

GRINGO

Veterinary Report by Embark

embarkvet.com

Test Date: November 19th, 2024

Customer-supplied information

Owner Name: Johanna Sandström

Dog Name: Gringo

Sex: Male (intact)

Date of birth: 03/03/18

Breed type: N/A

Breed: White Shepherd

Breed registration: Fédération Cynologique Internationale (FCI)

SE37125/2020

Microchip: N/A

Genetic summary

Genetic breed identification:

White Shepherd

Predicted adult weight: **78 lbs**

Calculated from 17 size genes.

Breed ancestry:

 **White Shepherd: 100.0%**

Life stage: **Mature adult**

Based on date of birth provided.

Health Report

How to interpret Gringo's genetic health results:

If Gringo 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 Gringo 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 274 genetic health risks we analyzed, we found 2 results that you should learn about.

Notable results (2)

ALT Activity

Degenerative Myelopathy, DM

Clear results

Breed-relevant (10)

Other (261)

Health Report

BREED-RELEVANT RESULTS

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

<input type="radio"/> -	Degenerative Myelopathy, DM (SOD1A)	Notable
<input checked="" type="radio"/>	Anhidrotic Ectodermal Dysplasia (EDA Intron 8)	Clear
<input checked="" type="radio"/>	Canine Leukocyte Adhesion Deficiency Type III, CLAD III (FERMT3, German Shepherd Variant)	Clear
<input checked="" type="radio"/>	Day Blindness (CNGA3 Exon 7, German Shepherd Variant)	Clear
<input checked="" type="radio"/>	Hemophilia A (F8 Exon 11, German Shepherd Variant 1)	Clear
<input checked="" type="radio"/>	Hemophilia A (F8 Exon 1, German Shepherd Variant 2)	Clear
<input checked="" type="radio"/>	MDR1 Drug Sensitivity (ABCB1)	Clear
<input checked="" type="radio"/>	Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII (GUSB Exon 3, German Shepherd Variant)	Clear
<input checked="" type="radio"/>	Platelet Factor X Receptor Deficiency, Scott Syndrome (TMEM16F)	Clear
<input checked="" type="radio"/>	Renal Cystadenocarcinoma and Nodular Dermatofibrosis (FLCN Exon 7)	Clear
<input checked="" type="radio"/>	Urate Kidney & Bladder Stones (SLC2A9)	Clear

Health Report

OTHER RESULTS

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

<input type="radio"/> ALT Activity (GPT)	Notable
<input checked="" type="radio"/> 2-DHA Kidney & Bladder Stones (APRT)	Clear
<input checked="" type="radio"/> Acral Mutilation Syndrome (GDNF-AS, Spaniel and Pointer Variant)	Clear
<input checked="" type="radio"/> Alaskan Husky Encephalopathy (SLC19A3)	Clear
<input checked="" type="radio"/> Alaskan Malamute Polyneuropathy, AMPN (NDRG1 SNP)	Clear
<input checked="" type="radio"/> Alexander Disease (GFAP)	Clear
<input checked="" type="radio"/> Autosomal Dominant Progressive Retinal Atrophy (RHO)	Clear
<input checked="" type="radio"/> Bald Thigh Syndrome (IGFBP5)	Clear
<input checked="" type="radio"/> Bernard-Soulier Syndrome, BSS (GP9, Cocker Spaniel Variant)	Clear
<input checked="" type="radio"/> Bully Whippet Syndrome (MSTN)	Clear
<input checked="" type="radio"/> Canine Elliptocytosis (SPTB Exon 30)	Clear
<input checked="" type="radio"/> Canine Fucosidosis (FUCA1)	Clear
<input checked="" type="radio"/> Canine Leukocyte Adhesion Deficiency Type I, CLAD I (ITGB2, Setter Variant)	Clear
<input checked="" type="radio"/> Canine Multifocal Retinopathy, cmr1 (BEST1 Exon 2)	Clear
<input checked="" type="radio"/> Canine Multifocal Retinopathy, cmr2 (BEST1 Exon 5, Coton de Tulear Variant)	Clear
<input checked="" type="radio"/> Canine Multifocal Retinopathy, cmr3 (BEST1 Exon 10 Deletion, Finnish and Swedish Lapphund, Lapponian Herder Variant)	Clear
<input checked="" type="radio"/> Canine Multiple System Degeneration (SERAC1 Exon 4, Chinese Crested Variant)	Clear
<input checked="" type="radio"/> Canine Multiple System Degeneration (SERAC1 Exon 15, Kerry Blue Terrier Variant)	Clear

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OTHER RESULTS

<input checked="" type="checkbox"/> Cardiomyopathy and Juvenile Mortality (YARS2)	Clear
<input checked="" type="checkbox"/> Centronuclear Myopathy, CNM (PTPLA)	Clear
<input checked="" type="checkbox"/> Cerebellar Hypoplasia (VLDLR, Eurasier Variant)	Clear
<input checked="" type="checkbox"/> Chondrodysplasia (ITGA10, Norwegian Elkhound and Karelian Bear Dog Variant)	Clear
<input checked="" type="checkbox"/> Cleft Lip and/or Cleft Palate (ADAMTS20, Nova Scotia Duck Tolling Retriever Variant)	Clear
<input checked="" type="checkbox"/> Cleft Palate, CP1 (DLX6 intron 2, Nova Scotia Duck Tolling Retriever Variant)	Clear
<input checked="" type="checkbox"/> Cobalamin Malabsorption (CUBN Exon 8, Beagle Variant)	Clear
<input checked="" type="checkbox"/> Cobalamin Malabsorption (CUBN Exon 53, Border Collie Variant)	Clear
<input checked="" type="checkbox"/> Collie Eye Anomaly (NHEJ1)	Clear
<input checked="" type="checkbox"/> Complement 3 Deficiency, C3 Deficiency (C3)	Clear
<input checked="" type="checkbox"/> Congenital Cornification Disorder (NSDHL, Chihuahua Variant)	Clear
<input checked="" type="checkbox"/> Congenital Dyserythropoietic Anemia and Polymyopathy (EHPB1L1, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/> Congenital Hypothyroidism (TPO, Rat, Toy, Hairless Terrier Variant)	Clear
<input checked="" type="checkbox"/> Congenital Hypothyroidism (TPO, Tenterfield Terrier Variant)	Clear
<input checked="" type="checkbox"/> Congenital Hypothyroidism with Goiter (TPO Intron 13, French Bulldog Variant)	Clear
<input checked="" type="checkbox"/> Congenital Hypothyroidism with Goiter (SLC5A5, Shih Tzu Variant)	Clear
<input checked="" type="checkbox"/> Congenital Macrothrombocytopenia (TUBB1 Exon 1, Cairn and Norfolk Terrier Variant)	Clear
<input checked="" type="checkbox"/> Congenital Muscular Dystrophy (LAMA2, Italian Greyhound)	Clear

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OTHER RESULTS

<input checked="" type="checkbox"/>	Congenital Myasthenic Syndrome, CMS (COLQ, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Congenital Myasthenic Syndrome, CMS (COLQ, Golden Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Congenital Myasthenic Syndrome, CMS (CHAT, Old Danish Pointing Dog Variant)	Clear
<input checked="" type="checkbox"/>	Congenital Myasthenic Syndrome, CMS (CHRNE, Jack Russell Terrier Variant)	Clear
<input checked="" type="checkbox"/>	Congenital Stationary Night Blindness (LRIT3, Beagle Variant)	Clear
<input checked="" type="checkbox"/>	Congenital Stationary Night Blindness (RPE65, Briard Variant)	Clear
<input checked="" type="checkbox"/>	Copper Toxicosis (Accumulating) (ATP7B)	Clear
<input checked="" type="checkbox"/>	Copper Toxicosis (Attenuating) (ATP7A, Labrador Retriever)	Clear
<input checked="" type="checkbox"/>	Copper Toxicosis (Attenuating) (RETN, Labrador Retriever)	Clear
<input checked="" type="checkbox"/>	Craniomandibular Osteopathy, CMO (SLC37A2)	Clear
<input checked="" type="checkbox"/>	Craniomandibular Osteopathy, CMO (SLC37A2 Intron 16, Basset Hound Variant)	Clear
<input checked="" type="checkbox"/>	Cystinuria Type I-A (SLC3A1, Newfoundland Variant)	Clear
<input checked="" type="checkbox"/>	Cystinuria Type II-A (SLC3A1, Australian Cattle Dog Variant)	Clear
<input checked="" type="checkbox"/>	Cystinuria Type II-B (SLC7A9, Miniature Pinscher Variant)	Clear
<input checked="" type="checkbox"/>	Darier Disease (ATP2A2, Irish Terrier Variant)	Clear
<input checked="" type="checkbox"/>	Day Blindness (CNGB3 Deletion, Alaskan Malamute Variant)	Clear
<input checked="" type="checkbox"/>	Day Blindness (CNGA3 Exon 7, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Day Blindness (CNGB3 Exon 6, German Shorthaired Pointer Variant)	Clear

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OTHER RESULTS

<input checked="" type="checkbox"/>	Deafness and Vestibular Syndrome of Dobermanns, DVDOB, DINGS (MYO7A)	Clear
<input checked="" type="checkbox"/>	Demyelinating Polyneuropathy (SBF2/MTRM13)	Clear
<input checked="" type="checkbox"/>	Dental-Skeletal-Retinal Anomaly (MIA3, Cane Corso Variant)	Clear
<input checked="" type="checkbox"/>	Diffuse Cystic Renal Dysplasia and Hepatic Fibrosis (INPP5E Intron 9, Norwich Terrier Variant)	Clear
<input checked="" type="checkbox"/>	Dilated Cardiomyopathy, DCM (RBM20, Schnauzer Variant)	Clear
<input checked="" type="checkbox"/>	Dilated Cardiomyopathy, DCM1 (PDK4, Doberman Pinscher Variant 1)	Clear
<input checked="" type="checkbox"/>	Dilated Cardiomyopathy, DCM2 (TTN, Doberman Pinscher Variant 2)	Clear
<input checked="" type="checkbox"/>	Disproportionate Dwarfism (PRKG2, Dogo Argentino Variant)	Clear
<input checked="" type="checkbox"/>	Dry Eye Curly Coat Syndrome (FAM83H Exon 5)	Clear
<input checked="" type="checkbox"/>	Dystrophic Epidermolysis Bullosa (COL7A1, Central Asian Shepherd Dog Variant)	Clear
<input checked="" type="checkbox"/>	Dystrophic Epidermolysis Bullosa (COL7A1, Golden Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Early Bilateral Deafness (LOXHD1 Exon 38, Rottweiler Variant)	Clear
<input checked="" type="checkbox"/>	Early Onset Adult Deafness, EOAD (EPS8L2 Deletion, Rhodesian Ridgeback Variant)	Clear
<input checked="" type="checkbox"/>	Early Onset Cerebellar Ataxia (SEL1L, Finnish Hound Variant)	Clear
<input checked="" type="checkbox"/>	Ehlers Danlos (ADAMTS2, Doberman Pinscher Variant)	Clear
<input checked="" type="checkbox"/>	Ehlers-Danlos Syndrome (EDS) (COL5A1, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Enamel Hypoplasia (ENAM Deletion, Italian Greyhound Variant)	Clear
<input checked="" type="checkbox"/>	Enamel Hypoplasia (ENAM SNP, Parson Russell Terrier Variant)	Clear

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<input checked="" type="checkbox"/> Episodic Falling Syndrome (BCAN)	Clear
<input checked="" type="checkbox"/> Exercise-Induced Collapse, EIC (DNM1)	Clear
<input checked="" type="checkbox"/> Factor VII Deficiency (F7 Exon 5)	Clear
<input checked="" type="checkbox"/> Factor XI Deficiency (F11 Exon 7, Kerry Blue Terrier Variant)	Clear
<input checked="" type="checkbox"/> Familial Nephropathy (COL4A4 Exon 3, Cocker Spaniel Variant)	Clear
<input checked="" type="checkbox"/> Familial Nephropathy (COL4A4 Exon 30, English Springer Spaniel Variant)	Clear
<input checked="" type="checkbox"/> Fanconi Syndrome (FAN1, Basenji Variant)	Clear
<input checked="" type="checkbox"/> Fetal-Onset Neonatal Neuroaxonal Dystrophy (MFN2, Giant Schnauzer Variant)	Clear
<input checked="" type="checkbox"/> Glanzmann's Thrombasthenia Type I (ITGA2B Exon 13, Great Pyrenees Variant)	Clear
<input checked="" type="checkbox"/> Glanzmann's Thrombasthenia Type I (ITGA2B Exon 12, Otterhound Variant)	Clear
<input checked="" type="checkbox"/> Globoid Cell Leukodystrophy, Krabbe disease (GALC Exon 5, Terrier Variant)	Clear
<input checked="" type="checkbox"/> Glycogen Storage Disease Type IA, Von Gierke Disease, GSD IA (G6PC1, German Pinscher Variant)	Clear
<input checked="" type="checkbox"/> Glycogen Storage Disease Type IA, Von Gierke Disease, GSD IA (G6PC, Maltese Variant)	Clear
<input checked="" type="checkbox"/> Glycogen Storage Disease Type IIIA, GSD IIIA (AGL, Curly Coated Retriever Variant)	Clear
<input checked="" type="checkbox"/> Glycogen storage disease Type VII, Phosphofructokinase Deficiency, PFK Deficiency (PFKM, Whippet and English Springer Spaniel Variant)	Clear
<input checked="" type="checkbox"/> Glycogen storage disease Type VII, Phosphofructokinase Deficiency, PFK Deficiency (PFKM, Wachtelhund Variant)	Clear
<input checked="" type="checkbox"/> GM1 Gangliosidosis (GLB1 Exon 2, Portuguese Water Dog Variant)	Clear
<input checked="" type="checkbox"/> GM1 Gangliosidosis (GLB1 Exon 15, Shiba Inu Variant)	Clear

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<input checked="" type="checkbox"/>	GM1 Gangliosidosis (GLB1 Exon 15, Alaskan Husky Variant)	Clear
<input checked="" type="checkbox"/>	GM2 Gangliosidosis (HEXA, Japanese Chin Variant)	Clear
<input checked="" type="checkbox"/>	GM2 Gangliosidosis (HEXB, Poodle Variant)	Clear
<input checked="" type="checkbox"/>	Golden Retriever Progressive Retinal Atrophy 1, GR-PRA1 (SLC4A3)	Clear
<input checked="" type="checkbox"/>	Golden Retriever Progressive Retinal Atrophy 2, GR-PRA2 (TTC8)	Clear
<input checked="" type="checkbox"/>	Goniodysgenesis and Glaucoma, Pectinate Ligament Dysplasia, PLD (OLFM3)	Clear
<input checked="" type="checkbox"/>	Hemophilia A (F8 Exon 10, Boxer Variant)	Clear
<input checked="" type="checkbox"/>	Hemophilia B (F9 Exon 7, Terrier Variant)	Clear
<input checked="" type="checkbox"/>	Hemophilia B (F9 Exon 7, Rhodesian Ridgeback Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Ataxia (PNPLA8, Australian Shepherd Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Ataxia, Cerebellar Degeneration (RAB24, Old English Sheepdog and Gordon Setter Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Cataracts (HSF4 Exon 9, Australian Shepherd Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Cataracts (FYCO1, Wirehaired Pointing Griffon Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Cerebellar Ataxia (SELENOP, Belgian Shepherd Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Footpad Hyperkeratosis (FAM83G, Terrier and Kromfohrlander Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Footpad Hyperkeratosis (DSG1, Rottweiler Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Nasal Parakeratosis (SUV39H2 Intron 4, Greyhound Variant)	Clear
<input checked="" type="checkbox"/>	Hereditary Nasal Parakeratosis, HNPK (SUV39H2)	Clear

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<input checked="" type="checkbox"/> Hereditary Vitamin D-Resistant Rickets (VDR)	Clear
<input checked="" type="checkbox"/> Hypocatalasia, Acatalasemia (CAT)	Clear
<input checked="" type="checkbox"/> Hypomyelination and Tremors (FNIP2, Weimaraner Variant)	Clear
<input checked="" type="checkbox"/> Hypophosphatasia (ALPL Exon 9, Karelian Bear Dog Variant)	Clear
<input checked="" type="checkbox"/> Ichthyosis (NIPAL4, American Bulldog Variant)	Clear
<input checked="" type="checkbox"/> Ichthyosis (ASPRV1 Exon 2, German Shepherd Variant)	Clear
<input checked="" type="checkbox"/> Ichthyosis (SLC27A4, Great Dane Variant)	Clear
<input checked="" type="checkbox"/> Ichthyosis, Epidermolytic Hyperkeratosis (KRT10, Terrier Variant)	Clear
<input checked="" type="checkbox"/> Ichthyosis, ICH1 (PNPLA1, Golden Retriever Variant)	Clear
<input checked="" type="checkbox"/> Ichthyosis, ICH2 (ABHD5, Golden Retriever Variant)	Clear
<input checked="" type="checkbox"/> Inflammatory Myopathy (SLC25A12)	Clear
<input checked="" type="checkbox"/> Inherited Myopathy of Great Danes (BIN1)	Clear
<input checked="" type="checkbox"/> Inherited Selected Cobalamin Malabsorption with Proteinuria (CUBN, Komondor Variant)	Clear
<input checked="" type="checkbox"/> Intervertebral Disc Disease (Type I) (FGF4 retrogene - CFA12)	Clear
<input checked="" type="checkbox"/> Intestinal Lipid Malabsorption (ACSL5, Australian Kelpie)	Clear
<input checked="" type="checkbox"/> Junctional Epidermolysis Bullosa (LAMA3 Exon 66, Australian Cattle Dog Variant)	Clear
<input checked="" type="checkbox"/> Junctional Epidermolysis Bullosa (LAMB3 Exon 11, Australian Shepherd Variant)	Clear
<input checked="" type="checkbox"/> Juvenile Epilepsy (LGI2)	Clear

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OTHER RESULTS

<input checked="" type="checkbox"/> Juvenile Laryngeal Paralysis and Polyneuropathy (RAB3GAP1, Rottweiler Variant)	Clear
<input checked="" type="checkbox"/> Juvenile Myoclonic Epilepsy (DIRAS1)	Clear
<input checked="" type="checkbox"/> L-2-Hydroxyglutaricaciduria, L2HGA (L2HGDH, Staffordshire Bull Terrier Variant)	Clear
<input checked="" type="checkbox"/> Lagotto Storage Disease (ATG4D)	Clear
<input checked="" type="checkbox"/> Laryngeal Paralysis (RAPGEF6, Miniature Bull Terrier Variant)	Clear
<input checked="" type="checkbox"/> Laryngeal Paralysis and Polyneuropathy (CNTNAP1, Leonberger, Saint Bernard, and Labrador Retriever variant)	Clear
<input checked="" type="checkbox"/> Late Onset Spinocerebellar Ataxia (CAPN1)	Clear
<input checked="" type="checkbox"/> Late-Onset Neuronal Ceroid Lipofuscinosis, NCL 12 (ATP13A2, Australian Cattle Dog Variant)	Clear
<input checked="" type="checkbox"/> Leonberger Polyneuropathy 1 (LPN1, ARHGEF10)	Clear
<input checked="" type="checkbox"/> Leonberger Polyneuropathy 2 (GJA9)	Clear
<input checked="" type="checkbox"/> Lethal Acrodermatitis, LAD (MKLN1)	Clear
<input checked="" type="checkbox"/> Leukodystrophy (TSEN54 Exon 5, Standard Schnauzer Variant)	Clear
<input checked="" type="checkbox"/> Ligneous Membranitis, LM (PLG)	Clear
<input checked="" type="checkbox"/> Limb Girdle Muscular Dystrophy (SGCD, Boston Terrier Variant)	Clear
<input checked="" type="checkbox"/> Limb-Girdle Muscular Dystrophy 2D (SGCA Exon 3, Miniature Dachshund Variant)	Clear
<input checked="" type="checkbox"/> Long QT Syndrome (KCNQ1)	Clear
<input checked="" type="checkbox"/> Lundehund Syndrome (LEPREL1)	Clear
<input checked="" type="checkbox"/> Macular Corneal Dystrophy, MCD (CHST6)	Clear

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<input checked="" type="checkbox"/> Malignant Hyperthermia (RYR1)	Clear
<input checked="" type="checkbox"/> May-Hegglin Anomaly (MYH9)	Clear
<input checked="" type="checkbox"/> Medium-Chain Acyl-CoA Dehydrogenase Deficiency, MCADD (ACADM, Cavalier King Charles Spaniel Variant)	Clear
<input checked="" type="checkbox"/> Methemoglobinemia (CYB5R3, Pit Bull Terrier Variant)	Clear
<input checked="" type="checkbox"/> Methemoglobinemia (CYB5R3)	Clear
<input checked="" type="checkbox"/> Microphthalmia (RBP4 Exon 2, Soft Coated Wheaten Terrier Variant)	Clear
<input checked="" type="checkbox"/> Mucopolysaccharidosis IIIB, Sanfilippo Syndrome Type B, MPS IIIB (NAGLU, Schipperke Variant)	Clear
<input checked="" type="checkbox"/> Mucopolysaccharidosis Type IIIA, Sanfilippo Syndrome Type A, MPS IIIA (SGSH Exon 6, Dachshund Variant)	Clear
<input checked="" type="checkbox"/> Mucopolysaccharidosis Type IIIA, Sanfilippo Syndrome Type A, MPS IIIA (SGSH Exon 6, New Zealand Huntaway Variant)	Clear
<input checked="" type="checkbox"/> Mucopolysaccharidosis Type VI, Maroteaux-Lamy Syndrome, MPS VI (ARSB Exon 5, Miniature Pinscher Variant)	Clear
<input checked="" type="checkbox"/> Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII (GUSB Exon 5, Terrier Brasileiro Variant)	Clear
<input checked="" type="checkbox"/> Muscular Dystrophy (DMD, Cavalier King Charles Spaniel Variant 1)	Clear
<input checked="" type="checkbox"/> Muscular Dystrophy (DMD, Golden Retriever Variant)	Clear
<input checked="" type="checkbox"/> Muscular Dystrophy-Dystroglycanopathy (LARGE1, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/> Musladin-Lueke Syndrome, MLS (ADAMTSL2)	Clear
<input checked="" type="checkbox"/> Myasthenia Gravis-Like Syndrome (CHRNE, Heideterrier Variant)	Clear
<input checked="" type="checkbox"/> Myotonia Congenita (CLCN1 Exon 23, Australian Cattle Dog Variant)	Clear
<input checked="" type="checkbox"/> Myotonia Congenita (CLCN1 Exon 19, Labrador Retriever Variant)	Clear

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<input checked="" type="checkbox"/>	Myotonia Congenita (CLCN1 Exon 7, Miniature Schnauzer Variant)	Clear
<input checked="" type="checkbox"/>	Narcolepsy (HCRTR2 Exon 1, Dachshund Variant)	Clear
<input checked="" type="checkbox"/>	Narcolepsy (HCRTR2 Intron 4, Doberman Pinscher Variant)	Clear
<input checked="" type="checkbox"/>	Narcolepsy (HCRTR2 Intron 6, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Nemaline Myopathy (NEB, American Bulldog Variant)	Clear
<input checked="" type="checkbox"/>	Neonatal Cerebellar Cortical Degeneration (SPTBN2, Beagle Variant)	Clear
<input checked="" type="checkbox"/>	Neonatal Encephalopathy with Seizures, NEWS (ATF2)	Clear
<input checked="" type="checkbox"/>	Neonatal Interstitial Lung Disease (LAMP3)	Clear
<input checked="" type="checkbox"/>	Neuroaxonal Dystrophy, NAD (VPS11, Rottweiler Variant)	Clear
<input checked="" type="checkbox"/>	Neuroaxonal Dystrophy, NAD (TECPR2, Spanish Water Dog Variant)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 1, NCL 1 (PPT1 Exon 8, Dachshund Variant 1)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 10, NCL 10 (CTSD Exon 5, American Bulldog Variant)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 2, NCL 2 (TPP1 Exon 4, Dachshund Variant 2)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 5, NCL 5 (CLN5 Exon 4 SNP, Border Collie Variant)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 5, NCL 5 (CLN5 Exon 4 Deletion, Golden Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 6, NCL 6 (CLN6 Exon 7, Australian Shepherd Variant)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 7, NCL 7 (MFSD8, Chihuahua and Chinese Crested Variant)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8, Australian Shepherd Variant)	Clear

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<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8 Exon 2, English Setter Variant)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8 Insertion, Saluki Variant)	Clear
<input checked="" type="checkbox"/>	Neuronal Ceroid Lipofuscinosis, Cerebellar Ataxia, NCL4A (ARSG Exon 2, American Staffordshire Terrier Variant)	Clear
<input checked="" type="checkbox"/>	Oculocutaneous Albinism, OCA (SLC45A2 Exon 6, Bullmastiff Variant)	Clear
<input checked="" type="checkbox"/>	Oculocutaneous Albinism, OCA (SLC45A2, Small Breed Variant)	Clear
<input checked="" type="checkbox"/>	Oculoskeletal Dysplasia 2 (COL9A2, Samoyed Variant)	Clear
<input checked="" type="checkbox"/>	Osteochondrodysplasia (SLC13A1, Poodle Variant)	Clear
<input checked="" type="checkbox"/>	Osteogenesis Imperfecta (COL1A2, Beagle Variant)	Clear
<input checked="" type="checkbox"/>	Osteogenesis Imperfecta (SERPINH1, Dachshund Variant)	Clear
<input checked="" type="checkbox"/>	Osteogenesis Imperfecta (COL1A1, Golden Retriever Variant)	Clear
<input checked="" type="checkbox"/>	P2Y12 Receptor Platelet Disorder (P2Y12)	Clear
<input checked="" type="checkbox"/>	Pachyonychia Congenita (KRT16, Dogue de Bordeaux Variant)	Clear
<input checked="" type="checkbox"/>	Paroxysmal Dyskinesia, PxD (PIGN)	Clear
<input checked="" type="checkbox"/>	Persistent Mullerian Duct Syndrome, PMDS (AMHR2)	Clear
<input checked="" type="checkbox"/>	Pituitary Dwarfism (POU1F1 Intron 4, Karelian Bear Dog Variant)	Clear
<input checked="" type="checkbox"/>	Polycystic Kidney Disease, PKD (PKD1)	Clear
<input checked="" type="checkbox"/>	Pompe's Disease (GAA, Finnish and Swedish Lapphund, Lapponian Herder Variant)	Clear
<input checked="" type="checkbox"/>	Prekallikrein Deficiency (KLKB1 Exon 8)	Clear

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<input checked="" type="checkbox"/>	Primary Ciliary Dyskinesia, PCD (NME5, Alaskan Malamute Variant)	Clear
<input checked="" type="checkbox"/>	Primary Ciliary Dyskinesia, PCD (STK36, Australian Shepherd Variant)	Clear
<input checked="" type="checkbox"/>	Primary Ciliary Dyskinesia, PCD (CCDC39 Exon 3, Old English Sheepdog Variant)	Clear
<input checked="" type="checkbox"/>	Primary Hyperoxaluria (AGXT)	Clear
<input checked="" type="checkbox"/>	Primary Lens Luxation (ADAMTS17)	Clear
<input checked="" type="checkbox"/>	Primary Open Angle Glaucoma (ADAMTS17 Exon 11, Basset Fauve de Bretagne Variant)	Clear
<input checked="" type="checkbox"/>	Primary Open Angle Glaucoma (ADAMTS10 Exon 17, Beagle Variant)	Clear
<input checked="" type="checkbox"/>	Primary Open Angle Glaucoma (ADAMTS10 Exon 9, Norwegian Elkhound Variant)	Clear
<input checked="" type="checkbox"/>	Primary Open Angle Glaucoma and Primary Lens Luxation (ADAMTS17 Exon 2, Chinese Shar-Pei Variant)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy (SAG)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy (IFT122 Exon 26, Lapponian Herder Variant)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy 5, PRA5 (NECAP1 Exon 6, Giant Schnauzer Variant)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, Bardet-Biedl Syndrome (BBS2 Exon 11, Shetland Sheepdog Variant)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, CNGA (CNGA1 Exon 9)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, crd1 (PDE6B, American Staffordshire Terrier Variant)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, crd4/cord1 (RPGRIP1)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, PRA1 (CNGB1)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, PRA3 (FAM161A)	Clear

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<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, prcd (PRCD Exon 1)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, rcd1 (PDE6B Exon 21, Irish Setter Variant)	Clear
<input checked="" type="checkbox"/>	Progressive Retinal Atrophy, rcd3 (PDE6A)	Clear
<input checked="" type="checkbox"/>	Proportionate Dwarfism (GH1 Exon 5, Chihuahua Variant)	Clear
<input checked="" type="checkbox"/>	Protein Losing Nephropathy, PLN (NPHS1)	Clear
<input checked="" type="checkbox"/>	Pyruvate Dehydrogenase Deficiency (PDP1, Spaniel Variant)	Clear
<input checked="" type="checkbox"/>	Pyruvate Kinase Deficiency (PKLR Exon 5, Basenji Variant)	Clear
<input checked="" type="checkbox"/>	Pyruvate Kinase Deficiency (PKLR Exon 7, Beagle Variant)	Clear
<input checked="" type="checkbox"/>	Pyruvate Kinase Deficiency (PKLR Exon 10, Terrier Variant)	Clear
<input checked="" type="checkbox"/>	Pyruvate Kinase Deficiency (PKLR Exon 7, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Pyruvate Kinase Deficiency (PKLR Exon 7, Pug Variant)	Clear
<input checked="" type="checkbox"/>	Raine Syndrome (FAM20C)	Clear
<input checked="" type="checkbox"/>	Recurrent Inflammatory Pulmonary Disease, RIPD (AKNA, Rough Collie Variant)	Clear
<input checked="" type="checkbox"/>	Retina Dysplasia and/or Optic Nerve Hypoplasia (SIX6 Exon 1, Golden Retriever Variant)	Clear
<input checked="" type="checkbox"/>	Sensory Neuropathy (FAM134B, Border Collie Variant)	Clear
<input checked="" type="checkbox"/>	Severe Combined Immunodeficiency, SCID (PRKDC, Terrier Variant)	Clear
<input checked="" type="checkbox"/>	Severe Combined Immunodeficiency, SCID (RAG1, Wetterhoun Variant)	Clear
<input checked="" type="checkbox"/>	Shaking Puppy Syndrome (PLP1, English Springer Spaniel Variant)	Clear

Health Report

OTHER RESULTS

<input checked="" type="checkbox"/> Shar-Pei Autoinflammatory Disease, SPAID, Shar-Pei Fever (MTBP)	Clear
<input checked="" type="checkbox"/> Skeletal Dysplasia 2, SD2 (COL11A2, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/> Skin Fragility Syndrome (PKP1, Chesapeake Bay Retriever Variant)	Clear
<input checked="" type="checkbox"/> Spinocerebellar Ataxia (SCN8A, Alpine Dachsbracke Variant)	Clear
<input checked="" type="checkbox"/> Spinocerebellar Ataxia with Myokymia and/or Seizures (KCNJ10)	Clear
<input checked="" type="checkbox"/> Spongy Degeneration with Cerebellar Ataxia 1 (KCNJ10)	Clear
<input checked="" type="checkbox"/> Spongy Degeneration with Cerebellar Ataxia 2 (ATP1B2)	Clear
<input checked="" type="checkbox"/> Stargardt Disease (ABCA4 Exon 28, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/> Succinic Semialdehyde Dehydrogenase Deficiency (ALDH5A1 Exon 7, Saluki Variant)	Clear
<input checked="" type="checkbox"/> Thrombopathia (RASGRP1 Exon 5, American Eskimo Dog Variant)	Clear
<input checked="" type="checkbox"/> Thrombopathia (RASGRP1 Exon 5, Basset Hound Variant)	Clear
<input checked="" type="checkbox"/> Thrombopathia (RASGRP1 Exon 8, Landseer Variant)	Clear
<input checked="" type="checkbox"/> Trapped Neutrophil Syndrome, TNS (VPS13B)	Clear
<input checked="" type="checkbox"/> Ullrich-like Congenital Muscular Dystrophy (COL6A3 Exon 10, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/> Ullrich-like Congenital Muscular Dystrophy (COL6A1 Exon 3, Landseer Variant)	Clear
<input checked="" type="checkbox"/> Unilateral Deafness and Vestibular Syndrome (PTPRQ Exon 39, Doberman Pinscher)	Clear
<input checked="" type="checkbox"/> Von Willebrand Disease Type I, Type I vWD (VWF)	Clear
<input checked="" type="checkbox"/> Von Willebrand Disease Type II, Type II vWD (VWF, Pointer Variant)	Clear

Health Report

OTHER RESULTS

<input checked="" type="checkbox"/> Von Willebrand Disease Type III, Type III vWD (VWF Exon 4, Terrier Variant)	Clear
<input checked="" type="checkbox"/> Von Willebrand Disease Type III, Type III vWD (VWF Intron 16, Nederlandse Kooikerhondje Variant)	Clear
<input checked="" type="checkbox"/> Von Willebrand Disease Type III, Type III vWD (VWF Exon 7, Shetland Sheepdog Variant)	Clear
<input checked="" type="checkbox"/> X-Linked Hereditary Nephropathy, XLHN (COL4A5 Exon 35, Samoyed Variant 2)	Clear
<input checked="" type="checkbox"/> X-Linked Myotubular Myopathy (MTM1, Labrador Retriever Variant)	Clear
<input checked="" type="checkbox"/> X-Linked Progressive Retinal Atrophy 1, XL-PRA1 (RPGR)	Clear
<input checked="" type="checkbox"/> X-linked Severe Combined Immunodeficiency, X-SCID (IL2RG Exon 1, Basset Hound Variant)	Clear
<input checked="" type="checkbox"/> X-linked Severe Combined Immunodeficiency, X-SCID (IL2RG, Corgi Variant)	Clear
<input checked="" type="checkbox"/> Xanthine Urolithiasis (XDH, Mixed Breed Variant)	Clear
<input checked="" type="checkbox"/> β -Mannosidosis (MANBA Exon 16, Mixed-Breed Variant)	Clear
Mast Cell Tumor	No result

Health Report

HEALTH REPORT

Notable result

ALT Activity

Albus Lupus Ri-Na Gringo inherited one copy of the variant we tested for Alanine Aminotransferase Activity

Why is this important to your vet?

Gringo has one copy of a variant associated with reduced ALT activity as measured on veterinary blood chemistry panels. Please inform your veterinarian that Gringo has this genotype, as ALT is often used as an indicator of liver health and Gringo is likely to have a lower than average resting ALT activity. As such, an increase in Gringo's 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.

Health Report

HEALTH REPORT

– Notable result

Degenerative Myelopathy, DM

Albus Lupus Ri-Na Gringo inherited one copy of the variant we tested for Degenerative Myelopathy, DM

What does this result mean?

This variant should not impact Gringo's health. This variant is inherited in an autosomal recessive manner, meaning that a dog needs two copies of the variant to show signs of this condition. Gringo is unlikely to develop this condition due to this variant because he only has one copy of the variant.

Impact on Breeding

Your dog carries this variant and will pass it on to ~50% of his offspring. You can email breeders@embarkvet.com to discuss with a genetic counselor how the genotype results should be applied to a breeding program.

What is Degenerative Myelopathy, DM?

The dog equivalent of Amyotrophic Lateral Sclerosis, or Lou Gehrig's disease, DM is a progressive degenerative disorder of the spinal cord. Because the nerves that control the hind limbs are the first to degenerate, the most common clinical signs are back muscle wasting and gait abnormalities.

When signs & symptoms develop in affected dogs

Affected dogs do not usually show signs of DM until they are at least 8 years old.

How vets diagnose this condition

Definitive diagnosis requires microscopic analysis of the spinal cord after death. However, veterinarians use clues such as genetic testing, breed, age, and other diagnostics to determine if DM is the most likely cause of your dog's clinical signs.

How this condition is treated

As dogs are seniors at the time of onset, the treatment for DM is aimed towards increasing their comfort through a combination of lifestyle changes, medication, and physical therapy.

Actions to take if your dog is affected

- Giving your dog the best quality of life for as long as possible is all you can do after receiving this diagnosis.

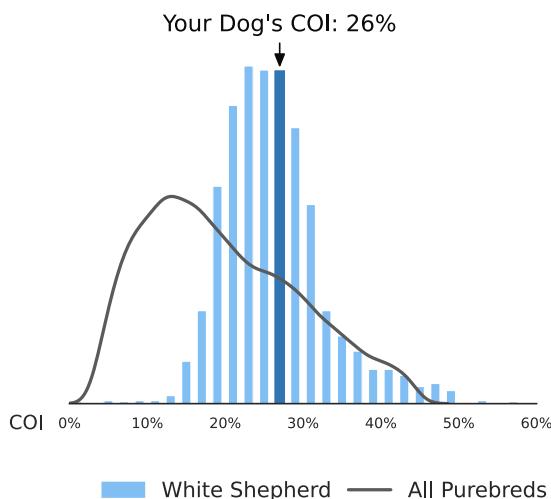
Genetic Diversity and Inbreeding

Coefficient of Inbreeding (COI)

Genetic Result: 26%

Our genetic COI measures the proportion of your dog's genome (his 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 him (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 NaN 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.