HT diagnostics

Biomedicum Helsinki Haartmaninkatu 8, room B332a 00290 Helsinki Helsinki 7.7.2008

Breed: Lagotto Romagnolo

Dogs name and register number: Creccio del Amici per Sempre SHSB/LOS 649874

Test result: The dog does not carry the juvenile epilepsy mutation.

The interpretation of the result:

In Lagotto Romagnolo breed the susceptibility to juvenile epilepsy is inherited in autosomal recessive fashion. This means that a dog can have three different genetical statuses concerning the epilepsy mutation

NORMAL = no epilepsy mutation and therefore no predisposition to juvenile epilepsy

CARRIER (HETEROZYGOTE) = Heterozygote towards the epilepsy gene so only the other chromosome carries the mutation. A heterozygote does not develop epilepsy but can transfer the gene defect approximately to 50% of its. Carriers can be used in breeding but should only be mated with normal individuals.

AFFECTED(HOMOZYGOTE)= Homozygote towards the epilepsy gene (both of the chromosomes carry the mutation). A homozygote has an increased risk of developing juvenile epilepsy. Homozygote carriers should not be used in breeding because all of its offsprings will be either heterozygote or homozygote carriers.

Puppies that have an increased risk of developing juvenile epilepsy can be born if both parents are heterozygotes. The probability of having affected puppies in that case is approximately 25%. If one parent is heterozygote and the other homozygote the probability of having affected puppies is 50%. If both parents are homozygote only affected puppies will be born.

On behalf of HT-Diagnostics

Elina Vuorenmaa, geneticist