

#### GENETIC CERTIFICATE

Ms Ingelise NIELSEN

Karbymark 7 7960 Karby DENMARK

Name: Labanc-volgyi Freya

Specie: Dog

Breed: Bernese Mountain Dog

ID Number: 991 001 000 955 708

Pedigree Number:

Gender: Female Birth date: 10/03/2017

Owner:

**NIELSEN Ingelise** 7960 Karby (DK)

Customer Nb: C97846

Sample Number: 597 291 (Authenticated)

Sample type: Blood sample Sample date: 27/09/2018 Request date: 03/10/2018

Sampler veterinarian:

**HOVGAARD SORENSEN René** 

7900 Nykobing Mors (DK) Official number:

File Nu.: 152 575 Animal Number: 174 572 Result code: 330226

#### **Histiocytic Sarcoma (Test SH)**

Result:

Index B

Interpretation:

Neutral index - not predictive of higher or lower risk of developing Histiocytic Sarcoma.

This genetic test should be just one of the many selection criteria. It is important within a breeding population to give priority to individuals with the best index but is also of the utmost importance when selecting breeding pairs that sufficient genetic diversity is maintained in the breed.

Result established on 12/10/2018 Certificate issued on 12/10/2018

Méline Corniquel Genetic Analyst

Caroline Dufaure De Citres Genetic Analyst

This genetic test for Histiocytic Sarcoma is based on 9 genetic markers (Panel SH0912) identified from scientific research on Histiocytic Sarcoma on Bernese Mountain Dogs carried out by the Canine Genetics Team of the CNRS of Rennes, France. The methods used to calculate the genetic index were based on a population of 1081 European dogs, mainly from France. The test for Histiocytic Sarcoma has three possible results expressed as an index: index A, the individual tested has a four times lower risk of developing Histiocytic Sarcoma; index B means neutral index; index C, the individual tested has a four times higher risk of developing Histiocytic Sarcoma. This genetic test is simply a probability test, and this must be clearly accepted by the user.

This genetic test is designed solely to be a tool to help breeders in their breeding decisions. As a probability test, the test SH is subject to error and should not therefore be used, under no circumstances, as a commercial or advertising point by breeders.

The ANTAGENE laboratory will provide the necessary state-of-the-art technology to guarantee the reliability of its genetic test.



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Karbymark 7 7960 Karby **DENMARK** 

Specie: Dog

Breed: Bernese Mountain Dog

ID Number: 991 001 000 955 708

Pedigree Number:

Gender: Female Birth date : 10/03/2017

Owner:

**NIELSEN Ingelise** 7960 Karby (DK) Customer Nb: C97846

Result code: 330225

Degenerative Myelopathy (DM-sod1b)

Result:

Normal homozygous

Interpretation:

The animal has 2 normal copies of the SOD1B allele. The animal will not develop the form of Degenerative Myelopathy associated to the tested mutation. The animal will not transmit the genetic anomaly to its progeny.

Genetic Analyst

Result established on 09/10/2018 Certificate issued on 09/10/2018

Manon Silvestre

Méline Corniquel Genetic Analyst

Explanation

This test is specific to Degenerative Myelopathy in Bernese Mountain dog. This disorder is inherited as an autosomal recessive trait. This test relies on the detection of the c.52A>T mutation in the SOD1 gene (Zeng et al. 2014). This test can not be used to detect other forms of degenerative myelopathy, nor other hereditary forms of neurological diseases, nor other neurological disorders acquired during the life span of the animal. An another DNA test (DM-sod1A) is available to detect an other form of Degenerative Myelopathy in this breed

The laboratory ANTAGENE puts at its disposal all resources and means necessary with regards to reliability, quality assurance, and traceability in order to guarantee a result of 99% accuracy.



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Pedigree Number:

Gender: Female Birth date : 10/03/2017

Owner:

**NIELSEN Ingelise** 7960 Karby (DK) Customer Nb : C97846 Sample Number: 597 291 (Authenticated)

Sample type : Blood sample Sample date : 27/09/2018 Request date: 03/10/2018

Sampler veterinarian :

**HOVGAARD SORENSEN René** 

7900 Nykobing Mors (DK) Official number:

File Nu.: 152 575 Animal Number: 174 572 Result code: 330224

# Degenerative Myelopathy (DM-sod1a)

Result:

Normal homozygous

Interpretation:

The animal has 2 normal copies of the SOD1A allele. The animal will not develop the form of Degenerative Myelopathy associated to the tested mutation. The animal will not transmit the genetic anomaly to its progeny.

Genetic Analyst

Result established on 09/10/2018 Certificate issued on 09/10/2018

Manon Silvestre

Méline Corniquel Genetic Analyst

This test is specific to Degenerative Myelopathy in Bernese Mountain dog. This disorder is inherited as an autosomal recessive trait. This test relies on the detection of the c.118G>A mutation in the SOD1 gene (Awano et al. 2009). This test can not be used to detect other forms of degenerative myelopathy, nor other hereditary forms of neurological diseases, nor other neurological disorders acquired during the life span of the animal. An another DNA test (DM-sod1B) is available to detect an other form

The laboratory ANTAGENE puts at its disposal all resources and means necessary with regards to reliability, quality assurance, and traceability in order to guarantee a