

**REFERENCE NO.:** 2021 - 044590/01

**OWNER:**

MARIA MÜLLERSDORF  
HUMMELSLINDAN 1  
SE-64592 STRÄNGNÄS  
SWEDEN

**NAME/LABEL:**

NORTHWORTH CROWN PAINTED BLUE

**SPECIES:** DOG

**BREED:** ENGLISH COCKER SPANIEL

**SEX:** MALE

**MICROCHIP NO.:** 985111001919820

**TATOO NO.:** NOT PROVIDED

**PEDIGREE NO.:** SE44151/2019

## GENETIC REPORT

**SAMPLE:** BUCCAL SWAB

**SAMPLE TAKEN BY:** KERSTIN AF UGGLAS, DVM, UGGLAS VETERINÄRPRAKTIK, ASPÖ, SÄBY HARRGARD,  
64593 STRÄNGNÄS, SWEDEN

**REQUESTED TEST:** FAMILIAR NEPHROPATHY (FN) OR HEREDITARY NEPHROPATHY

**RESULT:** CLEAR (WT/WT)

**COMMENT :**

The test examines presence or absence of COL4A4 gene mutation (c.115A>T) described as the cause of familial nephropathy (FN) in English Cocker Spaniel. The disease is characterized by glomerular basement membrane defects that result in impaired kidney function. Affected dogs typically develop severe renal disease by the age of 6 to 24 months. COL4A4 gene defect is inherited as an autosomal recessive trait.

Regarding to the presence of tested mutation animals are classified in three groups:

- Clear (wt/wt) - mutation is not present, normal genotype
- Carrier (mut/wt) - one of two alleles carries tested mutation, disease is not clinically manifested
- Affected (mut/mut) - both alleles carry tested mutation, disease is clinically manifested

For each group different breeding strategies should be followed. Breeding of affected and carrier animals should be avoided. If particularly valuable animal is classified as affected, it should be bred only with clear animal. In such case, all first generation siblings will be carriers. If a carrier is bred with clear animal, 50% of siblings are expected to be clear. In case two carriers are bred, 25% of siblings are expected to be clear and 50% are expected to be carriers. However, 25% of siblings are expected to be affected, therefore such breeding practice is discouraged.

AUTHORIZED SIGNATURE:

MARIBOR, 12.01.2022