

**Customer:** Jan Novák, Dlouhá 1, 30000 Plzeň, Czech Republic

**Sample:**

Sample: 21-12351

Date received: 01.02.2021

Sample type: horsehair

Information provided by the customer

**Name:** Black And White DEMO

**Breed:** Český teplokrevník

Date of birth: 25.11.2016

Reg.number : DE-123-456-789-012

Tattoo: 123456789012345

Sex: male

Date of sampling: 01.02.2021

The identity of the animal has been checked by MVDr. Veselý Josef.

**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.1423C>T mutation in B3GALNT2 gene causing Hydrocephalus in horses was tested. A genetically determined form of hydrocephalus has been confirmed particularly in Friesian horses, Belgian draft horses, and warmblood breeds. Hydrocephalus is a life-threatening condition characterized by excessive accumulation of cerebrospinal fluid in or around the brain ventricles. This condition leads to a progressive increase in skull volume, cranial deformities, and elevated intracranial pressure, which negatively affects brain function and manifests as neurological disorders. Affected individuals may exhibit impaired motor coordination, lethargy, difficulty suckling, seizures, or behavioral abnormalities.

Mutation that causes Hydrocephalus is inherited as an autosomal recessive trait. That means the disease affects horses with P/P genotype only. The horses 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.

Method: SOP172-B3GALNT2, direct DNA sequencing

Date of issue: 06.02.2021

Date of testing: 01.02.2021 - 06.02.2021

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: 12AB-CD34-GENO-MIA0-EFGH. You can verify report online at [www.genomia.cz](http://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 tested sample, as received. Genomia is not responsible for the accuracy of the information provided by the customer.