

# Result certificate #215110

Detection of c.531-2A>G mutation in DMD gene causing GRMD in Golder Retrievers

Customer: Míšek Pavel, Radošov 192, 36272 Kyselka, Czech Republic Sample: Sample: 22-31704 Date received: 15.11.2022 Sample type: buccal swab

#### Information provided by the customer Name: Nelson Golden Victory Breed: Golden Retriever Tattoo number: BNY 4513

Microchip: 643 099 011 505 604 Reg. number: ČLP/GR/23461 Date of birth: 11.06.2021 Sex: male Date of sampling: 14.11.2022 The identity of the animal has been checked by MVDr. Sabina Marie Šteklová, KVL 4726

# Result: Xn/Y

### Explanation

Presence or absence of c.531-2A>G mutation in DMD gene causing Muscular Dystrophy in Golder Retrievers was tested. GRMD is a degenerative muscular disease causing loss of active muscular tissue and movement disorders. Disease is usually expressed in puppies around 8 weeks of age. Dogs with severe form die soon after diagnosis, while dogs with milder form of the disease can survive several years. GRMD is X-linked recessive disease.

### Females have XX chromosomes. So females have three possibilities as regards GRMD:

XnXn - females with two normal X chromosomes = normal phenotype, a healthy female XnXm - females with one normal X (Xn) and one mutant X (Xm) = a female carrier. XmXm - females with two mutated X chromosomes = an affected female

#### Males have XY chromosomes. So they have two possibilities as regards GRMD:

XnY - normal phenotype, a healthy male XmY - an affected male; he inherited mutated X chromosome from his mother

Method: SOP172-GRMD, direct DNA sequencing

Date of issue: 29.11.2022 Date of testing: 15.11.2022 - 29.11.2022 Approved by: Mgr. Martina Šafrová, Laboratory Manager



Genomia s.r.o, Republikánská 6, 31200 Plzeň, Czech Republic www.genomia.cz, laborator@genomia.cz, tel: +420 373 749 999

Report verification code is: 5D2W-E3KY-JQ7D-5KAE-22EC. You can verify report online at www.genomia.cz Without a written consent by the lab, the report must not be reproduced unless as a whole. The result refers only to the sample as received. Genomia is not responsible for the accuracy of the information provided by the customer.