



GENETIC CERTIFICATE

Mme Eva FWALD
Hunsr uch Str.39
D-41352 KORSCHENBROICH
DEUTSCHLAND

Call name : **Felidae**
Registered name : **Felidae v. Tim-Est**
Affix :
Prefix :
Breed : **Norv gien**
Identification Nu : **276098510164001**

Sex : **F**
Birth's date : **18/07/97**
Pedigree Nu : **FE.LO5.NFO.D.009**

Veterinarian:
Dr Marletta BARTELS
(DUSSELDORF, D-40476, Germany)
Sampling date: **26/07/07**
Sampling Nu: **149322**

Glycogen Storage Disease type IV (GSD IV)

⇒ The cat Felidae is **Normal homozygous** for the Glycogen Storage Disease type IV

The result can be interpreted using the table below, which is based on knowledge of this genetic disease at the date of certificate edition

DNA test results	Genetic status	Will develop the disease ?	Will transmit the genetic anomaly ?
Normal homozygous (clear)	2 normal copies of <i>GBE1</i> gene	NO	NO
Heterozygous (carrier)	1 normal copy and 1 defective copy of <i>GBE1</i> gene	NO	YES statistically to 50% of its progeny
Mutated homozygous (affected)	2 defective copies of <i>GBE1</i> gene	YES neonatal mortality, potential survival until 15 months	Not able to reproduce

Certificate edited on the 24/08/07 by :

Dr Delphine DELATTRE
PhD in Genetics

TEST SPECIFICATIONS

Test accuracy: This test is specific to the Glycogen Storage Disease type IV in Norwegian Forest Cat (GSD IV, autosomal recessive disease). This disease is the main inherited metabolic disease in Norwegian Forest Cat. This test relies on the detection of the normal form of *GBE1* gene and the only defective form known up to date (Fyfe, *et al.* 2007). This test can not be used to detect other forms of hereditary glycogen storage diseases, nor other inherited metabolic diseases, nor other metabolic ailments acquired during the life span of the animal.

Test reliability

Sensitivity: probability of correct identification of the defective form of *GBE1* gene in heterozygous or mutated homozygous cat is higher than 99 %
Specificity: probability of correct identification of the normal form of *GBE1* gene in a normal homozygous or heterozygous cat is higher than 99%

SPECIFICATIONS DU TEST

Pr cision du test: Ce test est sp cifique de la Glycog nose de type IV du Chat des For ts Norv giennes (maladie autosomale r cessive). Cette maladie est la principale maladie m tabolique d'origine g n tique chez le Chat des For ts Norv giennes. Ce test repose sur la d tection de la forme normale du g ne *GBE1* et de la seule forme d fectueuse connue   ce jour (Fyfe *et al.* 2007). Le test n'est pas utilisable pour d tecter d'autres formes h r ditaires de glycog nososes, d'autres maladies m taboliques h r ditaires ou d'autres affections m taboliques acquises durant la vie de l'animal.

Fiabilit  du test

Sensibilit : la probabilit  d'identification correcte de la forme d fectueuse du g ne *GBE1* chez un chat h t rozygote ou homozygote mut  est sup rieure   99%
Sp cificit : la probabilit  d'identification correcte de la forme normale du g ne *GBE1* chez un chat homozygote normal ou h t rozygote est sup rieure   99%

