

Canine Genetic Health Certificate™

Call Name: Holani

Registered Name: SandStorm's Meet Me on the Blue at

Macushla

Breed: Labrador Retriever

Sex: Female DOB: Dec. 2022

Laboratory #: 386508

Registration #: SS38296702

Microchip #: 991001005384769

Certificate Date: April 21, 2023

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

Disease	Gene	Genotype	Interpretation
Centronuclear Myopathy	PTPLA	WT/WT	Normal (clear)
Congenital Myasthenic Syndrome (Labrador Retriever Type)	COLQ	WT/WT	Normal (clear)
Copper Toxicosis (Labrador Retriever Type) ATP7A	ATP7A	WT/M	Carrier Female
Copper Toxicosis (Labrador Retriever Type) ATP7B	ATP7B	WT/M	At-Risk
Degenerative Myelopathy	SOD1	WT/WT	Normal (clear)
Exercise-Induced Collapse	DNM1	WT/M	Carrier
Hereditary Nasal Parakeratosis (Labrador Retriever Type)	SUV39H2	WT/WT	Normal (clear)
Macular Corneal Dystrophy (Labrador Retriever Type)	CHST6	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Golden Retriever 2	TTC8	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	PRCD	WT/WT	Normal (clear)
Retinal Dysplasia/Oculoskeletal Dysplasia 1	COL9A3	WT/WT	Normal (clear)
Skeletal Dysplasia 2	COL11A2	WT/WT	Normal (clear)
Stargardt Disease	ABCA4	WT/WT	Normal (clear)

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

Blake C Ballif, PhD

Laboratory & Scientific Director

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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.