

OWNER:

SARTORI FABRIZIO
IT-37010 PASTRENGO
ITALY

DATE:29.03.2024

TEST REPORT NO. 212625

TEST: DEGENERATIVE MYELOPATHY (DM)

MUTATION: c.118G>A in SOD1 gene

RESULT: CLEAR (NORMAL/NORMAL)

ANIMAL NAME: HEIDI-F DEI RUBACUORI DI VERONA (CM.24/T)

SPECIES: DOG

BREED: POODLE- TOY

MICROCHIP NO.:

PEDIGREE NO.:

SAMPLE TYPE: ISOLATED DNA

SAMPLE TAKEN BY: DANIELE BELARDINELLI, DVM

RESULT COMMENT:

Clear (normal/normal): tested mutation is not present, normal genotype.

Carrier (normal/mutation): one allele carries tested mutation, disease is not clinically manifested.

Affected (mutation/mutation): both alleles carry tested mutation, disease is clinically manifested.

AUTHORIZED SIGNATURE:



Results are valid for laboratory analysed samples only.

REFERENCE NO.: 2024 - 062072/01**OWNER:**

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IT-37010 PASTRENGO

ITALY

NAME/LABEL:

HEIDI-F DEI RUBACUORI DI VERONA (CM.24/T)

SPECIES: DOG**BREED:** POODLE- TOY**SEX:** FEMALE**MICROCHIP NO.:** TATOO NO.:**PEDIGREE NO.:**

GENETIC REPORT

SAMPLE: ISOLATED DNA**SAMPLE TAKEN BY:** DANIELE BELARDINELLI, DVM**REQUESTED TEST:** B LOCUS**RESULT:**
Variant B^c: B^c/B^c
Variant B^d: B^d/B^d
Variant B^s: B^s/B^s**GENOTYPE:** B/B**COMMENT :**

The test examines presence or absence of three TYRP1 gene mutations on B locus (variant **bc**: c.121T>A, variant **bs**: c.991C>T and variant **bd**: c.1033_1036delCCT) associated with brown coat, nose and foot pads colour. Tested mutations affect dog coat colour by disrupting regular black pigment synthesis, which causes the dilution of black pigmented areas to brown. The bc, bd, and bs alleles cause brown colour when at least one of them is present on both gene copies at the B locus. The trait is inherited in autosomal recessive manner.

The overall B locus genotype for a dog is determined by the combination of the genotypes at the bc, bd, and bs loci. According to the presence of tested alleles dogs are classified in three groups:

- **B/B** - The dog carries two copies of **B** allele (black) and does not carry alleles for brown colour (bc, bd or bs). The dog will not express brown colour determined by B locus. Only dominant B alleles will be transferred to the offspring.
- **B/b** - The dog carries one copy of **B** allele and one copy of **b** allele at bc, bd or bs loci. The dog is a carrier of brown colour determined by B locus (brown colour will not be expressed). There is a 50% probability to transfer the allele for brown colour to the offspring.
- **b/b** - The dog carries two copies of **b** allele at bc, bd or bs locus. The dog will express brown colour determined by B locus. The dog will transfer one recessive b allele to its entire offspring.

NOTE: When two or three single copy variants of bc, bd, and bs are detected, the presence of multiple variants on a single copy of the gene cannot be excluded. Therefore, the overall B locus genotype for a dog could be B/b or b/b (the dog can appear black or brown) and cannot be determined by the laboratory without additional testing of parents. In such cases, the overall B locus genotype will not be summarized and will appear as CANNOT BE DETERMINED.

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ITALY**NAME/LABEL:**

HEIDI-F DEI RUBACUORI DI VERONA (CM.24/T)

SPECIES: DOG**BREED:** POODLE- TOY**SEX:** FEMALE**MICROCHIP NO.:****TATOO NO.:****PEDIGREE NO.:**

GENETIC REPORT

SAMPLE: ISOLATED DNA**SAMPLE TAKEN BY:** DANIELE BELARDINELLI, DVM**REQUESTED TEST:** E LOCUS**RESULT:** e/e**COMMENT :**

Locus E is examined for MC1R gene mutation (c.914C>T) or e allele that enables expression of other coat colour loci and causes black coat colour to change to yellow-red coat colour which is inherited autosomal recessive.

The dog carries two copies of recessive e allele, thus expressing yellow-red coat colour (breed specific: yellow, red, cream, apricot). Expression of other coat colour loci is disabled. Colour of the nose, eyes, and pads is expressed independently of genotype e/e (regulated by B locus). The dog is homozygous for yellow-red coat colour and will always transfer one copy of recessive e allele to its offspring.

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Results are valid for laboratory analysed samples only. Accuracy of the data about animal identity is the sole responsibility of the customer/owner. Laboratory is not responsible for false results which arise due to inaccurate animal identity data, false sample labels etc. To the extent the law allows, the maximal compensation for potential false result is limited to the invoiced amount. With the test it is not possible to rule out the presence of other genetic changes which might affect the development of the disease. Testing is performed according to the latest scientific knowledge.

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HEIDI-F DEI RUBACUORI DI VERONA (CM.24/T)

SPECIES: DOG**BREED:** POODLE- TOY**SEX:** FEMALE**MICROCHIP NO.:****TATOO NO.:** N**PEDIGREE NO.:**

GENETIC REPORT

SAMPLE: ISOLATED DNA**SAMPLE TAKEN BY:** DANIELE BELARDINELLI, DVM**REQUESTED TEST:** NEONATAL ENCEPHALOPATHY (NEWS)**RESULT:** CLEAR (WT/WT)**COMMENT :**

The test examines presence or absence of ATF2 gene mutation (c.152T>G) described as the cause of neonatal encephalopathy (NE) in Standard Poodle. The disease affects brain development. Affected puppies are small and weak. Symptoms are progressively getting worse. Disease progression can be accompanied by severe generalized seizures. Puppies die before seven weeks of age. Tested ATF2 gene mutation 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.

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HEIDI-F DEI RUBACUORI DI VERONA (CM.24/T)

SPECIES: DOG**BREED:** POODLE- TOY**SEX:** FEMALE**MICROCHIP NO.:****TATOO NO.:****PEDIGREE NO.:**

GENETIC REPORT

SAMPLE: ISOLATED DNA**SAMPLE TAKEN BY:** DANIELE BELARDINELLI, DVM**REQUESTED TEST:** PROGRESSIVE RETINAL ATROPHY (PRA-PRCD)**RESULT:** CLEAR (WT/WT)**COMMENT :**

The test examines presence or absence of PRCD gene mutation (c.5G>A) described as the cause of one form of progressive retinal atrophy (PRA) in several dog breeds. PRA-PRCD is a late onset disease characterized by progressive degeneration of retinal cells. PRCD 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.

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SPECIES: DOG**BREED:** POODLE- TOY**SEX:** FEMALE**MICROCHIP NO.:****TATOO NO.:****PEDIGREE NO.:**

GENETIC REPORT

SAMPLE: ISOLATED DNA**SAMPLE TAKEN BY:** DANIELE BELARDINELLI, DVM**REQUESTED TEST:** PROGRESSIVE RETINAL ATROPHY (PRA-RCD4)**RESULT:** CLEAR (WT/WT)**COMMENT :**

The test examines presence or absence of C17H2orf71 gene mutation (c.3149_3150insC) described as the cause for progressive retinal atrophy (PRA-RCD4) in some dog breeds. PRA-RCD4 is characterized by progressive degeneration of retinal cells. C17H2orf71 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.

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GENETIC REPORT

SAMPLE: ISOLATED DNA**SAMPLE TAKEN BY:** DANIELE BELARDINELLI, DVM**REQUESTED TEST:** VON WILLEBRAND DISEASE TYPE I (VWDI)**RESULT:** CLEAR (WT/WT)**COMMENT :**

The test examines presence or absence of VWF gene mutation (c.7437G>A) described as the cause of von Willebrand's disease type I (vWD I) in several dog breeds. This type of vWD is characterized by mild to moderate bleeding tendency due to constant deficiency of otherwise completely functional plasma von Willebrand factor, which is responsible for blood coagulation process. Tested VWF 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.

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Prelievo :

Luogo : FERRARA
Data : 17/03/2024
Medico veterinario : DANIELE BELARDINELLI

Si certifica che è stato depositato presso le nostre strutture il campione biologico del soggetto

Nome : HEIDI-F DEI RUBACUORI DI VERONA (CM.24/T)

Nato il : 30/01/2023

Tatuaggio :

Microchip :

L.O.I. (LO) / L.I.R. (LI) :

Razza : BARBONI TOY FULVO

Proprietario : SARTORI FABRIZIO

Fattura N. : 0

RIF. # : 89745

Distinti saluti

Dott.ssa Alessandra Paganelli

29/03/2024