

220 E. Rowan, Suite 220 Spokane, Washington 99207 www.pawprintgenetics.com (509) 483-5950

# **Laboratory Report**

**Laboratory #:** 223762 **Call Name:** Monroe

Order #: 101501 Registered Name:

Ordered By: Julie Stephens Breed: Aussiedoodle

 Ordered:
 Feb. 25, 2021
 Sex:
 Female

 Received:
 March 8, 2021
 DOB:
 Aug. 2019

**Reported:** March 17, 2021 **Registration #:** -

### **Results:**

DiseaseGeneGenotypeInterpretationCollie Eye AnomalyNHEJ1WT/WTNormal (clear)Craniomandibular OsteopathySLC37A2WT/WTNormal (clear)Degenerative MyelopathySOD1WT/WTNormal (clear)Hereditary Cataracts (Australian Shepherd Type)HSF4WT/WTNormal (clear)HyperuricosuriaSLC2A9WT/WTNormal (clear)Intestinal Cobalamin Malabsorption (Australian Shepherd Type)AMNWT/WTNormal (clear)Multidrug Resistance 1ABCB1WT/WTNormal (clear)Neonatal Encephalopathy with SeizuresATF2WT/WTNormal (clear)OsteochondrodysplasiaSLC13A1WT/WTNormal (clear)Progressive Retinal Atrophy, Progressive Rod-Cone DegenerationPRCDWT/WTNormal (clear)Von Willebrand Disease IVWFWT/WTNormal (clear)				
Craniomandibular Osteopathy  Degenerative Myelopathy  Hereditary Cataracts (Australian Shepherd Type)  Hyperuricosuria  Intestinal Cobalamin Malabsorption (Australian Shepherd Type)  Multidrug Resistance 1  Neonatal Encephalopathy with Seizures  ATF2  Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration  WT/WT  Normal (clear)  WT/WT  Normal (clear)  Normal (clear)  WT/WT  Normal (clear)  Normal (clear)  Normal (clear)	Disease	Gene	Genotype	Interpretation
Degenerative Myelopathy  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)  Multidrug Resistance 1 ABCB1 WT/WT Normal (clear)  Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration  WT/WT Normal (clear)  Normal (clear)	Collie Eye Anomaly	NHEJ1	WT/WT	Normal (clear)
Hereditary Cataracts (Australian Shepherd Type)  Hyperuricosuria  SLC2A9  WT/WT  Normal (clear)  Intestinal Cobalamin Malabsorption (Australian Shepherd Type)  Multidrug Resistance 1  Neonatal Encephalopathy with Seizures  ATF2  WT/WT  Normal (clear)  Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration  WT/WT  Normal (clear)	Craniomandibular Osteopathy	SLC37A2	WT/WT	Normal (clear)
Hyperuricosuria  SLC2A9  WT/WT  Normal (clear)  Intestinal Cobalamin Malabsorption (Australian Shepherd Type)  Multidrug Resistance 1  Neonatal Encephalopathy with Seizures  ATF2  WT/WT  Normal (clear)  Osteochondrodysplasia  SLC13A1  WT/WT  Normal (clear)  Normal (clear)  Normal (clear)  Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	Degenerative Myelopathy	SOD1	WT/WT	Normal (clear)
Intestinal Cobalamin Malabsorption (Australian Shepherd Type)  Multidrug Resistance 1  Neonatal Encephalopathy with Seizures  Osteochondrodysplasia  Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration  MI/WT  Normal (clear)  WT/WT  Normal (clear)  WT/WT  Normal (clear)  Normal (clear)	Hereditary Cataracts (Australian Shepherd Type)	HSF4	WT/WT	Normal (clear)
Shepherd Type)  Multidrug Resistance 1  Neonatal Encephalopathy with Seizures  ATF2  WT/WT  Normal (clear)  Normal (clear)  SLC13A1  WT/WT  Normal (clear)  Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration  WT/WT  Normal (clear)	Hyperuricosuria	SLC2A9	WT/WT	Normal (clear)
Neonatal Encephalopathy with Seizures  ATF2 WT/WT Normal (clear)  Osteochondrodysplasia SLC13A1 WT/WT Normal (clear)  Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration  WT/WT Normal (clear)		AMN	WT/WT	Normal (clear)
Osteochondrodysplasia SLC13A1 WT/WT Normal (clear)  Progressive Retinal Atrophy, Progressive Rod-Cone PRCD WT/WT Normal (clear)  Degeneration	Multidrug Resistance 1	ABCB1	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone PRCD WT/WT Normal (clear) Degeneration	Neonatal Encephalopathy with Seizures	ATF2	WT/WT	Normal (clear)
Degeneration	Osteochondrodysplasia	SLC13A1	WT/WT	Normal (clear)
Von Willebrand Disease I VWF WT/WT Normal (clear)	1 3 0	PRCD	WT/WT	Normal (clear)
	Von Willebrand Disease I	VWF	WT/WT	Normal (clear)

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

# Interpretation:

Molecular genetic analysis was performed for 11 specific mutations reported to be associated with disease in dogs. We identified two normal copies of the DNA sequences in 11 mutations tested. Thus, this dog is not at an increased risk for the diseases associated with these 11 mutations.

#### **Recommendations:**

No mutations were identified. Thus, this dog is not at an increased risk for the diseases caused by or associated with the mutations tested. Because this dog is "clear" of these mutations, this dog will only pass the normal genes on to its offspring. 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. Paw Print Genetics<sup>®</sup> 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.

Sha (Sally)

Blake C Ballif, PhD Laboratory & Scientific Director Cheffy

## Christina J Ramirez, PhD, DVM, DACVP 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.