinopathy 1 Multifocal Retinopathy 2 WT/WT Normal (Clear) Multifocal Retinopathy 3 Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear)	Late Onset Ataxia	WT/WT	Normal (Clear)
Leukocyte Adhesion Deficiency, Type III Ligneous Membranitis WT/WT Normal (Clear) Limb-Girdle Muscular Dystrophy (Dachshund Type) WT/WT Normal (Clear) Lundehund Syndrome WT/WT Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Marmary Tumors (English Springer Spaniel Type Risk Factor) May-Hegglin Anomaly Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Mucopolysaccharidosis I (Boston Terrier Type) WT/WT Mucopolysaccharidosis II(Plott Hound Type) WT/WT Mucopolysaccharidosis IIIA (Dachshund Type) WT/WT Mucopolysaccharidosis IIIIA (New Zealand Huntaway type) WT/WT Mucopolysaccharidosis IIIIA (New Zealand Huntaway type) WT/WT Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Mucopolysaccharidosis VI (Shepherd Type) WT/WT Mucopolysaccharidosis VI (Shepherd Type) WT/WT Mucopolysaccharidosis VI (Shepherd Type) WT/WT Normal (Clear) Mutopolysaccharidosis VI (Shepherd Type) WT/WT Normal (Clear) Mutopolysaccharidosis VI (Shepherd Type) WT/WT Normal (Clear) Mutifocal Retinopathy 1 Wt/WT Normal (Clear) Multifocal Retinopathy 2 Wt/WT Mury Mucopolysaccharidosity 3 Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome WT/WT Normal (Clear)	Lethal Acrodermatitis	WT/WT	Normal (Clear)
Ligneous Membranitis WT/WT Normal (Clear) Limb-Girdle Muscular Dystrophy (Dachshund Type) WT/WT Normal (Clear) Lundehund Syndrome WT/WT Normal (Clear) Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Normal (Clear) Mammary Tumors (English Springer Spaniel Type Risk Factor) WT/WT Normal (Clear) May-Hegglin Anomaly WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Boston Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis II(A (Dachshund Type) WT/WT Normal (Clear) Mucopolysaccharidosis III(A (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Brazilian Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Brazilian Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Shepherd Type) WT/WT Normal (Clear) Mutifocal Retinopathy 1 WT/WT Normal (Clear) Multifocal Retinopathy 2 WT/WT Normal (Clear) Multifocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear)	Leukocyte Adhesion Deficiency, Type I	WT/WT	Normal (Clear)
Limb-Girdle Muscular Dystrophy (Dachshund Type) WT/WT Normal (Clear) Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Normal (Clear) Mammary Tumors (English Springer Spaniel Type Risk Factor) May-Hegglin Anomaly WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Micopolysaccharidosis I (Boston Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Plott Hound Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIA (Dachshund Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIB (Schipperke Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Brazilian Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Mutifocal Retinopathy 1 WIT/WT Normal (Clear) Multifocal Retinopathy 2 WT/WT Normal (Clear) Mutifocal Retinopathy 3 Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear) Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear) Normal (Clear) Normal (Clear)	Leukocyte Adhesion Deficiency, Type III	WT/WT	Normal (Clear)
Lundehund Syndrome WT/WT Normal (Clear) Macular Corneal Dystrophy (Labrador Retriever Type) WT/WT Normal (Clear) Mammary Tumors (English Springer Spaniel Type Risk Factor) WT/WT Normal (Clear) May-Hegglin Anomaly WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Boston Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Plott Hound Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIA (Dachshund Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIA (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIB (Schipperke Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Brazilian Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Mutifocal Retinopathy 1 WT/WT Normal (Clear) Multifocal Retinopathy 2 WT/WT Normal (Clear) Mutifocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Muscular Dystrophy (Golden Retriever Type) WT/YT Normal (Clear)	Ligneous Membranitis	WT/WT	Normal (Clear)
Macular Corneal Dystrophy (Labrador Retriever Type) Mammary Tumors (English Springer Spaniel Type Risk Factor) May-Hegglin Anomaly MT/WT Mormal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) Mt/WT Mucopolysaccharidosis I (Boston Terrier Type) Mt/WT Mormal (Clear) Mucopolysaccharidosis I (Plott Hound Type) Mt/WT Mucopolysaccharidosis IIIA (Dachshund Type) Mt/WT Mucopolysaccharidosis IIIA (New Zealand Huntaway type) Mt/WT Mucopolysaccharidosis IIIB (Schipperke Type) Mt/WT Mucopolysaccharidosis VI (Miniature Schnauzer Type) Mt/WT Mucopolysaccharidosis VI (Brazilian Terrier Type) Mt/WT Mucopolysaccharidosis VI (Brazilian Terrier Type) Mt/WT Mutifocal Retinopathy 1 Multifocal Retinopathy 2 Mt/WT Muscular Dystrophy (Golden Retriever Type) Mt/WT Muscular Dystrophy (Golden Retriever Type) Mt/WT Mucopolysocharidosis VI (Golden Retriever Type) Mt/WT Muscular Dystrophy (Golden Retriever Type) Mt/WT Muscular Dystrophy (Golden Retriever Type) Mt/WT Murdl (Clear) Muscular Dystrophy (Golden Retriever Type) Mt/WT Murdl (Clear) Muscular Dystrophy (Golden Retriever Type) Mt/WT Mormal (Clear) Muscular Dystrophy (Golden Retriever Type) Mt/WT Mormal (Clear)	Limb-Girdle Muscular Dystrophy (Dachshund Type)	WT/WT	Normal (Clear)
Mammary Tumors (English Springer Spaniel Type Risk Factor) May-Hegglin Anomaly WT/WT Normal (Clear) Microphthalmia (Soft Coated Wheaten Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Boston Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis I (Plott Hound Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIA (Dachshund Type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIA (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIB (Schipperke Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Brazilian Terrier Type) WT/WT Normal (Clear) Mutidrogaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Multifocal Retinopathy 1 WT/WT Normal (Clear) Multifocal Retinopathy 2 WT/WT Normal (Clear) Multifocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear) WT/WT Normal (Clear)	Lundehund Syndrome	WT/WT	Normal (Clear)
May-Hegglin Anomaly Microphthalmia (Soft Coated Wheaten Terrier Type) Microphthalmia (Soft Coated Wheaten Terrier Type) Mucopolysaccharidosis I (Boston Terrier Type) Mucopolysaccharidosis I (Plott Hound Type) Mucopolysaccharidosis IIIA (Dachshund Type) Mucopolysaccharidosis IIIIA (New Zealand Huntaway type) Mucopolysaccharidosis IIIIA (New Zealand Huntaway type) Mucopolysaccharidosis IIIIB (Schipperke Type) Mucopolysaccharidosis VI (Miniature Schnauzer Type) Mucopolysaccharidosis VI (Miniature Schnauzer Type) Mucopolysaccharidosis VI (Brazilian Terrier Type) MutyMT Normal (Clear) Mucopolysaccharidosis VII (Shepherd Type) MutyMT Normal (Clear) Mutifocal Retinopathy 1 Mutifocal Retinopathy 2 MutyMT Normal (Clear) Mutifocal Retinopathy 3 MutyMT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) MutyMT Normal (Clear) Musladin-Lueke Syndrome MutyMT Normal (Clear)	Macular Corneal Dystrophy (Labrador Retriever Type)	WT/WT	Normal (Clear)
Microphthalmia (Soft Coated Wheaten Terrier Type) Micropolysaccharidosis I (Boston Terrier Type) Micopolysaccharidosis I (Plott Hound Type) Micopolysaccharidosis I (Plott Hound Type) Micopolysaccharidosis IIIA (Dachshund Type) Micopolysaccharidosis IIIIA (Dachshund Type) Micopolysaccharidosis IIIIA (New Zealand Huntaway type) Micopolysaccharidosis IIIIB (Schipperke Type) Micopolysaccharidosis VI (Miniature Schnauzer Type) Micopolysaccharidosis VI (Miniature Schnauzer Type) Micopolysaccharidosis VI (Brazilian Terrier Type) Micopolysaccharidosis VII (Shepherd Type) Normal (Clear) Normal (Clear) Normal (Clear	Mammary Tumors (English Springer Spaniel Type Risk Factor)	WT/WT	Normal (Clear)
Mucopolysaccharidosis I (Boston Terrier Type) MT/WT Mormal (Clear) Mucopolysaccharidosis I (Plott Hound Type) WT/WT Mormal (Clear) Mucopolysaccharidosis IIIA (Dachshund Type) WT/WT Mormal (Clear) Mucopolysaccharidosis IIIA (New Zealand Huntaway type) WT/WT Mormal (Clear) Mucopolysaccharidosis IIIB (Schipperke Type) WT/WT Mormal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Mormal (Clear) Mucopolysaccharidosis VII (Brazilian Terrier Type) WT/WT Mormal (Clear) Mutopolysaccharidosis VII (Shepherd Type) WT/WT Mormal (Clear) Multiforal Retinopathy 1 WT/WT Mormal (Clear) Multifocal Retinopathy 2 WT/WT Mormal (Clear) Multifocal Retinopathy 3 WT/WT Mormal (Clear) Multifocal Retinopathy 3 WT/WT Mormal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome	May-Hegglin Anomaly	WT/WT	Normal (Clear)
Mucopolysaccharidosis I (Plott Hound Type) Mucopolysaccharidosis IIIA (Dachshund Type) Mucopolysaccharidosis IIIA (New Zealand Huntaway type) Mucopolysaccharidosis IIIA (New Zealand Huntaway type) Mucopolysaccharidosis IIIB (Schipperke Type) Mucopolysaccharidosis VI (Miniature Schnauzer Type) Mucopolysaccharidosis VI (Miniature Schnauzer Type) Mucopolysaccharidosis VII (Brazilian Terrier Type) Mucopolysaccharidosis VII (Shepherd Type) Mutymt Normal (Clear) Multidrug Resistance 1 Mutymt Normal (Clear) Multifocal Retinopathy 1 Multifocal Retinopathy 2 Mutymt Normal (Clear) Multifocal Retinopathy 3 Mutymt Normal (Clear) Multifocal Retinopathy (Golden Retriever Type) Mutymt Muscular Dystrophy (Golden Retriever Type) Mutymt Musladin-Lueke Syndrome WT/WT Normal (Clear)	Microphthalmia (Soft Coated Wheaten Terrier Type)	WT/WT	Normal (Clear)
Mucopolysaccharidosis IIIA (Dachshund Type) Mucopolysaccharidosis IIIA (New Zealand Huntaway type) Mucopolysaccharidosis IIIB (Schipperke Type) Mucopolysaccharidosis VI (Miniature Schnauzer Type) Mucopolysaccharidosis VI (Brazilian Terrier Type) Mucopolysaccharidosis VII (Brazilian Terrier Type) Mucopolysaccharidosis VII (Shepherd Type) Mucopolysaccharidosis VII (Shepherd Type) Multidrug Resistance 1 Mu/WT Normal (Clear) Multifocal Retinopathy 1 Multifocal Retinopathy 2 Mu/WT Multifocal Retinopathy 3 Multifocal Retinopathy 3 Muscular Dystrophy (Golden Retriever Type) Multides Syndrome WT/WT Normal (Clear) Multides Syndrome WT/WT Normal (Clear) Normal (Clear) Murcopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Normal (Clear) Normal (Clear) Multifocal Retinopathy 3 Murcopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/WT Normal (Clear)	Mucopolysaccharidosis I (Boston Terrier Type)	WT/WT	Normal (Clear)
Mucopolysaccharidosis IIIA (New Zealand Huntaway type) WT/WT Normal (Clear) Mucopolysaccharidosis IIIB (Schipperke Type) WT/WT Normal (Clear) Mucopolysaccharidosis VI (Miniature Schnauzer Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Brazilian Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Multidrug Resistance 1 WT/WT Normal (Clear) Multifocal Retinopathy 1 WT/WT Normal (Clear) Multifocal Retinopathy 2 WT/WT Normal (Clear) Multifocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome	Mucopolysaccharidosis I (Plott Hound Type)	WT/WT	Normal (Clear)
Mucopolysaccharidosis IIIB (Schipperke Type) Mucopolysaccharidosis VI (Miniature Schnauzer Type) Mucopolysaccharidosis VI (Brazilian Terrier Type) Mucopolysaccharidosis VII (Brazilian Terrier Type) Mucopolysaccharidosis VII (Shepherd Type) Mut/WT Normal (Clear) Multidrug Resistance 1 WT/WT Normal (Clear) Multifocal Retinopathy 1 WT/WT Normal (Clear) Multifocal Retinopathy 2 WT/WT Normal (Clear) Multifocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome WT/WT Normal (Clear)	Mucopolysaccharidosis IIIA (Dachshund Type)	WT/WT	Normal (Clear)
Mucopolysaccharidosis VI (Miniature Schnauzer Type) MT/WT Normal (Clear) Mucopolysaccharidosis VII (Brazilian Terrier Type) WT/WT Normal (Clear) Mucopolysaccharidosis VII (Shepherd Type) WT/WT Normal (Clear) Multidrug Resistance 1 WT/WT Normal (Clear) Multifocal Retinopathy 1 WT/WT Normal (Clear) Multifocal Retinopathy 2 WT/WT Normal (Clear) Multifocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome WT/WT Normal (Clear)	Mucopolysaccharidosis IIIA (New Zealand Huntaway type)	WT/WT	Normal (Clear)
Mucopolysaccharidosis VII (Brazilian Terrier Type) Mucopolysaccharidosis VII (Shepherd Type) MI/WT Normal (Clear) Multidrug Resistance 1 WI/WT Normal (Clear) Multifocal Retinopathy 1 WI/WT Normal (Clear) Multifocal Retinopathy 2 WI/WT Normal (Clear) Multifocal Retinopathy 3 WI/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WI/Y Muscular Dystrophy (Golden Retriever Type) WI/WT Normal (Clear) WI/WT Normal (Clear)	Mucopolysaccharidosis IIIB (Schipperke Type)	WT/WT	Normal (Clear)
Multidrug Resistance 1 Multifocal Retinopathy 1 Multifocal Retinopathy 2 Multifocal Retinopathy 3 Multifocal Retinopathy 3 Multifocal Retinopathy 3 Multifocal Retinopathy 6 Multifocal Retinopathy 7 Multifocal Retinopathy 8 Multifocal Retinopathy 9 Multifocal Retinopat	Mucopolysaccharidosis VI (Miniature Schnauzer Type)	WT/WT	Normal (Clear)
Multidrug Resistance 1 Multifocal Retinopathy 1 Multifocal Retinopathy 2 Multifocal Retinopathy 3 Multifocal Retinopathy 3 Muscular Dystrophy (Golden Retriever Type) Musladin-Lueke Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome	Mucopolysaccharidosis VII (Brazilian Terrier Type)	WT/WT	Normal (Clear)
Multifocal Retinopathy 1 WT/WT Normal (Clear) Multifocal Retinopathy 2 WT/WT Normal (Clear) Multifocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome WT/WT Normal (Clear)	Mucopolysaccharidosis VII (Shepherd Type)	WT/WT	Normal (Clear)
Multifocal Retinopathy 2 Multifocal Retinopathy 3 Multifocal Retinopathy 3 Muscular Dystrophy (Golden Retriever Type) Musladin-Lueke Syndrome WT/WT Normal (Clear) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome	Multidrug Resistance 1	WT/WT	Normal (Clear)
Multifocal Retinopathy 3 WT/WT Normal (Clear) Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome WT/WT Normal (Clear)	Multifocal Retinopathy 1	WT/WT	Normal (Clear)
Muscular Dystrophy (Golden Retriever Type) WT/Y X-Linked Male Normal Musladin-Lueke Syndrome WT/WT Normal (Clear)	Multifocal Retinopathy 2	WT/WT	Normal (Clear)
Musladin-Lueke Syndrome WT/WT Normal (Clear)	Multifocal Retinopathy 3	WT/WT	Normal (Clear)
	Muscular Dystrophy (Golden Retriever Type)	WT/Y	X-Linked Male Normal
Myostatin Deficiency (Whippet Type) WT/WT Normal (Clear)	Musladin-Lueke Syndrome	WT/WT	Normal (Clear)
	Myostatin Deficiency (Whippet Type)	WT/WT	Normal (Clear)

Myotonia Congenita (Jabrador Retriever Type) WT/WT Normal (Clear) Myotonia Congenita (Schnauzer Type) WT/WT Normal (Clear) Myotubular Myopathy 1 (Boykin Spaniel Type) WT/Y X-Linked Male Normal Myotubular Myopathy 1 (Rottweiler Type) WT/Y X-Linked Male Normal Myotubular Myopathy 1 (Rottweiler Type) WT/WT Normal (Clear) Narcolepsy (Dachshund Type) WT/WT Normal (Clear) Narcolepsy (Daberman Pinscher Type) WT/WT Normal (Clear) Narcolepsy (Labrador Retriever Type) WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Glant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT<	Myotonia Congenita (Australian Cattle Dog type)	WT/WT	Normal (Clear)
Myotubular Myopathy 1 (Boykin Spaniel Type) MT/Y X-Linked Male Normal Myotubular Myopathy 1 (Labrador Retriever Type) WT/Y X-Linked Male Normal Myotubular Myopathy 1 (Rottweiler Type) WT/Y X-Linked Male Normal Myotubular Myopathy 1 (Rottweiler Type) WT/WT Narcolepsy (Dachshund Type) Narcolepsy (Dachshund Type) WT/WT Narcolepsy (Daberman Pinscher Type) WT/WT Narcolepsy (Labrador Retriever Type) WT/WT Normal (Clear) Neonatal Cerebellar Cortical Degeneration WT/WT Neonatal Cerebellar Cortical Degeneration WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Myotonia Congenita (Labrador Retriever Type)	WT/WT	Normal (Clear)
Myotubular Myopathy 1 (Labrador Retriever Type) WT/Y X-Linked Male Normal Myotubular Myopathy 1 (Rottweiler Type) WT/Y X-Linked Male Normal Myotubular Myopathy 1 (Rottweiler Type) WT/WT Normal (Clear) Narcolepsy (Dachshund Type) WT/WT Normal (Clear) Narcolepsy (Labrador Retriever Type) WT/WT Normal (Clear) Neonatal Ataxia WT/WT Normal (Clear) Neonatal Cerebellar Cortical Degeneration WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Myotonia Congenita (Schnauzer Type)	WT/WT	Normal (Clear)
Myotubular Myopathy 1 (Rottweller Type) MT/Y Narcolepsy (Dachshund Type) WT/WT Normal (Clear) Narcolepsy (Dachshund Type) WT/WT Normal (Clear) Narcolepsy (Labrador Retriever Type) WT/WT Normal (Clear) Neonatal Ataxia WT/WT Normal (Clear) Neonatal Ecrebellar Cortical Degeneration WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Myotubular Myopathy 1 (Boykin Spaniel Type)	WT/Y	X-Linked Male Normal
Narcolepsy (Dachshund Type) WT/WT Normal (Clear) Narcolepsy (Doberman Pinscher Type) WT/WT Normal (Clear) Narcolepsy (Labrador Retriever Type) WT/WT Normal (Clear) Neonatal Ataxia WT/WT Normal (Clear) Neonatal Cerebellar Cortical Degeneration WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuroal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Myotubular Myopathy 1 (Labrador Retriever Type)	WT/Y	X-Linked Male Normal
Narcolepsy (Doberman Pinscher Type) Narcolepsy (Labrador Retriever Type) WT/WT Normal (Clear) Neonatal Ataxia WT/WT Normal (Clear) Neonatal Cerebellar Cortical Degeneration WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 4 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Myotubular Myopathy 1 (Rottweiler Type)	WT/Y	X-Linked Male Normal
Narcolepsy (Labrador Retriever Type) Narcolepsy (Labrador Retriever Type) Neonatal Ataxia WT/WT Normal (Clear) Neonatal Cerebellar Cortical Degeneration WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Narcolepsy (Dachshund Type)	WT/WT	Normal (Clear)
Neonatal Ataxia WT/WT Normal (Clear) Neonatal Cerebellar Cortical Degeneration WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Narcolepsy (Doberman Pinscher Type)	WT/WT	Normal (Clear)
Neonatal Cerebellar Cortical Degeneration WT/WT Normal (Clear) Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Normal (Clear)	Narcolepsy (Labrador Retriever Type)	WT/WT	Normal (Clear)
Neonatal Encephalopathy with Seizures WT/WT Normal (Clear) Neuroaxonal Dystrophy (Giant Schnauzer Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuroanal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neonatal Ataxia	WT/WT	Normal (Clear)
Neuroaxonal Dystrophy (Giant Schnauzer Type) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neonatal Cerebellar Cortical Degeneration	WT/WT	Normal (Clear)
Neuroaxonal Dystrophy (Papillon Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal ceroid lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neonatal Encephalopathy with Seizures	WT/WT	Normal (Clear)
Neuroaxonal Dystrophy (Rottweiler Type) WT/WT Normal (Clear) Neuroaxonal Dystrophy (Spanish Water Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal ceroid lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuroaxonal Dystrophy (Giant Schnauzer Type)	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 1 Neuronal Ceroid Lipofuscinosis 10 Neuronal Ceroid Lipofuscinosis 12 Neuronal Ceroid Lipofuscinosis 2 Neuronal Ceroid Lipofuscinosis 2 Neuronal Ceroid Lipofuscinosis 4A Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) Neuronal Ceroid Lipofuscinosis 6 NT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) NT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuroaxonal Dystrophy (Papillon Type)	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type) WT/WT Normal (Clear) Neuronal ceroid lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuroaxonal Dystrophy (Rottweiler Type)	WT/WT	Normal (Clear)
Neuronal ceroid lipofuscinosis 1 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuroaxonal Dystrophy (Spanish Water Dog Type)	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type)	WT/WT	Normal (Clear)
Neuronal ceroid Lipofuscinosis 10 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal ceroid lipofuscinosis 1	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 12 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type)	WT/WT	Normal (Clear)
Neuronal ceroid Lipofuscinosis 2 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal ceroid Lipofuscinosis 10	WT/WT	Normal (Clear)
Neuronal ceroid Lipofuscinosis 4A WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal Ceroid Lipofuscinosis 12	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type) WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal ceroid Lipofuscinosis 2	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 6 WT/WT Normal (Clear) Neuronal Ceroid Lipofuscinosis 7 WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal ceroid Lipofuscinosis 4A	WT/WT	Normal (Clear)
Neuronal ceroid Lipofuscinosis 6WT/WTNormal (Clear)Neuronal Ceroid Lipofuscinosis 7WT/WTNormal (Clear)Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type)WT/WTNormal (Clear)Neuronal ceroid Lipofuscinosis 8 (Setter type)WT/WTNormal (Clear)	Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type)	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 7WT/WTNormal (Clear)Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type)WT/WTNormal (Clear)Neuronal ceroid Lipofuscinosis 8 (Setter type)WT/WTNormal (Clear)	Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type)	WT/WT	Normal (Clear)
Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type) WT/WT Normal (Clear) Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal ceroid Lipofuscinosis 6	WT/WT	Normal (Clear)
Neuronal ceroid Lipofuscinosis 8 (Setter type) WT/WT Normal (Clear)	Neuronal Ceroid Lipofuscinosis 7	WT/WT	Normal (Clear)
	Neuronal ceroid Lipofuscinosis 8 (Australian Shepherd type)	WT/WT	Normal (Clear)
Nonsyndromic Hearing Loss (Rottweiler Type) WT/WT Normal (Clear)	Neuronal ceroid Lipofuscinosis 8 (Setter type)	WT/WT	Normal (Clear)
	Nonsyndromic Hearing Loss (Rottweiler Type)	WT/WT	Normal (Clear)

Oculocutaneous Albinism (Doberman Pinscher Type)	No Result	No Result
Oculocutaneous Albinism (Small Breed Type)	WT/WT	Normal (Clear)
Osteochondrodysplasia	No Result	No Result
Osteogenesis Imperfecta (Beagle Type)	WT/WT	Normal (Clear)
Osteogenesis Imperfecta (Dachshund Type)	WT/WT	Normal (Clear)
Osteogenesis Imperfecta (Golden Retriever Type)	WT/WT	Normal (Clear)
P2RY12 Receptor Platelet Disorder	WT/WT	Normal (Clear)
Pancreatitis (Miniature Schnauzer Type Risk Factor)	WT/WT	Normal (Clear)
Pancreatitis (Miniature Schnauzer Type Risk Factor), Variant 1	0	
Pancreatitis (Miniature Schnauzer Type Risk Factor), Variant 2	0	
Pancreatitis (Miniature Schnauzer Type Risk Factor), Variant 3	0	
Pembroke Welsh Corgi Duchenne Muscular Dystrophy	WT/Y	X-Linked Male Normal
Persistent Mullerian Duct Syndrome	WT/WT	Normal (Clear)
Pituitary Dwarfism (Shepherd Type)	WT/WT	Normal (Clear)
Polyneuropathy (Leonberger Type 1)	WT/WT	Normal (Clear)
Polyneuropathy (Leonberger Type 2)	WT/WT	Normal (Clear)
Polyneuropathy with Ocular Abnormalities and Neuronal Vacuolation	WT/WT	Normal (Clear)
Pompe Disease	WT/WT	Normal (Clear)
Prekallikrein Deficiency	WT/WT	Normal (Clear)
Primary Ciliary Dyskinesia (Alaskan Malamute Type)	WT/WT	Normal (Clear)
Primary Ciliary Dyskinesia (Old English Sheepdog Type)	WT/WT	Normal (Clear)
Primary Hyperoxaluria	WT/WT	Normal (Clear)
Primary Lens Luxation	WT/WT	Normal (Clear)
Primary Open Angle Glaucoma	WT/WT	Normal (Clear)
Primary Open Angle Glaucoma (Basset Fauve de Bretagne Type)	WT/WT	Normal (Clear)
Primary Open Angle Glaucoma (Basset Hound Type)	WT/WT	Normal (Clear)
Primary Open Angle Glaucoma (Norwegian Elkhound Type)	WT/WT	Normal (Clear)
Primary Open Angle Glaucoma and Primary Lens Luxation (Shar Pei Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy (Basenji Type)	WT/WT	Normal (Clear)
Progressive retinal Atrophy (Bullmastiff/Mastiff Type)	WT/WT	Normal (Clear)

Progressive Retinal Atrophy (Giant Schnauzer Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy (Irish Setter Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy (Shetland Sheepdog Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy (Sloughi Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Cone-Rod Dystrophy (Dachshund Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Cone-Rod Dystrophy 1 (American Staffordshire Terrier Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Cone-Rod Dystrophy 2 (American Staffordshire Terrier Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Cone-Rod Dystrophy 3 (Glen of Imaal Terrier Type)	No Result	No Result
Progressive Retinal Atrophy, Cone-Rod Dystrophy 4	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Early Onset (Spanish Water Dog Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Early-Onset (Portuguese Water Dog Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Generalized (Schapendoes Type)	WT/WT	Normal (Clear)
Progressive retinal Atrophy, Golden Retriever 1	WT/WT	Normal (Clear)
Progressive retinal Atrophy, Golden Retriever 2	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Late-Onset (Lapponian Herder Type)	WT/WT	Normal (Clear)
Progressive retinal Atrophy, PRA1 (Papillon Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, PRA3 (Tibetan Terrier and Spaniel Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Rod-Cone Dysplasia 3	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Rod-Cone Dysplasia 4	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Syndromic Retinal Degeneration (Shetland Sheepdog Type)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, X-Linked 1 (Husky Type)	WT/Y	X-Linked Male Normal
Progressive Retinal Atrophy, X-linked 2	WT/Y	X-Linked Male Normal
Protein Losing Nephropathy	WT/WT, WT/WT	Normal (Clear) - No Increased Risk
Protein Losing Nephropathy (Variant 1)	0	
Protein Losing Nephropathy (Variant 2)	0	
Pyruvate Dehydrogenase Deficiency	WT/WT	Normal (Clear)
Pyruvate Kinase Deficiency (Basenji type)	WT/WT	Normal (Clear)
Pyruvate Kinase Deficiency (Beagle type)	WT/WT	Normal (Clear)

Pyruvate Kinase Deficiency (Pug type) WT/WT Normal (Clear) Pyruvate Kinase Deficiency (Terrier type) WT/WT Normal (Clear) Recurrent Inflammatory Pulmonary Disease WT/WT Normal (Clear) Renal Cystadenocarcinoma and Nodular Dermatofibrosis WT/WT Normal (Clear) Retinal Dysplasia/Oculoskeletal Dysplasia 1 WT/WT Normal (Clear) Sensory Neuropathy (Border Collie Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease (Terrier Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease (Wetterhoun Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease, X-Linked (Rasset Hound Type) WT/WT X-Linked Male Normal (Clear) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease WT/WT Normal (Clear) Shar, Pei Autoinflammatory Disease WT/WT Normal (Clear) Shar, Pei Autoinflammatory Disease WT/WT Normal (Clear) Spinal Dyspraphism WT/WT Normal (Clear) </th <th>Pyruvate Kinase Deficiency (Labrador Retriever type)</th> <th>WT/WT</th> <th>Normal (Clear)</th>	Pyruvate Kinase Deficiency (Labrador Retriever type)	WT/WT	Normal (Clear)
Recurrent Inflammatory Pulmonary Disease WT/WT Normal (Clear) Renal Cystadenocarcinoma and Nodular Dermatofibrosis WT/WT Normal (Clear) Retinal Dysplasia/Oculoskeletal Dysplasia 1 WT/WT Normal (Clear)	Pyruvate Kinase Deficiency (Pug type)	WT/WT	Normal (Clear)
Renal Cystadenocarcinoma and Nodular Dermatofibrosis WT/WT Normal (Clear) Retinal Dysplasia/Oculoskeletal Dysplasia 1 WT/WT Normal (Clear) Retinal Dysplasia/Oculoskeletal Dysplasia 2 WT/WT Normal (Clear) Sensory Neuropathy (Border Collie Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease (Terrier Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease (Wetterhoun Type) Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type) Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/WT Normal (Clear) Shar-Pei Autoinflammatory Disease WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Stargardt Disease No Result No Result No Result No Result No Result No Result Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) Normal (Clear) Normal (Clear) WT/WT Normal (Clear) Normal (Clear) Normal (Clear)	Pyruvate Kinase Deficiency (Terrier type)	WT/WT	Normal (Clear)
Retinal Dysplasia/Oculoskeletal Dysplasia 1 WT/WT Normal (Clear) Retinal Dysplasia/Oculoskeletal Dysplasia 2 WT/WT Normal (Clear) Sensory Neuropathy (Border Collie Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease (Terrier Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease (Wetterhoun Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type) WT/Y X-Linked Male Normal Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/Y X-Linked Male Normal Shar-Pei Autoinflammatory Disease WT/WT Normal (Clear) Shar-Pei Autoinflammatory Disease WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Stargardt Disease No Result No Result Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) WT/WT Normal (Clear)	Recurrent Inflammatory Pulmonary Disease	WT/WT	Normal (Clear)
Retinal Dysplasia/Oculoskeletal Dysplasia 2 WT/WT Normal (Clear) Sensory Neuropathy (Border Collie Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease (Wetterhoun Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease (Wetterhoun Type) WT/WT Normal (Clear) Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type) WT/Y X-Linked Male Normal Type) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/Y X-Linked Male Normal Shar-Pei Autoinflarmatory Disease, X-Linked (Corgi type) WT/WT Normal (Clear) Shar-Pei Autoinflarmatory Disease WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Stargardt Disease No Result No Result Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) WT/WT Normal (Clear)	Renal Cystadenocarcinoma and Nodular Dermatofibrosis	WT/WT	Normal (Clear)
Sensory Neuropathy (Border Collie Type) Severe Combined Immunodeficiency Disease (Terrier Type) Severe Combined Immunodeficiency Disease (Wetterhoun Type) Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type) Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/Y X-Linked Male Normal Shar-Pei Autoinflammatory Disease WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) Spinal Clear) Spinal Clear Ataxia (Alpine Dachsbrake Type) WT/WT WT/WT Normal (Clear) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Masset Hound Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) WT/WT Normal (Clear) Ulroithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) WT/WT Normal (Clear)	Retinal Dysplasia/Oculoskeletal Dysplasia 1	WT/WT	Normal (Clear)
Severe Combined Immunodeficiency Disease (Terrier Type) Severe Combined Immunodeficiency Disease (Wetterhoun Type) Severe Combined Immunodeficiency Disease (Wetterhoun Type) WT/Y X-Linked Male Normal WT/Y X-Linked Male Normal WT/Y X-Linked Male Normal WT/Y X-Linked Male Normal WT/Y Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/Y X-Linked Male Normal WT/Y X-Linked Male Normal WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT WT/WT Normal (Clear) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result No Result No Result No Result Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Memerican Eskimo Dog Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear)	Retinal Dysplasia/Oculoskeletal Dysplasia 2	WT/WT	Normal (Clear)
Severe Combined Immunodeficiency Disease (Wetterhoun Type) Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type) Severe Combined Immunodeficiency Disease, X-Linked (Gorgi type) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/Y X-Linked Male Normal Shar-Pei Autoinflammatory Disease WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinot Polysraphism WT/WT Normal (Clear) Spinoterebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinoterebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Stargardt Disease No Result No Result No Result No Result No Result Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear)	Sensory Neuropathy (Border Collie Type)	WT/WT	Normal (Clear)
Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/Y X-Linked Male Normal Shar-Pei Autoinfiammatory Disease WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result No Result No Result Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Resset Hound Type) WT/WT Normal (Clear) Thrombopathia (Rewfoundland Type) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear)	Severe Combined Immunodeficiency Disease (Terrier Type)	WT/WT	Normal (Clear)
Type) Severe Combined Immunodeficiency Disease, X-Linked (Corgi type) WT/Y X-Linked Male Normal Shar-Pei Autoinflammatory Disease WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result No Result Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear)	Severe Combined Immunodeficiency Disease (Wetterhoun Type)	WT/WT	Normal (Clear)
Shar-Pei Autoinflammatory Disease WT/WT Normal (Clear) Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result No Result Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear)		WT/Y	X-Linked Male Normal
Skeletal Dysplasia 2 WT/WT Normal (Clear) Spinal Dysraphism WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Severe Combined Immunodeficiency Disease, X-Linked (Corgi type)	WT/Y	X-Linked Male Normal
Spinal Dysraphism WT/WT Normal (Clear) Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome	Shar-Pei Autoinflammatory Disease	WT/WT	Normal (Clear)
Spinocerebellar Ataxia (Alpine Dachsbrake Type) WT/WT Normal (Clear) Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear)	Skeletal Dysplasia 2	WT/WT	Normal (Clear)
Spinocerebellar Ataxia (Terrier Type) WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result Normal (Clear) WT/WT Normal (Clear) Startle Disease No Result No Result Normal (Clear) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear)	Spinal Dysraphism	WT/WT	Normal (Clear)
Spondylocostal Dysostosis WT/WT Normal (Clear) Stargardt Disease WT/WT Normal (Clear) Startle Disease No Result No Result No Result Normal (Clear) WT/WT Normal (Clear) Normal (Clear) Normal (Clear) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Spinocerebellar Ataxia (Alpine Dachsbrake Type)	WT/WT	Normal (Clear)
Stargardt Disease No Result Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Spinocerebellar Ataxia (Terrier Type)	WT/WT	Normal (Clear)
Startle Disease No Result No Result No Result No Result Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear)	Spondylocostal Dysostosis	WT/WT	Normal (Clear)
Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type) WT/WT Normal (Clear) Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) WT/WT Normal (Clear)	Stargardt Disease	WT/WT	Normal (Clear)
Thrombopathia (American Eskimo Dog Type) WT/WT Normal (Clear) Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) Normal (Clear) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Var) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Normal (Clear)	Startle Disease	No Result	No Result
Thrombopathia (Basset Hound Type) WT/WT Normal (Clear) WT/WT Normal (Clear) Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Subacute Necrotizing Encephalopathy (Yorkshire Terrier Type)	WT/WT	Normal (Clear)
Thrombopathia (Newfoundland Type) WT/WT Normal (Clear) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Thrombopathia (American Eskimo Dog Type)	WT/WT	Normal (Clear)
Trapped Neutrophil Syndrome WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Thrombopathia (Basset Hound Type)	WT/WT	Normal (Clear)
Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1) WT/WT Normal (Clear) Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Thrombopathia (Newfoundland Type)	WT/WT	Normal (Clear)
Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2) WT/WT Normal (Clear) Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Trapped Neutrophil Syndrome	WT/WT	Normal (Clear)
Urolithiasis (Native American Indian Dog Type) WT/WT Normal (Clear) Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 1)	WT/WT	Normal (Clear)
Van Den Ende-Gupta Syndrome WT/WT Normal (Clear)	Ullrich Congenital Muscular Dystrophy (Labrador Retriever Type 2)	WT/WT	Normal (Clear)
	Urolithiasis (Native American Indian Dog Type)	WT/WT	Normal (Clear)
Von Willebrand Disease I WT/WT Normal (Clear)	Van Den Ende-Gupta Syndrome	WT/WT	Normal (Clear)
	Von Willebrand Disease I	WT/WT	Normal (Clear)

Von Willebrand Disease II	WT/WT	Normal (Clear)
Von Willebrand Disease III (Kooikerhondje Type)	WT/WT	Normal (Clear)
Von Willebrand Disease III (Scottish Terrier Type)	WT/WT	Normal (Clear)
Von Willebrand Disease III (Shetland Sheepdog Type)	WT/WT	Normal (Clear)