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

Canine Genetic Health Certificate™

Call Name:	Morgan	**Laboratory #:**	410437
Registered Name:	CH BLUE ELK'S LITTLE BIT OF CAPTAIN	**Registration #:**	DN68088312
Breed:	Miniature American Shepherd	**Microchip #:**	956000014184384
Sex:	Male	**Certificate Date:**	July 31, 2023
DOB:	July 2021		

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

Disease	Gene	Genotype	Interpretation
Collie Eye Anomaly	*NHEJ1*	WT/WT	Normal (Clear)
Degenerative Myelopathy (Common Variant)	*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)	*AMN*	WT/WT	Normal (Clear)
Intestinal Cobalamin Malabsorption (Border Collie Type)	*CUBN*	WT/WT	Normal (Clear)
Multidrug Resistance 1	*ABCB1*	WT/WT	Normal (Clear)
Multifocal Retinopathy 1	*BEST1*	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	*PRCD*	WT/WT	Normal (Clear)

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

Blake C Ballif, PhD
Laboratory & Scientific Director

Christina J Ramirez, PhD, DVM, DACVP
Medical Director

Paw Print Genetics® performed the testing on the dog listed on this certificate. 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. The results included in this report relate only to the items tested using the sample provided. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the test(s)' accuracy and precision with >99.9% sensitivity and specificity. The presence of mosaicism may not be detected by this test. Non-paternity may lead to unexpected results. This is not a breed identification test. 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.