

Detection of c.669delA mutation in TTC8 gene causing GR-PRA2 disease in Golden Retrievers

**Customer:** Dušan Kollárik, Belá 33, 03811 Belá-Dulice, Slovak Republic

**Sample:**

Sample: 25-05401

Date received: 04.03.2025

Sample type: buccal swab

Information provided by the customer

**Name:** Heidi Bella Aurea

**Breed:** Golden Retriever

Microchip: 941 000 026 557 633

Reg. number: SPKP 4826/24

Date of birth: 17.6.2023

Sex: female

Date of sampling: 28.02.2025

The identity of the animal has been checked by MVDr. Juraj Chorváth, 0011

**Result: Mutation was not detected (N/N)**

**Legend:** N/N = wild-type genotype. N/P = carrier of the mutation. P/P = mutated genotype (individual will be most probably affected with the disease). (N = negative, P = positive)

**Explanation**

Presence or absence of c.669delA mutation in TTC8 gene causing GR-PRA2 (Golden Retriever Progressive Retinal Atrophy) was tested. Disease is characterized by loss of vision due to degeneration of the photoreceptor cells of the retina. Most GR-PRA2 cases are clinically indistinguishable from other forms of PRA. The age of diagnosis is most commonly at a relatively late age of approximately 5 years.

Mutation that causes GR-PRA2 is inherited as an autosomal recessive trait. That means the disease affects dogs with P/P genotype only. The dogs with N/P genotype are considered carriers of the disease (heterozygotes). In offspring of two heterozygous animals following genotype distribution can be expected: 25 % N/N, 25 % P/P and 50 % N/P.

If there is a reason to believe that the dog can suffer from retinal atrophy, it is recommended that the dogs are tested for GR-PRA2 together with GR-PRA1 and PRA-prcd. It is highly probable that other mutation responsible for this disease will be discovered in future.

Method: SOPAgriseq\_canine, ngs, accredited method

Date of issue: 14.03.2025

Date of testing: 04.03.2025 - 14.03.2025

Approved by: Mgr. Markéta Dajbychová, Deputy Laboratory Manager



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Report verification code is: K4QH-NHQT-RRXF-19BR-6289. You can verify report online at [www.genomia.cz](http://www.genomia.cz)

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