

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

Dyreklinikken Bergen Vest AS  
Lyderhornsveien 295  
5171 Loddefjord  
Norwegen

**Report No.:** **2203-W-20719**  
Date of arrival: 18.03.2022  
Date of report: 22.03.2022  
Testing started: 18.03.2022  
Testing completed: 22.03.2022

Species:	Dog
Breed:	Border Collie
Gender:	Female
Name:	Boella
Chip No.:	578098100646604
Date of birth / Age:	09.10.2018
Type of sample:	EDTA-Blood
Date sample was taken:	17.03.2022
Owner / Animal-ID:	Eggoey, Venke
IT No. / Report-ID:	78541

### **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/TNS

Interpretation: The examined animal is heterozygous for 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

### **MDR1 gene variant - 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).

### **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

### **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

**Collie Eye Anomaly (CEA) - PCR**

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry 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, DAkkS 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.Dipl.-Biol. Bärbel Gunreben  
Abt. Molekularbiologie

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



Laboklin App

**\*\*\* Breeding season has started \*\*\***

Bacteriological examination of cervical swabs provides valuable information for assessing the clinical health status of the mare. Culture examination along with pathogen differentiation and resistance testing using the microdilution method supports targeted antibiotic treatment when potentially pathogenic bacterial colonisation is detected.