



REFERENCE NO.: 2018 - 20302

OWNER:

JENNIFER ZIESERL
ÜBERSBACH 199
AT-8280 ÜBERSBACH
AUSTRIA

NAME/LABEL:

CLAN ABBY DANGER ZONE
SPECIES: DOG
BREED: BORDER COLLIE
SEX: MALE
MICROCHIP NO.: 953010001322295
TATOO NO.: NOT PROVIDED
PEDIGREE NO.: ANKC 3100347128

GENETIC REPORT

SAMPLE: BUCCAL SWAB

SAMPLE TAKEN BY: OWNER

REQUESTED TEST: IMERSLUND-GRASBECK SYNDROME (IGS)

RESULT: CLEAR

COMMENT :

The test examines presence or absence of CUBN gene mutation (c.8392delC) described as the cause of Imerslund-Gräsbeck syndrome (IGS) in Border Collie. The disease is characterized by cobalamin malabsorption that leads to vitamin B12 deficiency and consequently causes dyshematopoiesis, lethargy, failure to thrive, and life-threatening metabolic disruption in juvenile period of life. CUBN 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, 17.07.2018

Molekularna diagnostika