GENOMIA
genetic laboratory

Result certificate #340926

Detection of c.118G>A mutation in SOD1 gene causing degenerative myelopathy in dogs

Customer: Serhii Korenchenko, Mladé gardy 2781/1, 43401 Most 1, Czech Republic
Sample:
Sample: 26-14508
Date received: 18.06.2026
Sample type: buccal swab

Information provided by the customer
Name: DANALIYA FLY KODI-ARCH
Breed: Papillon
Microchip: 900 263 004 156 117
Reg. number: CMKU/PAP/6125/-26/25
Date of birth: 05.05.2025
Sex: male
Date of sampling: 17.06.2026
The identity of the animal has been checked by MVDr. Alice Šimková, KVL 7073

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.118G>A mutation in exon 2 of SOD1 gene causing degenerative myelopathy in many canine breeds was tested. This mutation is sometimes referred to as SOD1A. Affected dogs have progressive loss of movement and gradual worsening of the condition up to complete paralysis. The age of disease onset and symptoms severity vary among the breeds.

Mutation SOD1A 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 (healthy non-carriers), 25 % P/P (affected), and 50 % N/P (healthy carriers).

The test does not exclude existence of another, nowadays unknown, mutation which can cause DM. In Bernese Mountain Dogs, there has been identified also SOD1B mutation responsible for DM - this test does not refer about SOD1B.

Analysis was performed by the partner laboratory. Genomia guarantees the quality of its partner's services.

Method: SOP188-MPS-canine, MPS

Date of issue: 25.06.2026
Date of testing: 18.06.2026 - 25.06.2026
Approved by: Mgr. Martina Šafrová, Laboratory Manager

verified and certified document
GENOMIA genetic laboratory

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

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