

Genetic Comprehensive Report

Animal Name: Vida

Owner:

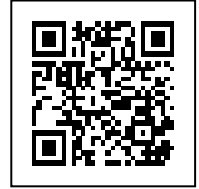
LaRena Phillips

Membership Number : Not assigned

Member Body/Breed Club : Not assigned

Approved Collection Method : YES





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Owner's details

Name : LaRena Phillips

Animal's Details

Registered Name : Lakylu's Whiskey Girl Having Fun

Pet Name : Vida

Registration Number : SS20741401

Breed : Labrador Retriever

Microchip Number : 956000012556319

Sex : Female

Date of Birth : 13th Jul 2020

Colour : Yellow

Sample Collection Details

Case Number : 22DZ008853

Collected By : Amanda Davis Armstrong, DVM

Approved Collection : YES

Sample Type : SWAB

Test Details

Test Requested : Labrador Retriever - Full Breed Profile

Pet Name : Vida

Date of Test : 25th Feb 2022

Authorisation

Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported:

George Sofronidis BSc (Hons)

Dr Noam Pik BVSc, MAVS





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Animal's Details

Registered Name :	Lakylu's Whiskey Girl Having Fun
Pet Name :	Vida
Registration Number :	SS20741401
Breed :	Labrador Retriever
Microchip Number :	956000012556319
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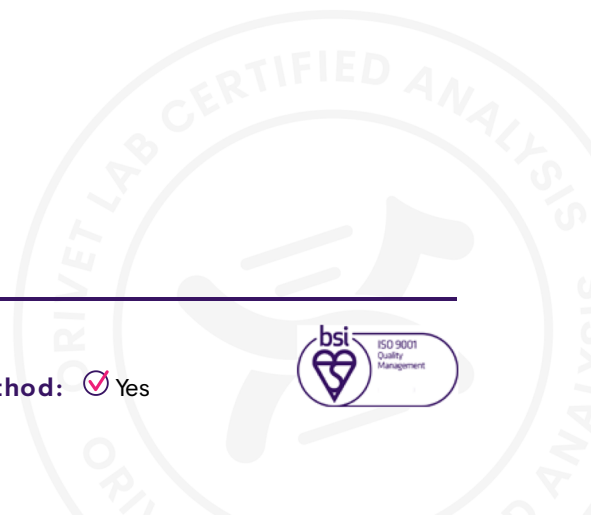
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Owner's Name : LaRena Phillips

Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes



Genetic Comprehensive Report

Animal's Details

Registered Name :	Lakylu's Whiskey Girl Having Fun
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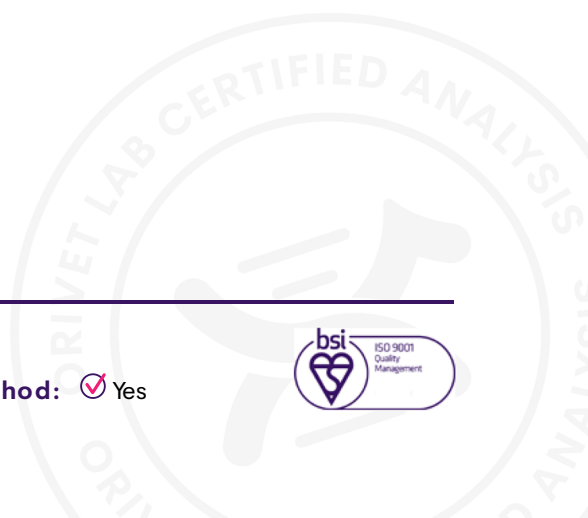
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Owner's Name : LaRena Phillips

Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes



Genetic Comprehensive Report

Animal's Details

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Microchip Number :	956000012556319
Sex :	Female
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Colour :	Yellow

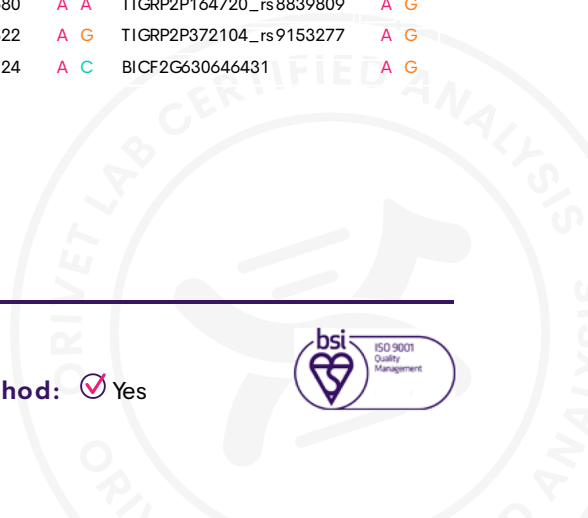
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Owner's Name : LaRena Phillips

Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes





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Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics,
DNA was extracted and analysed with the following result reported

Test Reported : ACHROMATOPSIA (LABRADOR TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : CNGA3

Variant Detected : c.1931_1933delTGG

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : CENTRONUCLEAR MYOPATHY (LABRADOR RETRIEVER TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : 3-hydroxyacyl-CoA dehydratase 1 (HACD1) also known as PTPLA on chromosome 2

Variant Detected : 236 bp SINE repeat insertion in exon 2 of HACD1

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : CONGENITAL MACROTHROMBOCYTOPENIA

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Tubulin beta 1 class VI (TUBB1) on Chromosome 24

Variant Detected : Base Substitutionc.745G>Ap.Asp249Asn

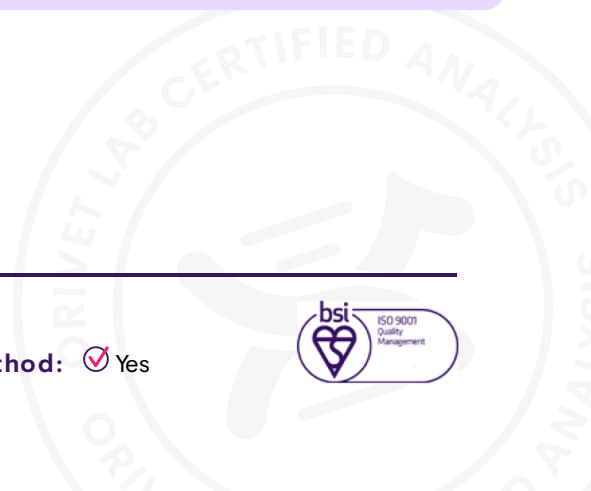
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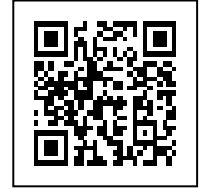
Owner's Name : LaRena Phillips

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Microchip Number : 956000012556319

Approved Collection Method: Yes





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Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics,
DNA was extracted and analysed with the following result reported

Test Reported : CONGENITAL MYASTHENIC SYNDROME (LABRADOR RETRIEVER TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : 2-hydroxyacyl-CoA lyase 1 (COLQ) on chromosome 23

Variant Detected : Base Substitutionc.1010T>Cp.Ile337Thr

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : COPPER TOXICOSIS (ATP7B & ATP7A) (LABRADOR RETRIEVER TYPE)

Result : **NEGATIVE FOR ATP7B / POSITIVE FOR THE ATP7A VARIANT**¹

Gene :

ATPase copper transporting beta (ATP7B) on chromosome 22ATPase copper transporting alpha (ATP7A) on chromosome X

Variant Detected :

Base SubstitutionATP7A: c.980C>TATP7A: p.Thy327IleATP7B: c.4358G>AATP7B: p.Arg1453Gln

There are two mutations, ATP7A:c.980C>T and ATP7B:c.4358G>A are run and reported. The two mutations work differently, ATP7B:c.4358G>A is associated with an increase in hepatic copper levels and ATP7A:c.980C>T is associated with a decrease in hepatic copper levels. The scientific literature suggests that if both mutations are present, the ATP7A attenuates some of the effect of the causative mutation. You can think of this as ATP7B:c.4358G>A being the variant for "at risk" and ATP7A:c.980C>T being the "protective" variant. The effect of the phenotype is that ATP7B is associated with hepatic copper accumulation which induces hepatic cirrhosis usually in middle-aged dogs. The mode of inheritance is complex disease whereby the ATP7B variant leads to increase hepatic copper accumulation over a long period of time which may lead to copper toxicosis.

Test Reported : CYSTINURIA (SLC3A1) LABRADOR RETRIEVER TYPE

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Solute carrier family 3 member 1 (SLC3A1) on chromosome 10

Variant Detected : Nucleotide Deletionc.350delGp.Gly117Alafs*41

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Owner's Name : LaRena Phillips

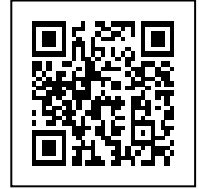
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Approved Collection Method: Yes



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DNA was extracted and analysed with the following result reported

Test Reported : DEGENERATIVE MYELOPATHY

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Superoxide dismutase 1 (SOD1) on chromosome 31

Variant Detected : Base Substitutionc.118G>Ap.Glu40Lys

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : EHLERS-DANLOS SYNDROME (LABRADOR TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : COL5A1, chr9

Variant Detected : c.3038delGp.Gly1013ValfsTer260

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : ELLIPTOCYTOSIS B-SPECTRIN (LABRADOR RETRIEVER/POODLE TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Spectrin beta erythrocytic (SPTB) Chromosome 8

Variant Detected : Base Substitutionc.6384C>TThr2110Met

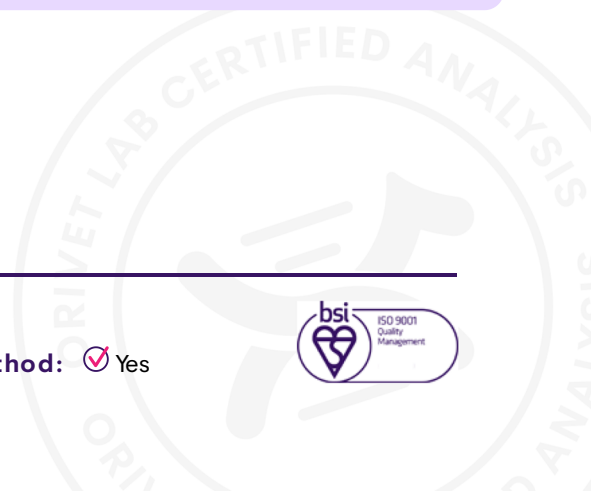
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Test Reported : EXERCISE INDUCED COLLAPSE (RETRIEVER TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : DNM1

Variant Detected : Base Substitution c.767 G>T

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : HEREDITARY NASAL PARAKERATOSIS/DRY NOSE (LABRADOR RETRIEVER TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Suppressor of variegation 3-9 homolog 2 (SUV39H2) on chromosome 2

Variant Detected : Base Substitution c.972T>Gp.Asn324Lys

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : HYPERURICOSURIA

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Solute carrier family 2 member 9 (SLC2A9) on chromosome 3

Variant Detected : Base Substitution c.563G>Tp.Cys188Phe

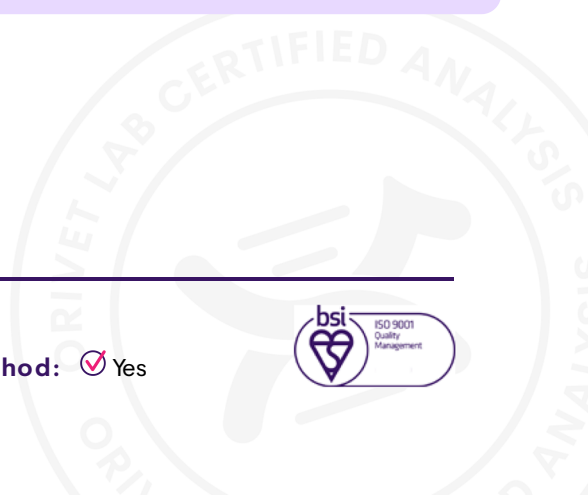
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Test Reported : MACULAR CORNEAL DYSTROPHY (LABRADOR TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : LOC4

Variant Detected : c.814C>A

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : MALIGNANT HYPERTHERMIA

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Ryanodine receptor 1 (RYR1) on Chromosome 1

Variant Detected : Base Substitutionc.1640T>Cp.Val547Ala

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : MYOTUBULAR MYOPATHY X-LINKED (LABRADOR RETRIEVER TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Myotubularin 1 (MTM1) on Chromosome X

Variant Detected : Base Substitutionc.465C>Ap.Asn155Lys

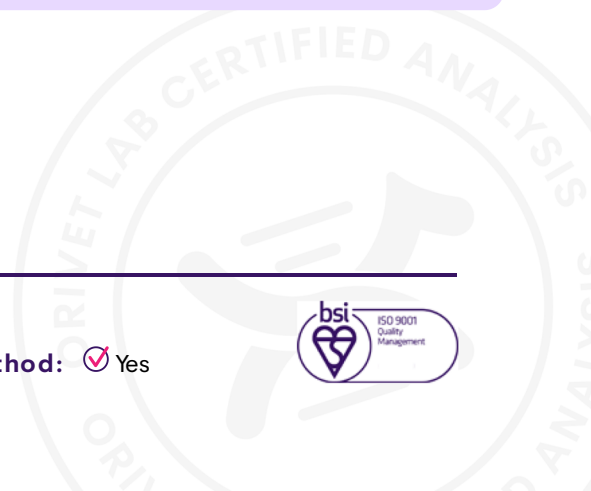
We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

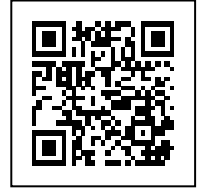
Owner's Name : LaRena Phillips

Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes





Scan to authenticate
this Report online

Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics,
DNA was extracted and analysed with the following result reported

Test Reported : NARCOLEPSY (LABRADOR)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Hypocretin receptor 2 (HCRT2) on Chromosome 12

Variant Detected : Base Substitutionc.1105+5G>Asplice site mutation

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : PROGRESSIVE ROD CONE DEGENERATION (PRCD) - PRA

Result : **CARRIER [ONE COPY OF THE VARIANT DETECTED]**¹

Gene : Photoreceptor disc component (PRCD) on Chromosome 9

Variant Detected : Base Substitutionc.5 G>A p.Cys2Tyr

We have scanned your animal's DNA and one copy of the normal gene and copy of the positive (mutant) gene has been detected. The genotype of the animal tested is CARRIER this result may also be referred to as HETEROZYGOUS or A/N or "+/-". Being an autosomal recessive disease the animal will not exhibit disease symptoms or develop the disease. Consideration needs to be taken if breeding this animal as it may produce affected offspring if mated to another carrier. It is recommended to have any breeding partner tested before breeding.

Test Reported : PYRUVATE KINASE DEFICIENCY (LABRADOR TYPE)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : PKLR

Variant Detected : c.799C>T

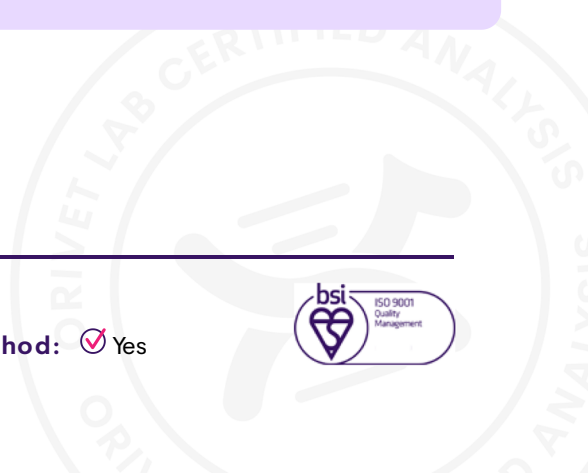
We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Owner's Name : LaRena Phillips

Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes





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this Report online

Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics,
DNA was extracted and analysed with the following result reported

Test Reported : SKELETAL DYSPLASIA 2 (MILD DISPROPORTIONATE DWARFISM)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : Collagen alpha-2(XI) chain gene (COL11A2) on chromosome 12

Variant Detected : Base Substitutionc.143G>Cp.Arg48Pro

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : STARGARDT DISEASE (RETINAL DEGENERATION)

Result : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**¹

Gene : ABCA4

Variant Detected : c.4176insC

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant. Can be mated with an untested animal and WILL NOT produce any positive/affected offspring.

Test Reported : E LOCUS - (CREAM/RED/YELLOW)

Result : **e/e - YELLOW [CAN RANGE FROM WHITE/WHITE to FOX RED]**¹

Gene : MC1R

Variant Detected : Em (point mutation) > E (wild type) > e (point mutation) chr5:63694334-63694334: C>T

This breed description is specific for the Labrador Retriever standard.

Owner's Name : LaRena Phillips

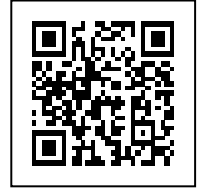
Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes



Genetic Comprehensive Report



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Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics,
DNA was extracted and analysed with the following result reported

Test Reported : I LOCUS COLOUR INTENSITY

Result :

I/i- ONE COPY OF THE MFSD12 INTENSITY ALLELE (NOT LIKELY TO SHOW EXTREME DILUTION)¹

Gene : MFSD12

Variant Detected : c.151C>T (p.Arq51Cys)

This variant is associated with the dilution of phaeomelanin which is involved in the cream/white/apricot color in dogs. Degree of intensity (dilution) will vary within and between breeds.

Test Reported : BROWN (345DELPRO) DELETION

Result : **B^d/B^d - DOES NOT CARRY BROWN/RED/LIVER or CHOCOLATE [DELETION]¹**

Gene : TYRP1

Variant Detected : Base Substitution (Point Mutation)

Does not carry the brown deletion codon. Please refer to the other brown variants to clarify potential colour for offspring.

Test Reported : BROWN (GLNT331STOP) STOP CODON

Result : **B^s/B^s - DOES NOT CARRY BROWN/RED/LIVER or CHOCOLATE [STOP CODON]¹**

Gene : TYRP1

Variant Detected : Point Mutation

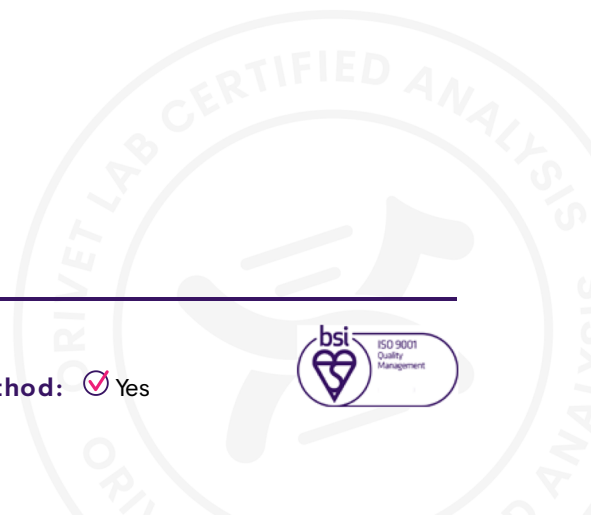
Does not carry the brown stop codon. Please refer to the other brown variants to clarify potential colour for offspring.

Owner's Name : LaRena Phillips

Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes



Genetic Comprehensive Report



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this Report online

Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics,
DNA was extracted and analysed with the following result reported

Test Reported : BROWN (SER41CYS) INSERTION CODON

Result : B^c/B^c - DOES NOT CARRY BROWN/RED/LIVER or CHOCOLATE [INSERTION]¹

Gene : TYRP1

Variant Detected : Base Substitution (Point Mutation)

Does not carry the brown insertion codon. Please refer to the other brown variants to clarify potential colour for offspring.

Test Reported : LIVER [TYRP1] (LANCASHIRE HEELER TYPE)

Result : B^e/B^e - DOES NOT CARRY BROWN/LIVER [TYRP1]¹

Gene :

Variant Detected :

Test Reported : D (DILUTE) LOCUS

Result : D/D - NO COPY OF MLPH-D ALLELE (DILUTE) - PIGMENT IS NORMAL¹

Gene : MLPH

Variant Detected : Base Substitution

Full colour, no dilute gene present. The D allele modifies the Melanophillin (MLPH) gene. This animal cannot produce "dilute" offspring. Please Note: There are other dilute variants d2 (Sloughi, Chow Chow & Thai Ridgeback) and rare d3 (Italian Greyhound & Chihuahua) so this test/result may not identify dilute in these breeds.

Owner's Name : LaRena Phillips

Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes





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Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics,
DNA was extracted and analysed with the following result reported

Test Reported : DILUTE D2 VARIANT (CHOW CHOW TYPE)

Result : **d^2/d^2 - NO COPY OF d^2 ALLELE (DILUTE) - PIGMENT IS NORMAL**¹

Gene : MLPH

Variant Detected : c.705G>C

This d^2 variant has been shown to be associated with the blue/dilute seen in the Chow Chow, Sloughi, Thai Ridgeback and any mixes of these breeds.

Test Reported : K LOCUS (DOMINANT BLACK)

Result : **K/K - DOMINANT BLACK - SOLID [WILL NOT BE BRINDLED or EXPRESS AGOUTI]**¹

Gene : CBD103

Variant Detected : Deletion of GGG

Two copies of dominant black (K) are present. No brindle/red or fawn offspring will be produced. Will not express Agouti phenotype. This can also be referred to as KB. In some breeds the K locus is fixed so all dogs will be KK. This (the K Locus) can be modified by other genes eg. liver, dilute, greying or merle. Red can only be added through the e locus.

Test Reported : A LOCUS (FAWN/SABLE; TRI/TAN POINTS)

Result : **a^t/a^t - TAN POINTS/BLACK & TAN or TRICOLOUR MAY BE BRINDLED [SEE K LOCUS]**¹

Gene : ASIP

Variant Detected : Base Substitution 246 G>T(A82S); G>A (R83H): C>T (p.R96C)

Homozygous for black and tan/tricolour (no hidden colours) allele. Tri factored/white factored in dogs that have white points. No Bi Factoring (Black White & Tan). Animals are primarily black and have areas of pheomelanin (tan) which tends to be seen on the leg and stomach areas, the side of the head and spots above the eyes. Please note the colour and distribution of pheomelanin "tan" will be dependent on the breed and other colour genes. Please note that any genes on the "A" series will only be expressed if the K locus is kk, kibr or kibrkibr.

Owner's Name : LaRena Phillips

Pet Name : Vida

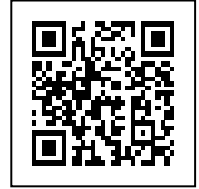
Microchip Number : 956000012556319

Approved Collection Method: Yes





Genetic Comprehensive Report



Scan to authenticate
this Report online

Sample with Lab ID Number 22DZ008853 was received at Orivet Genetics,
DNA was extracted and analysed with the following result reported

Test Reported : LONG HAIR GENE (CANINE C95F)

Result : **NEGATIVE - NOT SHOWING THE PHENOTYPE**¹

Gene : FGF5

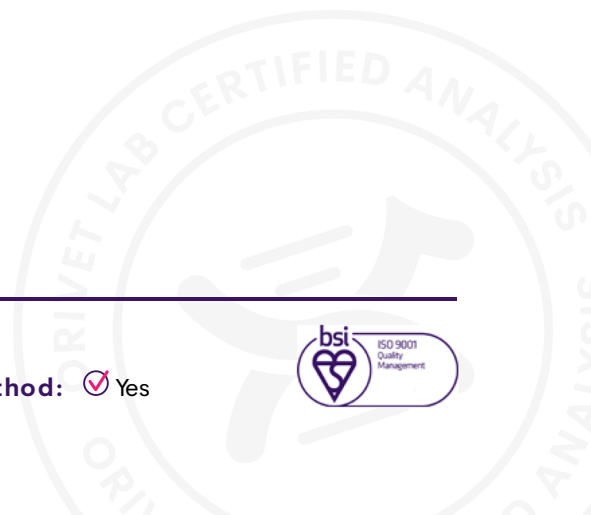
Variant Detected : p.Cys95Phe c284G>T (Point Mutation)

Owner's Name : LaRena Phillips

Pet Name : Vida

Microchip Number : 956000012556319

Approved Collection Method: Yes



Glossary of Genetic Terms (Results)



The terms below are provided to help clarify certain results phrases on your genetic report. The phrases below are those as reported by Orivet and may vary from one laboratory to the other.

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)



The terms below are provided to help clarify certain results phrases on your genetic report. The phrases below are those as reported by Orivet and may vary from one laboratory to the other.

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

Results for this test are still being processed. Some tests are run independently and are reported at a later date. When completed, the result will be emailed. APPROVED COLLECTION METHOD (NO) The sample submitted for testing HAS NOT met the requirements recommended by member bodies for the DNA collection process.

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.