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Through:

MAU Urdiales Muro Azarcones 4 45514 Quismondo SPAIN Customer number

LABOCOR, S.L. Alamillo 41 41 ES-28770 COLMENAR VIEJO (MADRI **SPAIN**

Analysis Certificate

Animal data

Name: Date of birth: Sexe: Chip number: Breed:

D'SPAIN FUEGO NEGRO DONNA KARAN 12.11.2020 Female 941000026055518 Unknown

109689

VHL ID: Test ID-nr: Material:

Sample data

H532599 527173 1 Swab

H699 - Hereditary Cataract 2 (HC) -HSF4 - Date of test: 24.01.2022 **Testresult: NORMAL**

H724 - L2-HGA - Date of test: 24.01.2022 **Testresult: NORMAL**

H811 - Hyperuricemia (HUU) - Date of test: 24.01.2022 Testresult: NORMAL

H673 - Degenerative Meyelopathy (DM) - Date of test: 02.02.2022 **Testresult: NORMAL**

H847 - Coat Colour D-Locus Improved (MLPH) - Date of test: 24.01.2022 Testresult: D/D

H919 - Hiplaxity 1 - Date of test: 24.01.2022 Testresult: N/N

H421 - Hiplaxity 2 - Date of test: 24.01.2022 Testresult: N/N

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dr. van haeringen laboratorium b.v.

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D. Mioch, MSc Veterinary Medicine CEO

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H699 - Hereditary Cataract 2 (HC) -HSF4

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will not become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

H724 - L2-HGA

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will not become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

H811 - Hyperuricemia (HUU)

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will not become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

H673 - Degenerative Meyelopathy (DM)

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will not become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

This test is based on an association study.

H847 - Coat Colour D-Locus Improved (MLPH)

Detailed information about Coat Colours and Coat Variation is available at www.combibreed.com. Direct link: https://www.combibreed.com/en-gb/Info-results/Coat-colour-and-variation/Dog

H919 - Hiplaxity 1

The disease is of multifactorial origin, which means that the symptoms are a combination of genetic factors as well as the environment.

This marker is part of a panel of genetic factors influencing hip laxity. For each genetic factor of a multifactorial disease, the desirable genetic variant is indicated as 'N/N'. Animals carrying one

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copy of the undesirable genetic variant are indicated as 'N/HL', whereas animals carrying two copies of the undesirable genetic variant are indicated as 'HL/HL'.

H421 - Hiplaxity 2

The disease is of multifactorial origin, which means that the symptoms are a combination of genetic factors as well as the environment.

This marker is part of a panel of genetic factors influencing hip laxity. For each genetic factor of a multifactorial disease, the desirable genetic variant is indicated as 'N/N'. Animals carrying one copy of the undesirable genetic variant are indicated as 'N/HL', whereas animals carrying two copies of the undesirable genetic variant are indicated as 'HL/HL'.

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