

Dr Kirsten Wylie Total Veterinary Services 516 Gloucester St Linwood Christchurch

GS10 5099-5103

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Juvenile epilepsy gene test in Lagotto Romagnolo breed

Lab.no	Dog's name:	Microchip/tattoo no	Result of gene test:
5099	Miabella Chiaro Di Luna	978101080179434	Carrier
5100	Azzuronastro Larrabella	982009106351781	Carrier
5101	Takahoa Te Tahi	978000001241179	Carrier
5102	Lagottostar Ale-Ebar	985121005346117	Carrier
5103	Azzuronastro Ariela	985120019168008	Carrier

Benign juvenile epilepsy in Lagottos is an autosomal recessive disorder and the test results are interpreted follows:

Normal: No epilepsy mutation and therefore no predisposition to juvenile

epilepsy

Carrier: Heterozygote for the juvenile epilepsy mutation (carries one copy of

the juvenile epilepsy mutation)

Affected: Homozygote for the juvenile epilepsy mutation (carries two copies of

the juvenile epilepsy mutation)

Puppies that have increased risk of developing juvenile epilepsy can be born if both parents are heterozygote. The probability of having affected puppies in that case is approximately 25%. If one parent is heterozygote and the other homozygote (affected) the probability of having affected puppies is 50%. If both parents are homozygote only affected puppies will be born. Puppies homozygous for the mutation become affected and experience seizures of variable extent and severity. Few individual heterozygous carriers have also been reported with seizures. The reason for this is unclear with the following possible explanations under further investigations: the carrier puppy has another mutation in the same gene, or there is another mutation in another gene, or the heterozygosity for the mutation lowers the seizure threshold in some puppies. The breed suffers also from a persisting and progressive juvenile ataxia resulting often to the euthanasia of the affected puppy. In addition, there is an adult-onset epilepsy caused by other genetic factors. If your Lagotto was tested as a carrier but has experienced seizures please contact our customer service (info@genoscoper.com) for further investigation. We are also looking for more ataxia and adult-onset epilepsy cases from the breed to study the genetics of these disorders.

On behalf of Genoscoper.

Marjut Ritala, Medical Laboratory Technologist

Genoscoper Oy, PL 36, 00501 Helsinki, Puh. (09) 737 823, Fax (09) 737 827 into a genoscoper com www.genoscoper.com