

## GENETIC CERTIFICATE

**Ms Therese BRATENES**

Nedre Langgt 105  
1743 Klavestadhaugen  
NORWAY

Name : **Mirakel Morten Av Triomar**

Specie : **Dog**  
Breed : **Bernese Mountain Dog**

ID Number : **NO33188/19**  
Pedigree Number : **No33188/19**

Gender : **Male**  
Birth date : **06/02/2019**

Owner :  
**BRATENES Therese**  
1743 Klavestadhaugen (NO)  
Customer Nb : C77418

Sample Number : **621 913**  
Sample type : Cheek swab sample  
Sample date : 27/03/2019  
Request date : 16/04/2019

Sample realized by :  
**TORP Per August** (Veterinarian)  
1890 Rakkestad (NO)  
Official Nb : **8771**  
Authenticated sample

File Nu. : 160 896  
Animal Number : 195 265  
Result code : 356589

### 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.

Magali Kernaleguen  
Genetic Analyst

Elodie Belmonte  
Genetic Analyst

Result established on 25/04/2019

Certificate issued on 04/05/2019



#### Explanation

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.