

KIMI

Veterinary Report by Embark

embarkvet.com

Test Date: May 23rd, 2023

Customer-supplied information

Owner Name: Yolanda Bolt Swierstra

Dog Name: Kimi

Sex: Female (intact)

Date of birth: 04/13/23

Breed type: N/A

Breed: Newfoundland

Breed registration: Fédération Cynologique Internationale (FCI)

Microchip: N/A

Genetic summary

Genetic breed identification:

Newfoundland

Breed ancestry:



Newfoundland: 100.0%

Predicted adult weight: **94 lbs**

Calculated from 17 size genes.

Life stage: **Young adult**

Based on date of birth provided.

Health Report

How to interpret Kimi's genetic health results:

If Kimi inherited any of the variants that we tested, they will be listed at the top of the Health Report section, along with a description of how to interpret this result. We also include all of the variants that we tested Kimi for that we did not detect the risk variant for.

A genetic test is not a diagnosis

This genetic test does not diagnose a disease. Please talk to your vet about your dog's genetic results, or if you think that your pet may have a health condition or disease.

Summary

Of the 256 genetic health risks we analyzed, we found 1 result that you should learn about.

Notable results (1)

ALT Activity

Clear results

Breed-relevant (3)

Other (251)

Health Report

BREED-RELEVANT RESULTS

Research studies indicate that these results are more relevant to dogs like Kimi, and may influence her chances of developing certain health conditions.

	Cystinuria Type I-A (SLC3A1, Newfoundland Variant)	Clear
	Thrombopathia (RASGRP1 Exon 8, Landseer Variant)	Clear
	Ullrich-like Congenital Muscular Dystrophy (COL6A1 Exon 3, Landseer Variant)	Clear

Health Report

OTHER RESULTS

Research has not yet linked these conditions to dogs with similar breeds to Kimi. Review any increased risk or notable results to understand her potential risk and recommendations.

 ALT Activity (GPT)	Notable
 2-DHA Kidney & Bladder Stones (APRT)	Clear
 Acral Mutilation Syndrome (GDNF-AS, Spaniel and Pointer Variant)	Clear
 Alaskan Husky Encephalopathy (SLC19A3)	Clear
 Alaskan Malamute Polyneuropathy, AMPN (NDRG1 SNP)	Clear
 Alexander Disease (GFAP)	Clear
 Anhidrotic Ectodermal Dysplasia (EDA Intron 8)	Clear
 Autosomal Dominant Progressive Retinal Atrophy (RHO)	Clear
 Bald Thigh Syndrome (IGFBP5)	Clear
 Bernard-Soulier Syndrome, BSS (GP9, Cocker Spaniel Variant)	Clear
 Bully Whippet Syndrome (MSTN)	Clear
 Canine Elliptocytosis (SPTB Exon 30)	Clear
 Canine Fucosidosis (FUCA1)	Clear
 Canine Leukocyte Adhesion Deficiency Type I, CLAD I (ITGB2, Setter Variant)	Clear
 Canine Leukocyte Adhesion Deficiency Type III, CLAD III (FERMT3, German Shepherd Variant)	Clear
 Canine Multifocal Retinopathy, cmr1 (BEST1 Exon 2)	Clear
 Canine Multifocal Retinopathy, cmr2 (BEST1 Exon 5, Coton de Tulear Variant)	Clear
 Canine Multifocal Retinopathy, cmr3 (BEST1 Exon 10 Deletion, Finnish and Swedish Lapphund, Lapponian Herder Variant)	Clear

Health Report

OTHER RESULTS

	Canine Multiple System Degeneration (SERAC1 Exon 4, Chinese Crested Variant)	Clear
	Canine Multiple System Degeneration (SERAC1 Exon 15, Kerry Blue Terrier Variant)	Clear
	Cardiomyopathy and Juvenile Mortality (YARS2)	Clear
	Centronuclear Myopathy, CNM (PTPLA)	Clear
	Cerebellar Hypoplasia (VLDLR, Eurasier Variant)	Clear
	Chondrodysplasia (ITGA10, Norwegian Elkhound and Karelian Bear Dog Variant)	Clear
	Cleft Lip and/or Cleft Palate (ADAMTS20, Nova Scotia Duck Tolling Retriever Variant)	Clear
	Cleft Palate, CP1 (DLX6 intron 2, Nova Scotia Duck Tolling Retriever Variant)	Clear
	Cobalamin Malabsorption (CUBN Exon 8, Beagle Variant)	Clear
	Cobalamin Malabsorption (CUBN Exon 53, Border Collie Variant)	Clear
	Collie Eye Anomaly (NHEJ1)	Clear
	Complement 3 Deficiency, C3 Deficiency (C3)	Clear
	Congenital Cornification Disorder (NSDHL, Chihuahua Variant)	Clear
	Congenital Hypothyroidism (TPO, Rat, Toy, Hairless Terrier Variant)	Clear
	Congenital Hypothyroidism (TPO, Tenterfield Terrier Variant)	Clear
	Congenital Hypothyroidism with Goiter (TPO Intron 13, French Bulldog Variant)	Clear
	Congenital Hypothyroidism with Goiter (SLC5A5, Shih Tzu Variant)	Clear
	Congenital Macrothrombocytopenia (TUBB1 Exon 1, Cairn and Norfolk Terrier Variant)	Clear

Health Report

OTHER RESULTS

✓	Congenital Myasthenic Syndrome, CMS (COLQ, Labrador Retriever Variant)	Clear
✓	Congenital Myasthenic Syndrome, CMS (COLQ, Golden Retriever Variant)	Clear
✓	Congenital Myasthenic Syndrome, CMS (CHAT, Old Danish Pointing Dog Variant)	Clear
✓	Congenital Myasthenic Syndrome, CMS (CHRNE, Jack Russell Terrier Variant)	Clear
✓	Congenital Stationary Night Blindness (LRIT3, Beagle Variant)	Clear
✓	Congenital Stationary Night Blindness (RPE65, Briard Variant)	Clear
✓	Craniomandibular Osteopathy, CMO (SLC37A2)	Clear
✓	Craniomandibular Osteopathy, CMO (SLC37A2 Intron 16, Basset Hound Variant)	Clear
✓	Cystinuria Type II-A (SLC3A1, Australian Cattle Dog Variant)	Clear
✓	Cystinuria Type II-B (SLC7A9, Miniature Pinscher Variant)	Clear
✓	Day Blindness (CNGB3 Deletion, Alaskan Malamute Variant)	Clear
✓	Day Blindness (CNGA3 Exon 7, German Shepherd Variant)	Clear
✓	Day Blindness (CNGA3 Exon 7, Labrador Retriever Variant)	Clear
✓	Day Blindness (CNGB3 Exon 6, German Shorthaired Pointer Variant)	Clear
✓	Deafness and Vestibular Syndrome of Dobermans, DVDob, DINGS (MYO7A)	Clear
✓	Degenerative Myelopathy, DM (SOD1A)	Clear
✓	Demyelinating Polyneuropathy (SBF2/MTRM13)	Clear
✓	Dental-Skeletal-Retinal Anomaly (MIA3, Cane Corso Variant)	Clear

Health Report

OTHER RESULTS

✓	Diffuse Cystic Renal Dysplasia and Hepatic Fibrosis (INPP5E Intron 9, Norwich Terrier Variant)	Clear
✓	Dilated Cardiomyopathy, DCM (RBM20, Schnauzer Variant)	Clear
✓	Dilated Cardiomyopathy, DCM1 (PDK4, Doberman Pinscher Variant 1)	Clear
✓	Dilated Cardiomyopathy, DCM2 (TTN, Doberman Pinscher Variant 2)	Clear
✓	Disproportionate Dwarfism (PRKG2, Dogo Argentino Variant)	Clear
✓	Dry Eye Curly Coat Syndrome (FAM83H Exon 5)	Clear
✓	Dystrophic Epidermolysis Bullosa (COL7A1, Central Asian Shepherd Dog Variant)	Clear
✓	Dystrophic Epidermolysis Bullosa (COL7A1, Golden Retriever Variant)	Clear
✓	Early Bilateral Deafness (LOXHD1 Exon 38, Rottweiler Variant)	Clear
✓	Early Onset Adult Deafness, EOAD (EPS8L2 Deletion, Rhodesian Ridgeback Variant)	Clear
✓	Early Onset Cerebellar Ataxia (SEL1L, Finnish Hound Variant)	Clear
✓	Ehlers Danlos (ADAMTS2, Doberman Pinscher Variant)	Clear
✓	Enamel Hypoplasia (ENAM Deletion, Italian Greyhound Variant)	Clear
✓	Enamel Hypoplasia (ENAM SNP, Parson Russell Terrier Variant)	Clear
✓	Episodic Falling Syndrome (BCAN)	Clear
✓	Exercise-Induced Collapse, EIC (DNM1)	Clear
✓	Factor VII Deficiency (F7 Exon 5)	Clear
✓	Factor XI Deficiency (F11 Exon 7, Kerry Blue Terrier Variant)	Clear

Health Report

OTHER RESULTS

✓ Familial Nephropathy (COL4A4 Exon 3, Cocker Spaniel Variant)	Clear
✓ Familial Nephropathy (COL4A4 Exon 30, English Springer Spaniel Variant)	Clear
✓ Fanconi Syndrome (FAN1, Basenji Variant)	Clear
✓ Fetal-Onset Neonatal Neuroaxonal Dystrophy (MFN2, Giant Schnauzer Variant)	Clear
✓ Glanzmann's Thrombasthenia Type I (ITGA2B Exon 13, Great Pyrenees Variant)	Clear
✓ Glanzmann's Thrombasthenia Type I (ITGA2B Exon 12, Otterhound Variant)	Clear
✓ Globoid Cell Leukodystrophy, Krabbe disease (GALC Exon 5, Terrier Variant)	Clear
✓ Glycogen Storage Disease Type IA, Von Gierke Disease, GSD IA (G6PC, Maltese Variant)	Clear
✓ Glycogen Storage Disease Type IIIA, GSD IIIA (AGL, Curly Coated Retriever Variant)	Clear
✓ Glycogen storage disease Type VII, Phosphofructokinase Deficiency, PFK Deficiency (PFKM, Whippet and English Springer Spaniel Variant)	Clear
✓ Glycogen storage disease Type VII, Phosphofructokinase Deficiency, PFK Deficiency (PFKM, Wachtelhund Variant)	Clear
✓ GM1 Gangliosidosis (GLB1 Exon 2, Portuguese Water Dog Variant)	Clear
✓ GM1 Gangliosidosis (GLB1 Exon 15, Shiba Inu Variant)	Clear
✓ GM1 Gangliosidosis (GLB1 Exon 15, Alaskan Husky Variant)	Clear
✓ GM2 Gangliosidosis (HEXA, Japanese Chin Variant)	Clear
✓ GM2 Gangliosidosis (HEXB, Poodle Variant)	Clear
✓ Golden Retriever Progressive Retinal Atrophy 1, GR-PRA1 (SLC4A3)	Clear
✓ Golden Retriever Progressive Retinal Atrophy 2, GR-PRA2 (TTC8)	Clear

Health Report

OTHER RESULTS

	Goniodysgenesis and Glaucoma, Pectinate Ligament Dysplasia, PLD (OLFM3)	Clear
	Hemophilia A (F8 Exon 11, German Shepherd Variant 1)	Clear
	Hemophilia A (F8 Exon 1, German Shepherd Variant 2)	Clear
	Hemophilia A (F8 Exon 10, Boxer Variant)	Clear
	Hemophilia B (F9 Exon 7, Terrier Variant)	Clear
	Hemophilia B (F9 Exon 7, Rhodesian Ridgeback Variant)	Clear
	Hereditary Ataxia, Cerebellar Degeneration (RAB24, Old English Sheepdog and Gordon Setter Variant)	Clear
	Hereditary Cataracts (HSF4 Exon 9, Australian Shepherd Variant)	Clear
	Hereditary Footpad Hyperkeratosis (FAM83G, Terrier and Kromfohrlander Variant)	Clear
	Hereditary Footpad Hyperkeratosis (DSG1, Rottweiler Variant)	Clear
	Hereditary Nasal Parakeratosis (SUV39H2 Intron 4, Greyhound Variant)	Clear
	Hereditary Nasal Parakeratosis, HNPK (SUV39H2)	Clear
	Hereditary Vitamin D-Resistant Rickets (VDR)	Clear
	Hypocatalasia, Acatlasemia (CAT)	Clear
	Hypomyelination and Tremors (FNIP2, Weimaraner Variant)	Clear
	Hypophosphatasia (ALPL Exon 9, Karelian Bear Dog Variant)	Clear
	Ichthyosis (NIPAL4, American Bulldog Variant)	Clear
	Ichthyosis (ASPRV1 Exon 2, German Shepherd Variant)	Clear

Health Report

OTHER RESULTS

 Ichthyosis (SLC27A4, Great Dane Variant)	Clear
 Ichthyosis, Epidermolytic Hyperkeratosis (KRT10, Terrier Variant)	Clear
 Ichthyosis, ICH1 (PNPLA1, Golden Retriever Variant)	Clear
 Inflammatory Myopathy (SLC25A12)	Clear
 Inherited Myopathy of Great Danes (BIN1)	Clear
 Inherited Selected Cobalamin Malabsorption with Proteinuria (CUBN, Komondor Variant)	Clear
 Intervertebral Disc Disease (Type I) (FGF4 retrogene - CFA12)	Clear
 Intestinal Lipid Malabsorption (ACSL5, Australian Kelpie)	Clear
 Junctional Epidermolysis Bullosa (LAMA3 Exon 66, Australian Cattle Dog Variant)	Clear
 Junctional Epidermolysis Bullosa (LAMB3 Exon 11, Australian Shepherd Variant)	Clear
 Juvenile Epilepsy (LG12)	Clear
 Juvenile Laryngeal Paralysis and Polyneuropathy (RAB3GAP1, Rottweiler Variant)	Clear
 Juvenile Myoclonic Epilepsy (DIRAS1)	Clear
 L-2-Hydroxyglutaricaciduria, L2HGA (L2HGDH, Staffordshire Bull Terrier Variant)	Clear
 Lagotto Storage Disease (ATG4D)	Clear
 Laryngeal Paralysis (RAPGEF6, Miniature Bull Terrier Variant)	Clear
 Late Onset Spinocerebellar Ataxia (CAPN1)	Clear
 Late-Onset Neuronal Ceroid Lipofuscinosis, NCL 12 (ATP13A2, Australian Cattle Dog Variant)	Clear

Health Report

OTHER RESULTS

✓ Leonberger Polyneuropathy 1 (LPN1, ARHGEF10)	Clear
✓ Leonberger Polyneuropathy 2 (GJA9)	Clear
✓ Lethal Acrodermatitis, LAD (MKLN1)	Clear
✓ Leukodystrophy (TSEN54 Exon 5, Standard Schnauzer Variant)	Clear
✓ Ligneous Membranitis, LM (PLG)	Clear
✓ Limb Girdle Muscular Dystrophy (SGCD, Boston Terrier Variant)	Clear
✓ Limb-Girdle Muscular Dystrophy 2D (SGCA Exon 3, Miniature Dachshund Variant)	Clear
✓ Long QT Syndrome (KCNQ1)	Clear
✓ Lundehund Syndrome (LEPREL1)	Clear
✓ Macular Corneal Dystrophy, MCD (CHST6)	Clear
✓ Malignant Hyperthermia (RYR1)	Clear
✓ May-Hegglin Anomaly (MYH9)	Clear
✓ Methemoglobinemia (CYB5R3, Pit Bull Terrier Variant)	Clear
✓ Methemoglobinemia (CYB5R3)	Clear
✓ Microphthalmia (RBP4 Exon 2, Soft Coated Wheaten Terrier Variant)	Clear
✓ Mucopolysaccharidosis IIIB, Sanfilippo Syndrome Type B, MPS IIIB (NAGLU, Schipperke Variant)	Clear
✓ Mucopolysaccharidosis Type IIIA, Sanfilippo Syndrome Type A, MPS IIIA (SGSH Exon 6, Dachshund Variant)	Clear
✓ Mucopolysaccharidosis Type IIIA, Sanfilippo Syndrome Type A, MPS IIIA (SGSH Exon 6, New Zealand Huntaway Variant)	Clear

Health Report

OTHER RESULTS

✓ Mucopolysaccharidosis Type VI, Maroteaux-Lamy Syndrome, MPS VI (ARSB Exon 5, Miniature Pinscher Variant)	Clear
✓ Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII (GUSB Exon 3, German Shepherd Variant)	Clear
✓ Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII (GUSB Exon 5, Terrier Brasileiro Variant)	Clear
✓ Multiple Drug Sensitivity (ABCB1)	Clear
✓ Muscular Dystrophy (DMD, Cavalier King Charles Spaniel Variant 1)	Clear
✓ Muscular Dystrophy (DMD, Golden Retriever Variant)	Clear
✓ Musladin-Lueke Syndrome, MLS (ADAMTSL2)	Clear
✓ Myasthenia Gravis-Like Syndrome (CHRNE, Heideterrier Variant)	Clear
✓ Myotonia Congenita (CLCN1 Exon 23, Australian Cattle Dog Variant)	Clear
✓ Myotonia Congenita (CLCN1 Exon 7, Miniature Schnauzer Variant)	Clear
✓ Narcolepsy (HCRT2 Exon 1, Dachshund Variant)	Clear
✓ Narcolepsy (HCRT2 Intron 4, Doberman Pinscher Variant)	Clear
✓ Narcolepsy (HCRT2 Intron 6, Labrador Retriever Variant)	Clear
✓ Nemaline Myopathy (NEB, American Bulldog Variant)	Clear
✓ Neonatal Cerebellar Cortical Degeneration (SPTBN2, Beagle Variant)	Clear
✓ Neonatal Encephalopathy with Seizures, NEWS (ATF2)	Clear
✓ Neonatal Interstitial Lung Disease (LAMP3)	Clear
✓ Neuroaxonal Dystrophy, NAD (VPS11, Rottweiler Variant)	Clear

Health Report

OTHER RESULTS

✓ Neuroaxonal Dystrophy, NAD (TECPR2, Spanish Water Dog Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis 1, NCL 1 (PPT1 Exon 8, Dachshund Variant 1)	Clear
✓ Neuronal Ceroid Lipofuscinosis 10, NCL 10 (CTSD Exon 5, American Bulldog Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis 2, NCL 2 (TPP1 Exon 4, Dachshund Variant 2)	Clear
✓ Neuronal Ceroid Lipofuscinosis 5, NCL 5 (CLN5 Exon 4 SNP, Border Collie Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis 5, NCL 5 (CLN5 Exon 4 Deletion, Golden Retriever Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis 6, NCL 6 (CLN6 Exon 7, Australian Shepherd Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis 7, NCL 7 (MFSD8, Chihuahua and Chinese Crested Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8, Australian Shepherd Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8 Exon 2, English Setter Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8 Insertion, Saluki Variant)	Clear
✓ Neuronal Ceroid Lipofuscinosis, Cerebellar Ataxia, NCL4A (ARSG Exon 2, American Staffordshire Terrier Variant)	Clear
✓ Oculocutaneous Albinism, OCA (SLC45A2 Exon 6, Bullmastiff Variant)	Clear
✓ Oculocutaneous Albinism, OCA (SLC45A2, Small Breed Variant)	Clear
✓ Oculoskeletal Dysplasia 2 (COL9A2, Samoyed Variant)	Clear
✓ Osteochondrodysplasia (SLC13A1, Poodle Variant)	Clear
✓ Osteogenesis Imperfecta (COL1A2, Beagle Variant)	Clear
✓ Osteogenesis Imperfecta (SERPINH1, Dachshund Variant)	Clear

Health Report

OTHER RESULTS

	Osteogenesis Imperfecta (COL1A1, Golden Retriever Variant)	Clear
	P2Y12 Receptor Platelet Disorder (P2Y12)	Clear
	Pachyonychia Congenita (KRT16, Dogue de Bordeaux Variant)	Clear
	Paroxysmal Dyskinesia, PxD (PIGN)	Clear
	Persistent Mullerian Duct Syndrome, PMDS (AMHR2)	Clear
	Pituitary Dwarfism (POU1F1 Intron 4, Karelian Bear Dog Variant)	Clear
	Platelet Factor X Receptor Deficiency, Scott Syndrome (TMEM16F)	Clear
	Polycystic Kidney Disease, PKD (PKD1)	Clear
	Pompe's Disease (GAA, Finnish and Swedish Lapphund, Lapponian Herder Variant)	Clear
	Prekallikrein Deficiency (KLKB1 Exon 8)	Clear
	Primary Ciliary Dyskinesia, PCD (NME5, Alaskan Malamute Variant)	Clear
	Primary Ciliary Dyskinesia, PCD (CCDC39 Exon 3, Old English Sheepdog Variant)	Clear
	Primary Hyperoxaluria (AGXT)	Clear
	Primary Lens Luxation (ADAMTS17)	Clear
	Primary Open Angle Glaucoma (ADAMTS17 Exon 11, Basset Fauve de Bretagne Variant)	Clear
	Primary Open Angle Glaucoma (ADAMTS10 Exon 17, Beagle Variant)	Clear
	Primary Open Angle Glaucoma (ADAMTS10 Exon 9, Norwegian Elkhound Variant)	Clear
	Primary Open Angle Glaucoma and Primary Lens Luxation (ADAMTS17 Exon 2, Chinese Shar-Pei Variant)	Clear

Health Report

OTHER RESULTS

✓ Progressive Retinal Atrophy (SAG)	Clear
✓ Progressive Retinal Atrophy (IFT122 Exon 26, Lapponian Herder Variant)	Clear
✓ Progressive Retinal Atrophy, Bardet-Biedl Syndrome (BBS2 Exon 11, Shetland Sheepdog Variant)	Clear
✓ Progressive Retinal Atrophy, CNGA (CNGA1 Exon 9)	Clear
✓ Progressive Retinal Atrophy, crd1 (PDE6B, American Staffordshire Terrier Variant)	Clear
✓ Progressive Retinal Atrophy, crd4/cord1 (RPGRIP1)	Clear
✓ Progressive Retinal Atrophy, PRA1 (CNGB1)	Clear
✓ Progressive Retinal Atrophy, PRA3 (FAM161A)	Clear
✓ Progressive Retinal Atrophy, prcd (PRCD Exon 1)	Clear
✓ Progressive Retinal Atrophy, rcd1 (PDE6B Exon 21, Irish Setter Variant)	Clear
✓ Progressive Retinal Atrophy, rcd3 (PDE6A)	Clear
✓ Proportionate Dwarfism (GH1 Exon 5, Chihuahua Variant)	Clear
✓ Protein Losing Nephropathy, PLN (NPHS1)	Clear
✓ Pyruvate Dehydrogenase Deficiency (PDP1, Spaniel Variant)	Clear
✓ Pyruvate Kinase Deficiency (PKLR Exon 5, Basenji Variant)	Clear
✓ Pyruvate Kinase Deficiency (PKLR Exon 7, Beagle Variant)	Clear
✓ Pyruvate Kinase Deficiency (PKLR Exon 10, Terrier Variant)	Clear
✓ Pyruvate Kinase Deficiency (PKLR Exon 7, Labrador Retriever Variant)	Clear

Health Report

OTHER RESULTS

 Pyruvate Kinase Deficiency (PKLR Exon 7, Pug Variant)	Clear
 Raine Syndrome (FAM20C)	Clear
 Recurrent Inflammatory Pulmonary Disease, RIPD (AKNA, Rough Collie Variant)	Clear
 Renal Cystadenocarcinoma and Nodular Dermatofibrosis (FLCN Exon 7)	Clear
 Retina Dysplasia and/or Optic Nerve Hypoplasia (SIX6 Exon 1, Golden Retriever Variant)	Clear
 Sensory Neuropathy (FAM134B, Border Collie Variant)	Clear
 Severe Combined Immunodeficiency, SCID (PRKDC, Terrier Variant)	Clear
 Severe Combined Immunodeficiency, SCID (RAG1, Wetterhoun Variant)	Clear
 Shaking Puppy Syndrome (PLP1, English Springer Spaniel Variant)	Clear
 Shar-Pei Autoinflammatory Disease, SPAID, Shar-Pei Fever (MTBP)	Clear
 Skeletal Dysplasia 2, SD2 (COL11A2, Labrador Retriever Variant)	Clear
 Skin Fragility Syndrome (PKP1, Chesapeake Bay Retriever Variant)	Clear
 Spinocerebellar Ataxia (SCN8A, Alpine Dachsbracke Variant)	Clear
 Spinocerebellar Ataxia with Myokymia and/or Seizures (KCNJ10)	Clear
 Spongy Degeneration with Cerebellar Ataxia 1 (KCNJ10)	Clear
 Spongy Degeneration with Cerebellar Ataxia 2 (ATP1B2)	Clear
 Stargardt Disease (ABCA4 Exon 28, Labrador Retriever Variant)	Clear
 Succinic Semialdehyde Dehydrogenase Deficiency (ALDH5A1 Exon 7, Saluki Variant)	Clear

Health Report

OTHER RESULTS

✓ Thrombopathia (RASGRP1 Exon 5, American Eskimo Dog Variant)	Clear
✓ Thrombopathia (RASGRP1 Exon 5, Basset Hound Variant)	Clear
✓ Trapped Neutrophil Syndrome, TNS (VPS13B)	Clear
✓ Ullrich-like Congenital Muscular Dystrophy (COL6A3 Exon 10, Labrador Retriever Variant)	Clear
✓ Unilateral Deafness and Vestibular Syndrome (PTPRQ Exon 39, Doberman Pinscher)	Clear
✓ Urate Kidney & Bladder Stones (SLC2A9)	Clear
✓ Von Willebrand Disease Type I, Type I vWD (VWF)	Clear
✓ Von Willebrand Disease Type II, Type II vWD (VWF, Pointer Variant)	Clear
✓ Von Willebrand Disease Type III, Type III vWD (VWF Exon 4, Terrier Variant)	Clear
✓ Von Willebrand Disease Type III, Type III vWD (VWF Intron 16, Nederlandse Kooikerhondje Variant)	Clear
✓ Von Willebrand Disease Type III, Type III vWD (VWF Exon 7, Shetland Sheepdog Variant)	Clear
✓ X-Linked Hereditary Nephropathy, XLHN (COL4A5 Exon 35, Samoyed Variant 2)	Clear
✓ X-Linked Myotubular Myopathy (MTM1, Labrador Retriever Variant)	Clear
✓ X-Linked Progressive Retinal Atrophy 1, XL-PRA1 (RPGR)	Clear
✓ X-linked Severe Combined Immunodeficiency, X-SCID (IL2RG Exon 1, Basset Hound Variant)	Clear
✓ X-linked Severe Combined Immunodeficiency, X-SCID (IL2RG, Corgi Variant)	Clear
✓ Xanthine Urolithiasis (XDH, Mixed Breed Variant)	Clear
✓ β-Mannosidosis (MANBA Exon 16, Mixed-Breed Variant)	Clear

Health Report

OTHER RESULTS

Mast Cell Tumor	No result
-----------------	-----------

Health Report

HEALTH REPORT

Notable result

ALT Activity

La Scuderia di Dirk Kimi Räikkönen inherited both copies of the variant we tested for Alanine Aminotransferase Activity

Why is this important to your vet?

Kimi has two copies of a variant in the GPT gene and is likely to have a lower than average baseline ALT activity. ALT is a commonly used measure of liver health on routine veterinary blood chemistry panels. As such, your veterinarian may want to watch for changes in Kimi's ALT activity above their current, healthy, ALT activity. As an increase above Kimi's baseline ALT activity could be evidence of liver damage, even if it is within normal limits by standard ALT reference ranges.

What is Alanine Aminotransferase Activity?

Alanine aminotransferase (ALT) is a clinical tool that can be used by veterinarians to better monitor liver health. This result is not associated with liver disease. ALT is one of several values veterinarians measure on routine blood work to evaluate the liver. It is a naturally occurring enzyme located in liver cells that helps break down protein. When the liver is damaged or inflamed, ALT is released into the bloodstream.

How vets diagnose this condition

Genetic testing is the only way to provide your veterinarian with this clinical tool.

How this condition is treated

Veterinarians may recommend blood work to establish a baseline ALT value for healthy dogs with one or two copies of this variant.

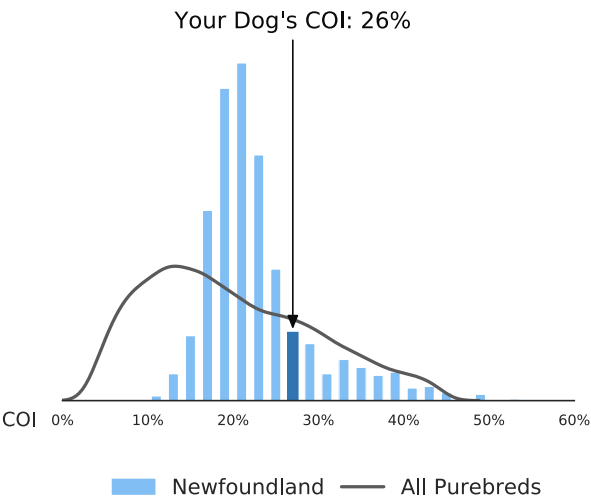
Genetic Diversity and Inbreeding

Coefficient of Inbreeding (COI)

Genetic Result: 26%

Our genetic COI measures the proportion of your dog’s genome (her genes) where the genes on the mother’s side are identical by descent to those on the father’s side. The higher your dog’s coefficient of inbreeding (the percentage), the more inbred your dog is.

Your Dog’s COI



This graph represents where your dog’s inbreeding levels fall on a scale compared to both dogs with a similar breed makeup to her (the blue bars) and all purebred dogs (the grey line).

Genetic Diversity and Inbreeding

More on the Science

Embark scientists, along with our research partners at Cornell University, have shown the impact of inbreeding on longevity and fertility and developed a state-of-the-art, peer-reviewed method for accurately measuring COI and predicting average COI in litters.

Citations

Sams & Boyko 2019 "Fine-Scale Resolution of Runs of Homozygosity Reveal Patterns of Inbreeding and Substantial Overlap with Recessive Disease Genotypes in Domestic Dogs" (<https://www.ncbi.nlm.nih.gov/pubmed/30429214>)

Chu et al 2019 "Inbreeding depression causes reduced fecundity in Golden Retrievers" (<https://link.springer.com/article/10.1007/s00335-019-09805-4>)

Yordy et al 2019 "Body size, inbreeding, and lifespan in domestic dogs" (<https://www.semanticscholar.org/paper/Body-size%2C-inbreeding%2C-and-lifespan-in-domestic-Yordy-Kraus/61d0fa7a71afb26f547f0fb7ff71e23a14d19d2c>)

About Embark

Embark Veterinary is a canine genetics company offering research-grade genetic tests to pet owners and breeders. Every Embark test examines thousands of genetic markers, and provides results for over 280 genetic health conditions, breed identification, clinical tools, and more.

Embark is a research partner of the Cornell University College of Veterinary Medicine and collaborates with scientists and registries to accelerate genetic research in canine health. We make it easy for customers and vets to understand, share and make use of their dog's unique genetic profile to improve canine health and happiness.

Learn more at embarkvet.com

Veterinarians and hospitals can send inquiries to veterinarians@embarkvet.com.