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LETORT Céline Veaux -63820 Laqueuille Frankreich

### **Test Report**

Order No.: 209832 Customer No.: D104493 Date of Receipt: 2018-01-16 Date of Analysis: 2018-02-07 Date of Report: 2018-02-08 Date of Print: 2018-02-08

No of Pages: 1

## Analysis of the predisposition to dwarfism in Miniature Horses (ACAN D1, D2, D3, D4)

Name: Dakota Girl du Cap de la Coste

201800137 Lab-No .: Identification: A222014 Gender: female Date of birth: 2013-04-19

Test	Inheritance	Result
ACAN	recessiv	Normal (N/N)

Remark: The analysis was performed by a partner laboratory.

> In literature 4 mutations in the ACAN gene were described which are responsible for dwarfism in Miniature Horses. The genotypes D1/D1, D1/D2, D1/D3 and D1/D4 are lethal. Therefore, breeding with D1 carriers should be avoided.

Legend:

Normal: The animal does not carry the mutation. When used in breeding this animal will not spread the predisposition into the population.

Carrier: The animal is heterozygous for the predisposition. When used in breeding on average 50% of the offspring will inherit the mutated allele. Carriers (D1, D2, D3, D4) of the predisposition will not show dwarfism-like symptoms.

Affected: The animal has two mutated alleles and will be affected by disproportionate dwarfism. When used in breeding all offspring will inherit a mutated allele.

Lethal: Affected animals with a D1 genotype (D1/D1, D1/D2, D1/D3 or D1/D4) are not viable. Unknown: The genotypes D3/D3 and D4/D4 have not been detected in any animal yet. Therefore,

the effect of these mutations remains unclear.

Comment:

( ) Dr. Weber, Proxy

Rheinbach, 2018-02-08 Please note:

> Sampling and shipment has been done by the client. All results and identifications refer to the samples and information sent by the customer and cannot be verified by

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( ) Dr. Jansen, Managing Director ( ) Dr. van Haeringen, Managing Director

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#### SKELETAL ATAVISM REPORT

LETORT CÉLINE **VEAUX** 63820 LAQUEUILLE **FRANCE** 

NQ54723 Case: 13-Jan-2020 Date Received:

Print Date: 17-Jan-2020

5306-5486-3301-2019 Report ID:

Verify report at www.vgl.ucdavis.edu/myvgl/verify.htm

Name: DAKOTA Reg:

YOB: Sex: Mare Breed: Miniature Horse

# **Skeletal Atavism Test Result**



#### Interpretation of Results

N/N Normal. No copies of the skeletal atavism mutations detected.

N/Del1 Carrier. 1 copy of a skeletal atavism mutation detected. N/Del2 Carrier. 1 copy of a skeletal atavism mutation detected.

Del1/Del1 Affected. 2 copies of mutation detected. Del2/Del2 Affected. 2 copies of mutation detected. Affected. 2 copies of mutation detected. Del1/Del2

Skeletal atavism (SA) is a heritable recessive defect of bone development that occurs in Shetland ponies and American Miniature horses. SA limb deformities progressively worsen with age and usually lead to euthanasia within six months.

> For more information on Skeletal Atavism test, see https://www.vgl.ucdavis.edu/services/horse/SkeletalAtavism.php http://www.capiletgenetics.com/en/skeletal-atavism-test-eng