

Laboratory Report

Laboratory #:	142694	Call Name:	Dash
Order #:	63663	Registered Name:	-
Ordered By:	Lauren Sikkema	Breed:	Australian Cobberdog
Ordered:	July 23, 2019	Sex:	Male
Received:	Aug. 15, 2019	DOB:	Dec. 2016
Reported:	Aug. 20, 2019	Registration #:	-

Results:

Disease	Gene	Genotype	Interpretation
Copper Toxicosis (Labrador Retriever Type) ATP7A	ATP7A	M/Y	Carrier Male
Copper Toxicosis (Labrador Retriever Type) ATP7B	ATP7B	WT/WT	Normal (clear)

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

Interpretation:

Molecular genetic analysis was performed for two specific mutations reported to be associated with copper toxicosis in dogs (one deleterious mutation and one protective mutation). We identified two normal copies of the DNA sequences in the *ATP7B* gene tested. Thus, this dog is not at an increased risk for Copper Toxicosis (Labrador Retriever Type). In addition, we identified one mutant copy of the DNA sequence for *ATP7A*. Thus, this dog carries one copy of the protective mutation for Copper Toxicosis (Labrador Retriever Type).

Recommendations:

No mutations were identified in the *ATP7B* gene. Thus, this dog is not at an increased risk for copper toxicosis. This dog was also tested for a genetic mutation of the *ATP7A* gene which partially protects against copper toxicosis in dogs that have inherited the *ATP7B* mutation described above. This dog carries one copy of the *ATP7A* gene mutation. The *ATP7A* gene mutation is more effective at decreasing the risk of copper toxicosis in male dogs than females. However, since multiple factors (both genetic and environmental) play a role in causing copper toxicosis, the *ATP7A* mutation is not completely protective in either sex. Note: The *ATP7A* mutation is located on the X-chromosome. Since males only have a single X chromosome they can only inherit a single copy of this mutation.

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.



Christina J Ramirez, PhD, DVM, DACVP
 Medical Director



Casey R Carl, DVM
 Associate Medical Director

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.