

Canine Genetic Health Certificate™

Call Name: Cooper

Registered Name: -

Breed: Toy Australian Shepherd

Sex: Male DOB: Feb. 2017

Laboratory #: 111445

Registration #:

Certificate Date:

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Dec. 27, 2018

This canine's DNA showed the following genotype(s):

DiseaseGeneGenotypeInterpretationCollie Eye AnomalyNHEJ1WT/WTNormal (clear)Cone DegenerationCNGB3WT/WTNormal (clear)Degenerative MyelopathySOD1WT/WTNormal (clear)Hereditary Cataracts (Australian Shepherd Type)HSF4WT/WTNormal (clear)HyperuricosuriaSLC2A9WT/WTNormal (clear)Intestinal Cobalamin Malabsorption (Australian Shepherd Type)AMNWT/WTNormal (clear)Multidrug Resistance 1ABCB1WT/WTNormal (clear)Multifocal Retinopathy 1BEST1WT/WTNormal (clear)Neuronal Ceroid Lipofuscinosis 6CLN6WT/WTNormal (clear)Progressive Retinal Atrophy, Progressive Rod-Cone DegenerationPRCDWT/MCarrier				
Cone Degeneration CNGB3 WT/WT Normal (clear) Degenerative Myelopathy SOD1 WT/WT Normal (clear) Hereditary Cataracts (Australian Shepherd Type) HSF4 WT/WT Normal (clear) Hyperuricosuria SLC2A9 WT/WT Normal (clear) Intestinal Cobalamin Malabsorption (Australian Shepherd Type) Multidrug Resistance 1 ABCB1 WT/WT Normal (clear) Multifocal Retinopathy 1 BEST1 WT/WT Normal (clear) Neuronal Ceroid Lipofuscinosis 6 CLN6 WT/WT Normal (clear) Progressive Retinal Atrophy, Progressive Rod-Cone PRCD WT/M Carrier	Disease	Gene	Genotype	Interpretation
Degenerative Myelopathy SOD1 WT/WT Normal (clear) Hereditary Cataracts (Australian Shepherd Type) HSF4 WT/WT Normal (clear) Hyperuricosuria SLC2A9 WT/WT Normal (clear) Intestinal Cobalamin Malabsorption (Australian Shepherd Type) Multidrug Resistance 1 ABCB1 WT/WT Normal (clear) Multifocal Retinopathy 1 BEST1 WT/WT Normal (clear) Neuronal Ceroid Lipofuscinosis 6 CLN6 WT/WT Normal (clear) Progressive Retinal Atrophy, Progressive Rod-Cone PRCD WT/M Carrier	Collie Eye Anomaly	NHEJ1	WT/WT	Normal (clear)
Hereditary Cataracts (Australian Shepherd Type) Hyperuricosuria SLC2A9 WT/WT Normal (clear) Intestinal Cobalamin Malabsorption (Australian Shepherd Type) Multidrug Resistance 1 ABCB1 WT/WT Normal (clear) Multifocal Retinopathy 1 BEST1 WT/WT Normal (clear) Normal (clear) Normal (clear) Multifocal Retinopathy 1 Normal (clear) Normal (clear) Normal (clear) Normal (clear) Normal (clear) Normal (clear)	Cone Degeneration	CNGB3	WT/WT	Normal (clear)
Hyperuricosuria SLC2A9 WT/WT Normal (clear) Intestinal Cobalamin Malabsorption (Australian Shepherd Type) Multidrug Resistance 1 ABCB1 WT/WT Normal (clear) Multifocal Retinopathy 1 BEST1 WT/WT Normal (clear) Neuronal Ceroid Lipofuscinosis 6 CLN6 WT/WT Normal (clear) Progressive Retinal Atrophy, Progressive Rod-Cone PRCD WT/M Carrier	Degenerative Myelopathy	SOD1	WT/WT	Normal (clear)
Intestinal Cobalamin Malabsorption (Australian Shepherd Type) Multidrug Resistance 1 Multifocal Retinopathy 1 Normal (clear) Meuronal Ceroid Lipofuscinosis 6 CLN6 WT/WT Normal (clear) Normal (clear) Normal (clear) WT/WT Normal (clear) CLN6 WT/WT Normal (clear) CLN6 WT/WT Carrier	Hereditary Cataracts (Australian Shepherd Type)	HSF4	WT/WT	Normal (clear)
Shepherd Type) Multidrug Resistance 1	Hyperuricosuria	SLC2A9	WT/WT	Normal (clear)
Multifocal Retinopathy 1 BEST1 WT/WT Normal (clear) Neuronal Ceroid Lipofuscinosis 6 CLN6 WT/WT Normal (clear) Progressive Retinal Atrophy, Progressive Rod-Cone PRCD WT/M Carrier	· · · · · · · · · · · · · · · · · · ·	AMN	WT/WT	Normal (clear)
Neuronal Ceroid Lipofuscinosis 6 CLN6 WT/WT Normal (clear) Progressive Retinal Atrophy, Progressive Rod-Cone PRCD WT/M Carrier	Multidrug Resistance 1	ABCB1	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone PRCD WT/M Carrier	Multifocal Retinopathy 1	BEST1	WT/WT	Normal (clear)
	Neuronal Ceroid Lipofuscinosis 6	CLN6	WT/WT	Normal (clear)
		PRCD	WT/M	Carrier

WT, wild type (normal); M, mutant; Y, Y chromosome (male)

Helen F Smith, PhD

Heller Shouth

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Christina J Ramirez, PhD, DVM, DACVP

Medical Director

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Paw Print Genetics[®] performed the tests listed on this dog. See the Laboratory Report for interpretation and recommendations based on these findings. The genes/diseases reported here were selected by the client. Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the tests' accuracy and precision. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results. Genetic counseling is available at Paw Print Genetics.