Orivet

Genetic Summary Report

Animal Name: Ember

Owner:
Luke Erb
Membership Number : Not assigned
Member Body/Breed Club: Not assigned

Approved Collection Method: No

Orivet

Genetic Summary Report

Scan to authenticate this Report online

Owner's details

Name:	Luke Erb

Animal's Details

Registered Name :	Arrowhead Sara
Pet Name :	Ember
Registration Number :	5535852F2
Breed :	Australian Cobberdog
Microchip Number :	952000001442830
Sex :	Female
Date of Birth :	28th Aug 2023
Colour :	Sable

Sample Collection Details

Case Number :	24A105055
Collected By :	
Approved Collection :	No
Sample Type :	SWAB

Test Details

Test Requested :	Australian Cobberdog – Full Breed Profile
Pet Name :	Ember
Date of Test :	12th Dec 2024

Authorisation

Sample with Lab ID Number 24A105055 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported:

.....

Orivet Genetic Analyst

ORIVET CERTIFIED REPORT

Orivet

Genetic Summary Report

Scan to authenticate this Report online

Health Tests Reported

Diseases	Result
Achromatopsia (Labrador Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Autosomal Hereditary Recessive Nephropathy	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Centronuclear Myopathy (Labrador Retriever Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Chondrodystrophy (CDDY) & Intervertebral Disc Disease (IVDD) [RESEARCH ONLY]	NEGATIVE FOR CFA18 (SHORT LIMB) VARIANT/HETEROZYGOUS FOR CFA12 VARIANT
Collie Eye Anomaly/Choroidal Hypoplasia	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Cone-Rod Dystrophy I - PRA (crd -4/cord I)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Congenital Macrothrombocytopenia	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Congenital Myasthenic Syndrome (Labrador Retriever Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Curly Coat Dry Eye Syndrome (Cavalier Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Cystinuria (SLC3A1) Labrador Retriever Type	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Degenerative Myelopathy	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Ehlers-Danlos Syndrome (Labrador Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]

Owner's Name : Luke Erb

Pet Name : Ember

Microchip Number 952000001442830

Approved Collection Method : No

Orivet

Genetic Summary Report

Scan to authenticate this Report online

Health Tests Reported (Continued)

Diseases	Result
Elliptocytosis B-spectrin (Labrador Retriever/Poodle Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Episodic Falling Syndrome (Cavalier Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Exercise Induced Collapse (Retriever Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Gangliosidosis GM2 (Poodle Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Generalised PRA 1 (Golden Retriever Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Globoid Cell Leukodystrophy/Krabbe's Disease	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Glomerulopathy (PLN) KIRREL2	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Glomerulopathy (PLN) NPHS1	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Hereditary Nasal Parakeratosis/Dry Nose (Labrador Retriever Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Hyperuricosuria	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Ivermectin Sensitivity MDR1 (Multi Drug Resistance)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Macular Corneal Dystrophy (Labrador Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]

Orivet

Genetic Summary Report

Scan to authenticate this Report online

Health Tests Reported (Continued)

Diseases	Result
Malignant Hyperthermia	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Microphthalmia, Anophthalmia & Coloboma (Wheaten Terrier Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Myxomatous Mitral Valve Disease 1 [NEBL535 Risk Variant]	NEGATIVE FOR NEBL1_535 RISK VARIANT - LINKED TO NEBL3_724 CANDIDATE VARIANT
Myxomatous Mitral Valve Disease 2 [NEBL576 Risk Variant]	NEGATIVE FOR NEBL2_576 RISK VARIANT - LINKED TO NEBL3_724 CANDIDATE VARIANT
Myxomatous Mitral Valve Disease 3 [NEBL724 Candidate Variant]	NEGATIVE (G/G) FOR NEBL3_724 CANDIDATE VARIANT - REGULAR RISK FOR EARLY ONSET MMVD (REFER TO OTHER VARIANTS)
Myxomatous Mitral Valve Disease 4 [NEBL890 Risk Variant]	HETEROZYGOUS FOR NEBL4_890 RISK VARIANT - NO PUBLISHED ASSOCIATION TO NEBL3_724 CANDIDATE VARIANT
Myxomatous Mitral Valve Disease 5 [NEBL498 Risk Variant]	NEGATIVE FOR NEBL5_498 RISK VARIANT - NO PUBLISHED ASSOCIATION TO NEBL3_724 CANDIDATE VARIANT
Narcolepsy (Labrador)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Neonatal Encephalopathy (Poodle Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Phosphofructokinase Deficiency (Spaniel Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Progressive Rod Cone Degeneration (prcd) - PRA	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Skeletal Dysplasia 2 (Mild Disproportionate Dwarfism)	NEGATIVE / CLEAR [NO VARIANT DETECTED]

Orivet

Genetic Summary Report

Scan to authenticate this Report online

Health Tests Reported (Continued)

Diseases	Result
Stargardt Disease (Retinal Degeneration)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
Trapped Neutrophil Syndrome (Border Collie Type)	NEGATIVE / CLEAR [NO VARIANT DETECTED]
von Willebrand's Disease Type I	NEGATIVE / CLEAR [NO VARIANT DETECTED]

Orivet

Genetic Summary Report

Scan to authenticate this Report online

Health Tests Reported (Continued)

Traits	Result
E Locus - (Cream/Red/Yellow)	E/e - BLACK CARRIES EXTENSION [YELLOW/WHITE/APRICOT/RUBY/RED]
EM (MC1R) Locus - Melanistic Mask	E^m/E^n - ONE COPY OF MASK ALLELE DETERMINED BY A SERIES
I Pheomelanin Locus Colour Intensity	I/I - NO COPY OF MFSD12 INTENSITY/CREAM ALLELE (NOT LIKELY TO SHOW EXTREME DILUTION)
Brown Deletion = Bd	B^d/B^d - DOES NOT CARRY BROWN/RED/LIVER or CHOCOLATE [DELETION]
Brown Stop Codon = Bs	B^s/B^s - DOES NOT CARRY BROWN/RED/LIVER or CHOCOLATE [STOP CODON]
Brown Insertion = Bc	B^c/b^c - CARRIER OF BROWN/LIVER/RED/CHOCOLATE [INSERTION]
Brown TYRP1 [Lancashire Heeler Type] = Bl	B^L/B^L - DOES NOT CARRY BROWN/LIVER [TYRP1]
D (Dilute) Locus	D/D - NO COPY OF MLPH-D ALLELE (DILUTE) - PIGMENT IS NORMAL
K Locus (Dominant Black)	KB / k^y or k^{br} - ONE COPY DOMINANT BLACK (KB) and ONE COPY OF NON-BLACK (k^y) dog MAY be brindled
A Locus (Fawn/Sable;Tri/Tan Points)	a^y/a^t - FAWN/RED/SABLE CARRIES TRICOLOUR/TAN POINTS
Pied (BOTH SINE and REPEAT VARIANTS)	S/sp - CARRIER OF PIEBALD [LIMITED WHITE SPOTTING, FLASH OR PARTI]
M Locus (Merle/Dapple)	m [171bp] / m [171bp] - NON MERLE SOLID COAT (NO CHANGE TO COAT or EYE COLOUR)
Long Hair Gene (Canine C95F)	POSITIVE - SHOWING THE PHENOTYPE

Orivet

Genetic Summary Report

Scan to authenticate this Report online

Health Tests Reported

Traits	Result
Shedding (MC5R)	shd/shd [HIGH SHEDDING] - TWO COPIES OF THE shd (MC5R) VARIANT DETECTED REFER TO R151W (IC) FOR LEVEL OF SHEDDING
Coat Composition CFA28 Gene (Double/Single Coat)	UDC/UDC - NO COPY OF THE DOUBLE COAT (DENSE UNDERCOAT) PHENOTYPE DETECTED
Curly Coat/Hair Curl (KRT71 R151W)	ONE COPY OF THE R151W (CU/Cu) VARIANT DETECTED - MOST LIKELY TO HAVE MODERATE 'WAVY' CURLY COAT PHENOTYPE
Curly Coat Phenotype (KRT71 - p.Ser422ArgfsTer)	NEGATIVE FOR THE KRT71 (p.Ser422ArgfsTer) VARIANT - NOT SHOWING THE CURLY COAT (C2) PHENOTYPE
Improper Coat/Furnishings (RSPO2)	POSITIVE FOR IMPROPER COAT/FURNISHINGS (OPEN FACE) - WILL SHOW FURNISHINGS

Owner's Name : Luke Erb

Pet Name : Ember

Microchip Number 952000001442830

Approved Collection Method : No

Glossary of Genetic Terms (Results)

I accept terms of service and privacy policy!

NEGATIVE / CLEAR [NO VARIANT DETECTED]

No presence of the variant (mutation) has been detected. The animal is clear of the disease and will not pass on any disease-causing mutation.

CARRIER [ONE COPY OF THE VARIANT DETECTED]

This is also referred to as HETEROZYGOUS. One copy of the normal gene and copy of the affected (mutant) gene has been detected. The animal will not exhibit disease symptoms or develop the disease. Consideration needs to be taken if breeding this animal - if breeding with another carrier or affected or unknown then it may produce an affected offspring.

POSITIVE / AT RISK [TWO COPIES OF THE VARIANT DETECTED]

Two copies of the disease gene variant (mutation) have been detected also referred to as HOMOZYGOUS for the variant. The animal may show symptoms (affected) associated with the disease. Appropriate treatment should be pursued by consulting a Veterinarian.

POSITIVE HETEROZYGOUS [ONE COPY OF THE DOMINANT VARIANT DETECTED]

Also referred to as POSITIVE ONE COPY or POSITIVE HETEROZYGOUS. This result is associated with a disease that has a dominant mode of inheritance. One copy of the normal gene (wild type) and affected (mutant) gene is present. Appropriate treatment should be pursued by consulting a Veterinarian. This result can still be used to produce a clear offspring.

NORMAL BY PARENTAGE HISTORY

The sample submitted has had its parentage verified by DNA. By interrogating the DNA profiles of the Dam, Sire and Offspring this information together with the history submitted for the parents excludes this animal from having this disease. The controls run confirm that the dog is NORMAL for the disease requested.

NORMAL BY PEDIGREE

The sample submitted has had its parentage verified by Pedigree. The pedigree has been provided and details(genetic testing reports) of the parents have been included. Parentage could not be determined via DNA profile as no sample was submitted.

NO RESULTS AVAILABLE

Insufficient information has been provided to provide a result for this test. Sire and Dam information and/or sample may be required. This result is mostly associated with tests that have a patent/license and therefore certain restrictions apply. Please contact the laboratory to discuss.

INDETERMINABLE

The sample submitted has failed to give a conclusive result. This result is mainly due to the sample failing to "cluster" or result in the current grouping. A recollection is required at no charge.

DNA PROFILE

Also known as a DNA fingerprint. This is unique for the animal. No animal shares the same DNA profile. An individual's DNA profile is inherited from both parents and can be used for verifying parentage (pedigrees). This profile contains no disease or trait information and is simply a unique DNA signature for that animal.

Glossary of Genetic Terms (Results)

I accept terms of service and privacy policy!

PARENTAGE VERIFICATION/ QUALIFIES/CONFIRMED OR DOES NOT QUALIFY/EXCLUDED

Parentage is determined by examining the markers on the DNA profile. A result is generated and stated for all DNA parentage requests.Parentage confirmation reports can only be generated if a DNA profile has been carried out for Dam, Offspring and possible Sire/s.

PENDING

PENDING

TRAIT (PHENOTYPE)

A feature that an animal is born with (a genetically determined characteristic).Traits are a visual phenotype that range from colour to hair length, and also includes certain features such as tail length. If an individual is AFFECTED for a trait then it will show that characteristic eg.AFFECTED for the B (Brown) Locus or bb will be brown/chocolate.

POSITIVE – SHOWING THE PHENOTYPE

The animal is showing the trait or phenotype tested.

CLARIFICATION OF GENETIC TESTING

The goal of genetic testing is to provide breeders with relevant information to improve breeding practices in the interest of animal health.However, genetic inheritance is not a simple process, and may be complicated by several factors. Below is some information to help clarify these factors.

The goal of genetic testing is to provide breeders with relevant information to improve breeding practices in the interest of animal health.However, genetic inheritance is not a simple process, and may be complicated by several factors. Below is some information to help clarify these factors.

1) Some diseases may demonstrate signs of what Geneticists call "genetic heterogeneity". This is a term to describe an apparently single condition that may be caused by more than one mutation and/or gene

2) It is possible that there exists more than one disease that presents in a similar fashion and segregates in a single breed. These conditions -although phenotypically similar - may be caused by separate mutations and/or genes.

3) It is possible that the disease affecting your breed may be what Geneticists call an "oligogenic disease". This is a term to describe the existence of additional genes that may modify the action of a dominant gene associated with a disease. These modifier genes may for example give rise to a variable age of onset for a particular condition, or affect the penetrance of a particular mutation such that some animals may never develop the condition.

The range of hereditary diseases continues to increase and we see some that are relatively benign and others that can cause severe and/or fatal disease. Diagnosis of any disease should be based on pedigree history, clinical signs, history (incidence) of the disease and the specific genetic test for the disease. Penetrance of a disease will always vary not only from breed to breed but within a breed, and will vary with different diseases. Factors that influence penetrance are genetics, nutrition and environment. Although genetic testing should be a priority for breeders, we strongly recommend that temperament and phenotype also be considered when breeding.

Orivet Genetic Pet Care aims to frequently update breeders with the latest research from the scientific literature. If breeders have any questions regarding a particular condition, please contact us on (03) 9534 1544 or admin@orivet.com and we will be happy to work with you to answer any relevant questions.