

Finnish Kennel Club
Suomen Kennelliitto
Kamreerintie 8
02770 Espoo
Finland

LABOKLIN GmbH&CoKG
Steubenstraße 4
DE-97688 Bad Kissingen
Fax-Nr.: +49 971 68546
Tel.: +49 971 72020

Report

No.: 1901-W-04396
Date of arrival: 23-01-2019
Testing started: 23-01-2019
Date of report: 12-02-2019
Testing completed: 01-02-2019

```
+-----+
| Patient identification: Dog          unknown          * 08.08.17 |
|                               Pitkäkarvainen Collie |
| Owner / Animal-ID:              Koistinen, Heidi |
| Type of sample:                  EDTA-Blood |
| Date sample was taken:           17-01-2019 |
+-----+
```

Parameter	Value	Reference value
-----------	-------	-----------------

Name:	Millakes Hefty Galvyn	
-------	------------------------------	--

Stud book no.:	FI46074/17	
----------------	-------------------	--

Chip no.:	981098106578306	
-----------	------------------------	--

Tattoo no.:	---	
-------------	-----	--

Degenerative Myelopathy - PCR

Result: Genotype N/N (exon 2)

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the high-risk factor for DM in exon 2 of the SOD1-gene.

Trait of inheritance: autosomal-recessive

Please note: In the Bernese Mountain Dog breed the mutation in exon 1 of the SOD1-gene also occurs in correlation with DM.

Hyperuricosuria - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for HUU in the SLC2A9-gene.

Trait of inheritance: autosomal-recessive

rcd2-PRA - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for

rcd2-PRA in the RD3-gene.

Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Collie

*MDR1 genetic test - PCR

Result: Genotype N/MDR (+/-)

Interpretation: The examined animal is heterozygous for the causative mutation for MDR in the ABCB1-gene.

Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Australian Shepherd, Border Collie, Elo, German Shepherd, Longhaired Whippet, McNab, Old English Sheepdog, Rough/Smooth Collie, Shetland Sheepdog, Silken Windhound, Weller, White Shepherd

The DNA-test is run according to the publication of Mealey et al. (2001) "Ivermectin sensitivity in collies is associated with a deletion mutation of the mdr1 gene." and detects the mutation MDR1 nt230 (del4).

MDR1 genetic test carried out according to DIN EN ISO/IEC 17025 in our partnerlaboratory. Liability for specification of samples (e.g. name, identity of animal) lies by the sender.

*Collie Eye Anomaly (CEA) - PCR

Result: Genotype N/CEA

Interpretation: The examined animal is heterozygous for the causative mutation for CEA in the NHEJ1-gene.

Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Australian Shepherd, Bearded Collie, Border Collie, Boykin Spaniel, Hokkaido, Lancashire Heeler, Longhaired Wippet, Nova Scotia Duck Tolling Retriever, Rough/Smooth Collie, Shetland Sheepdogs, Silken Windhound

Sampling:

The following impartial person (veterinarian, breed warden, or similar) signed the form for the sampling and identity check of the animal:

Lotta Axelson

The current result is only valid for the sample submitted to our

laboratory. The sender is responsible for the correct information regarding the sample material. The laboratory can not be made liable. Furthermore, any obligation for compensation is limited to the value of the tests performed.

There is a possibility that other mutations may have caused the disease/phenotype. The analysis was performed according to the latest knowledge and technology.

The laboratory is accredited for the performed tests according to DIN EN ISO/IEC 17025:2005. (except partner lab tests).

courier costs

*** END of report ***

Hr. Dr. Beitzinger
Dipl.-Biol. Molekularbiologie

*: test performed by partnerlaboratory