

LABOKLIN GmbH & Co. KG · Steubenstraße 4 · 97688 Bad Kissingen

Dyrlegen i
Bardu
Industriveien 1
9360 Bardu
Norwegen

Report No.: **2107-W-07319**
Date of arrival: 28.07.2021
Date of report: 03.08.2021
Testing started: 28.07.2021
Testing completed: 03.08.2021

| | |
|------------------------|---------------------|
| Species: | Dog |
| Breed: | Border Collie |
| Gender: | Female |
| Name: | Queen |
| Stud book No.: | NO 44977/19 |
| Chip No.: | 578098100674388 |
| Date of birth / Age: | 03.05.2019 |
| Type of sample: | EDTA-Blood |
| Date sample was taken: | 22.07.2021 |
| Treating veterinarian: | Sofie Delphin-Solli |
| Owner / Animal-ID: | Olsson, Ken Are |
| IT No. / Report-ID: | --- |

Raine Syndrome - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for Raine Syndrome in the FAM20C-gene.

Trait of inheritance: autosomal-recessive

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

Imerslund-Gräsbeck-Syndrome (IGS) - PCR

Result: Genotype N/N

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

Trait of inheritance: autosomal-recessive

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

Trapped Neutrophil Syndrome (TNS) - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for TNS in the VPS13B-gene.

Trait of inheritance: autosomal-recessive

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

Neuronal Ceroid Lipofuszinosis (NCL) -PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for NCL in the CL5-gene.

Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Border Collie, Australian Cattle Dog

Glaucoma and Goniodysgenesis (GG) - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype allele. It does not carry the causative mutation for glaucoma in the OLFML3 gene.

Trait of inheritance: autosomal recessive

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

Sensory Neuropathy (SN) - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for SN in the FAM134B-gene.

Trait of inheritance: autosomal-recessive

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

MDR1 genetic test - PCR

Result: Genotype N/N (+/+)

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry 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, Wäller, White Shepherd

Please note: in individual cases, heterozygous dogs can show clinical signs!

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 Kelpie and Shepherd, Bearded Collie, Border Collie, Boykin Spaniel, Hokkaido, Lancashire Heeler, Longhaired Wippet, Nova Scotia Duck Tolling Retriever, Rough/Smooth Collie, Shetland Sheepdogs, Silken Windhound

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 17025:2018. (except partner lab tests).

These results are based on the sample material submitted to our laboratory.

This was suitable if not stated otherwise. The submitter is responsible for the accuracy of the information regarding the sample. This report can only be transmitted in toto and unchanged. Doing otherwise requires written permission from Laboklin GmbH & Co. KG.

LABOKLIN is an accredited laboratory according to DIN EN ISO/IEC 17025:2018, DAkS No. D-PL-13186-01-01 and D-PL-13186-1-02. The accreditation applies to all test procedures listed in the accreditation certificate.



Fr. MSc Michelle Meißler
Abt. Molekularbiologie

***** END of report *****

PCR diagnostics for equine herpes virus

Due to the currently increased need for PCR tests for EHV1 and EHV4, we are performing this test for you up to 4 times a day. Results are usually available within 1-2 working days after arrival of the sample in the lab.