

Canine Genetic Health Certificate™

Call Name:	Bruce	Laboratory #:	123701
Registered Name:	Ch Sandstone It's Hard To Be A Saint In The City	Registration #:	SS062645/06
Breed:	Labrador Retriever	Microchip #:	981020027114808
Sex:	Male	Certificate Date:	March 30, 2021
DOB:	June 2018		

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

Disease	Gene	Genotype	Interpretation
Copper Toxicosis (Labrador Retriever Type) ATP7A	<i>ATP7A</i>	WT/Y	Normal/Clear Male
Copper Toxicosis (Labrador Retriever Type) ATP7B	<i>ATP7B</i>	WT/M	At-Risk
Exercise-Induced Collapse	<i>DNM1</i>	WT/WT	Normal (clear)
Hereditary Nasal Parakeratosis	<i>SUV39H2</i>	WT/WT	Normal (clear)
Macular Corneal Dystrophy (Labrador Retriever Type)	<i>CHST6</i>	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	<i>PRCD</i>	WT/WT	Normal (clear)

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



Blake C Ballif, PhD
Laboratory & Scientific Director



Casey R Carl, DVM
Associate Medical Director

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.



Coat Color and Trait Certificate

Call Name: Bruce
Registered Name: Ch Sandstone It's Hard To Be A Saint In The City
Breed: Labrador Retriever
Sex: Male
DOB: June 2018

Laboratory #: 123701
Registration #: SS062645/06
Microchip #: 981020027114808
Certificate Date: Jan. 20, 2020

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

Coat Color/Trait Test	Gene	Genotype	Interpretation
D Locus (Dilute)	MLPH	D/D	Non dilute
L Locus (Long Hair/Fluffy)	FGF5	Sh/Sh	Shorthaired

Interpretation:

This dog carries two copies of **D** which does not result in the "dilution" or lightening of the black and yellow/red pigments that produce the dog's coat color. The base coat color of this dog will be primarily determined by the E, K, A, and B genes. This dog will pass on **D** to 100% of its offspring.

This dog carries two copies of **Sh** which results in short hair. However, the overall coat type of this dog is dependent on the combination of this dog's genotypes at the L, Cu, and IC loci. This dog will pass **Sh** on to 100% of its offspring.

Paw Print Genetics® has genetic counseling available to you at no additional charge to answer any questions about these test results, their implications and potential outcomes in breeding this dog.

**Note: At the client's request, this certificate was amended on Jan. 20, 2020 to update the registered name for this dog.*

Helen F Smith, PhD
Assistant Laboratory Director

Christina J Ramirez, PhD, DVM, DACVP
Medical Director

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