

## GENETIC CERTIFICATE

**Ms Erika BROMOSE**

Dystedvej 24  
4684 Holmegaard  
DENMARK

Name : **Fruenshøj's Dorit de Luxe**

Specie : **Dog**  
Breed : **Bernese Mountain Dog**  
  
ID Number : **208 250 000 143 606**  
Pedigree Number : **DK03613/2020**

Gender : **Female**  
Birth date : **16/02/2020**

Owner :  
**BROMOSE Erika**  
4684 Holmegaard (DK)  
Customer Nb : C73578

Sample Number : **683 608**  
Sample type : Blood sample  
Sample date : 07/04/2020  
Request date : 18/05/2020

Sample realized by :  
**SIF BERG Trine** (Veterinarian)  
4700 Naestved (DK)  
Official Nb : **v3704**  
Authenticated sample

File Nu. : 176 845  
Animal Number : 219 550  
Result code : 408235

### Degenerative Myelopathy (DM-sod1a)

Result : **Heterozygous**

Interpretation : The animal has 1 normal copy and 1 defective copy of the SOD1A allele. The animal will not develop the form of Degenerative Myelopathy associated to this single mutation. Statistically the animal will transmit the genetic anomaly to 50% of its progeny. An another DNA test (DM-sod1b) is available to detect an other form of Degenerative Myelopathy in this breed. Dogs heterozygous for both SOD1A and SOD1B may also develop a Degenerative Myelopathy associated to this double heterozygosity.

Mathilde Verdier  
Genetic Analyst



Magali Kernalyguen  
Genetic Analyst



Result established on 28/05/2020

Certificate issued on 28/05/2020

#### 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.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 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.