Paw Print Genetics
A division of Genetic Veterinary Sciences, Inc.

Canine Genetic Health Certificate©

Call Name:	Simon	**Laboratory #:**	3502
Registered Name:	Kerhaven's The X Factor	**Registration #:**	AL510920
Breed:	Smooth Collie	**Microchip #:**	952000000831033
Sex:	Male	**Certificate Date:**	Sept. 11, 2014
DOB:	June 2013		

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

Disease	Gene	Genotype	Interpretation
Collie eye anomaly	*NHEJ1*	WT/M	Carrier
Cone degeneration (Group A)	*CNGB3*	WT/WT	Normal
Degenerative myelopathy	*SOD1*	WT/WT	Normal
Dilated cardiomyopathy	*PDK4*	WT/WT	Normal
Dilute (D-locus) coat color	*MLPH*	WT/WT	Normal
Exercise-induced collapse	*DNM1*	WT/WT	Normal
Gallbladder mucoceles	*ABCB4*	WT/WT	Normal
Hyperuricosuria	*SLC2A9*	WT/WT	Normal
Intestinal cobalamin malabsorption (Group B)	*CUBN*	WT/WT	Normal
Multidrug resistance 1	*ABCB1*	WT/WT	Normal
Multifocal retinopathy 1	*BEST1*	WT/WT	Normal
Neuronal ceroid lipofuscinosis 5	*CLN5*	WT/WT	Normal

WT, wild type (normal); M, mutant

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. Genetic counseling is available at Paw Print Genetics.

Blake C Ballif, PhD
Laboratory & Scientific Director

Casey R Carl, DVM
Associate Medical Director

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Disease	Gene	Genotype	Interpretation
Neuronal ceroid lipofuscinosis 6	*CLN6*	WT/WT	Normal
Primary ciliary dyskinesia	*CCDC39*	WT/WT	Normal
Primary lens luxation	*ADAMTS17*	WT/WT	Normal
Progressive retinal atrophy, Progressive rod-cone degeneration	*PRCD*	WT/WT	Normal
Spongiform leukoencephalomyelopathy	*CYTB*	WT/WT	Normal
Trapped neutrophil syndrome	*VPS13B*	WT/WT	Normal
Von Willebrand disease II	*VWF*	WT/WT	Normal
Von Willebrand disease III (Group B)	*VWF*	WT/WT	Normal

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