

## Order for LPN1 genetic testing Leonberger Polyneuropathy

Leonbergers may suffer from a hereditary neurological disease, which has frequently been termed "inherited polyneuropathy (IPN)" or "Leonberger polyneuropathy (LPN)" by veterinarians and breeders. Affected dogs suffer from slowly worsening exercise intolerance and may develop gait abnormalities, such as an exaggerated hitched step, especially in the hind limbs. There is often wasting of the hind limb muscles as well. Additionally, these dogs may have noisy breathing, a change in their bark, or even difficulty breathing due to involvement of the larynx and laryngeal folds in the throat. Eventually the disease may progress to the point where the dog can no longer support its own weight. We investigated the genetic mechanisms leading to LPN and identified one of several genetic risk factors termed LPN1. This allowed the development of a DNA test that allows the unequivocal diagnosis of homozygous and heterozygous carriers of this deleterious mutation.

For genetic testing a 2-5 ml **EDTA blood sample** of the animal in question is required. The use of plastic tubes is recommended. Blood samples should be sent in a padded envelope without cooling to our laboratory. They have to arrive within 3 days of sample taking. Please send the samples together with this signed order form to:

**Institut für Genetik**  
**Stichwort „Leonberger“**  
**Bremgartenstrasse 109A**  
**CH-3001 Bern**

The direct genetic test costs 110.-- CHF or 75.-- EUR. As we cannot run the complete procedure for single individual samples, it may take 1-3 months until a result is obtained.

### **Animal to be analyzed (EDTA blood sample):**

**Name / Kennel:** \_\_\_\_\_

**Animal ID:** \_\_\_\_\_

**Date of birth:** \_\_\_\_\_ **Sex (m/f):** \_\_\_\_\_

### **Owner of the animal**

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone/e-mail:** \_\_\_\_\_

### **Owner's declaration of consent**

I agree to genetic testing in the animals indicated above. I also agree that the test result and sample material may be used for further scientific research. In the case of SHSB-registered dogs, the test result will be communicated to the Swiss Leonberger Club.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

### **Confirmation of correct sampling and animal identity** **Veterinarian (stamp):**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature