

Laboratory Report

Laboratory #:	10086	Call Name:	Tug
Order #:	3414	Registered Name:	Steady Under Fire
Ordered By:	Rosanne Starkman	Breed:	Labrador Retriever
Ordered:	April 9, 2015	Sex:	Male
Received:	May 4, 2015	DOB:	Oct. 2009
Reported:	May 8, 2015	Registration #:	WU324338
		Tattoo:	5EF3WLE

Results:

Disease	Gene	Genotype	Interpretation
Centronuclear myopathy	<i>PTPLA</i>	WT/M	Carrier
Degenerative myelopathy	<i>SOD1</i>	WT/WT	Normal
Exercise-induced collapse	<i>DNM1</i>	WT/WT	Normal
Hereditary nasal parakeratosis	<i>SUV39H2</i>	WT/WT	Normal
Progressive retinal atrophy, Progressive rod-cone degeneration	<i>PRCD</i>	WT/WT	Normal
Retinal dysplasia/Oculoskeletal dysplasia 1	<i>COL9A3</i>	WT/WT	Normal
Skeletal dysplasia 2	<i>COL11A2</i>	WT/WT	Normal

WT, wild type (normal); M, mutant

Interpretation:

Molecular genetic analysis was performed for specific mutations of seven genes reported to be associated with disease in dogs. We identified two normal copies of the DNA sequences in six of the genes tested. Thus, this dog is not at an increased risk for any of the diseases associated with these six genes. However, we identified one normal copy and one mutant copy of the DNA sequences for *PTPLA*. Thus, this dog is a carrier of centronuclear myopathy.

Recommendations:

Centronuclear myopathy is inherited in an autosomal recessive fashion. Based on this, and the fact that this dog showed a mutation in one copy of the *PTPLA* gene, this dog is a carrier of this disease. Although this dog is not clinically affected by this mutation, if bred with another carrier, the pairing could produce affected offspring. To avoid producing affected offspring, this dog should be bred with dogs that are normal (WT/WT) for this gene. Dogs related to this dog have an increased risk to be affected by or carry the mutated gene. Additional testing for this mutation is indicated for related dogs.

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.