

REFERENCE NO.: 2024 - 067664/01**OWNER:**TETIANA TRUFIN
VIA CESARE BATTISTI 1
IT-27040 VERRUA PO
ITALY**NAME/LABEL:**

ROMA

SPECIES: DOG**BREED:** STAFFORDSHIRE BULL TERRIER**SEX:** FEMALE**MICROCHIP NO.:** 380260171529348**TATOO NO.:** -**PEDIGREE NO.:** LO22158855

GENETIC REPORT

SAMPLE: ISOLATED DNA**SAMPLE TAKEN BY:** CHIARA REZZANI, DVM -, -, -, ITALY**REQUESTED TEST:** HEREDITARY CATARACT (HSF4)**RESULT:** CLEAR (WT/WT)**COMMENT :**

The test examines presence or absence of HSF4 gene mutation (g.85286582-85286583insC) described as the cause of primary hereditary cataract (HC) in Staffordshire Bull Terrier, Boston Terrier and French Bulldog. The disease is characterized by opacity of the crystalline lens, which leads to blindness. Tested HSF4 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, 22.11.2024