Paw Print Genetics
A division of Genetic Veterinary Sciences, Inc.

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Laboratory Report

Laboratory #:	162472	**Call Name:**	Molly
Order #:	72079	**Registered Name:**	MW Rising Star
Ordered By:	Darah Gestes	**Breed:**	Bernedoodle
Ordered:	Jan. 15, 2020	**Sex:**	Female
Received:	Feb. 6, 2020	**DOB:**	Jan. 2019
Reported:	Feb. 19, 2020	**Registration #:**	-
		Microchip #:	932002000584926

Results:

Disease	Gene	Genotype	Interpretation
Degenerative Myelopathy	*SOD1*	WT/WT	Normal (clear)
Degenerative Myelopathy (Bernese Mountain Dog Type)	*SOD1*	WT/M	Carrier
GM2 Gangliosidosis (Poodle Type)	*HEXB*	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	*PRCD*	WT/WT	Normal (clear)
Von Willebrand Disease I	*VWF*	WT/WT	Normal (clear)

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

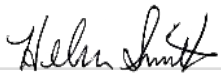
Interpretation:

Molecular genetic analysis was performed for seven specific mutations reported to be associated with disease in dogs. We identified two normal copies of the DNA sequences in six of the mutations tested. Thus, this dog is not at an increased risk for the diseases associated with these six mutations. However, we identified one normal copy and one mutant copy of the DNA sequences for *SOD1*. Thus, this dog is a carrier of Degenerative Myelopathy (Bernese Mountain Dog Type).

Recommendations:

Degenerative Myelopathy (Bernese Mountain Dog Type) is inherited in an autosomal recessive fashion. Based on this, and the fact that this dog showed a mutation in one copy of the *SOD1* gene, this dog is a carrier of this disease. Although dogs that carry only one copy of this mutation will not be clinically affected, 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.



Helen F Smith, PhD
Assistant Laboratory 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.

Orthopedic Foundation for Animals
Preliminary (Consultation) Report

A Not-For-Profit Organization

MIDWEST'S RISING STAR
registered name

HYBRID
breed

932002000584926
tattoo/microchip/DNA profile

2123095
application number

film/case no(s)

NOREG2123095
registration number

F
sex

1/1/2019
date of birth

13
age at evaluation in months

2/10/2020
date of report

Owner
DARAH GESTES
470 BARKWOOD LN
GLEN CARBON, IL 62034

Veterinarian
VETERINARY GROUP OF CHESTERFIELD
17709 EDISON AVE STE A
CHESTERFIELD, MO 63005

RADIOGRAPHIC EVALUATION OF PELVIC PHENOTYPE WITH RESPECT TO HIP DYSPLASIA

* The study must be repeated when the animal is 24 months of age or older to qualify for an OFA number.

_____ **EXCELLENT HIP JOINT CONFORMATION***
superior hip joint conformation as compared with other individuals of the same breed and age

__√__ **GOOD HIP JOINT CONFORMATION***
well formed hip joint conformation as compared with other individuals of the same breed and age

_____ **FAIR HIP JOINT CONFORMATION***
minor irregularities of the hip joint conformation as compared with other individuals of the same breed and age

_____ **BORDERLINE HIP JOINT CONFORMATION**
marginal hip joint conformation of indeterminate status with respect to hip dysplasia at this time – **Repeat study in six months**

_____ **MILD HIP DYSPLASIA**
radiographic evidence of minor dysplastic changes of the hip joints

_____ **MODERATE HIP DYSPLASIA**
well defined radiographic evidence of dysplastic changes of the hip joints

_____ **SEVERE HIP DYSPLASIA**
radiographic evidence of marked dysplastic changes of the hip joints

HIP JOINTS - STANDARD VD VIEW
RADIOGRAPHIC FINDINGS

_____subluxation
_____remodeling of femoral head/neck
_____osteoarthritis/degenerative joint disease
_____shallow acetabula
_____acetabular rim/edge change
_____unilateral pathology _____left _____right
_____transitional vertebra
_____spondylosis
_____panosteitis
_____other

ELBOW JOINTS – FLEXED LATERAL VIEW

__√__ negative for elbow dysplasia __√__ L __√__ R

ELBOW DYSPLASIA

Grade I	L_____	R_____
Grade II	L_____	R_____
Grade III	L_____	R_____

RADIOGRAPHIC FINDINGS

degenerative joint disease (DJD)	L_____	R_____
ununited anconeal process (UAP)	L_____	R_____
fragmented coronoid process (FCP)	L_____	R_____
osteochondrosis	L_____	R_____

Consultation by: Greg Keller DVM
G.G. KELLER, DVM, MS, DACVR
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Coat Color and Trait Certificate

Call Name:	Molly	**Laboratory #:**	162472
Registered Name:	MW Rising Star	**Registration #:**	-
Breed:	Bernedoodle	**Microchip #:**	932002000584926
Sex:	Female	**Certificate Date:**	Feb. 19, 2020
DOB:	Jan. 2019		

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

Coat Color/Trait Test	Gene	Genotype	Interpretation
Cu Locus (Curly Hair)	*KRT71*	Cu/Cu^{C}	Wavy/Curly coat (carrier)

Interpretation:

This dog carries one copy of **Cu^{C}** and one copy of **Cu** which results in a wavy or curly coat. 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 **Cu^{C}** on to 50% of its offspring and **Cu** to 50% of its offspring.

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