Paw Print Genetics
A division of Genetic Veterinary Sciences, Inc.

Canine Genetic Health Certificate™

Call Name:	Ritz	**Laboratory #:**	163742
Registered Name:	FR's Little Quacker Dealer	**Registration #:**	SS15579502
Breed:	Labrador Retriever	**Microchip #:**	956000012313498
Sex:	Female	**Certificate Date:**	April 26, 2022
DOB:	Oct. 2019		

This canine's DNA showed the following genotype(s):

Disease	Gene	Genotype	Interpretation
Centronuclear Myopathy	*PTPLA*	WT/WT	Normal (clear)
Congenital Myasthenic Syndrome (Labrador Retriever Type)	*COLQ*	WT/WT	Normal (clear)
Copper Toxicosis (Labrador Retriever Type) ATP7A	*ATP7A*	WT/WT	Normal/Clear Female
Copper Toxicosis (Labrador Retriever Type) ATP7B	*ATP7B*	WT/WT	Normal (clear)
Degenerative Myelopathy	*SOD1*	WT/WT	Normal (clear)
Exercise-Induced Collapse	*DNM1*	WT/WT	Normal (clear)
Hereditary Nasal Parakeratosis	*SUV39H2*	WT/WT	Normal (clear)
Macular Corneal Dystrophy (Labrador Retriever Type)	*CHST6*	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Golden Retriever 2	*TTC8*	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	*PRCD*	WT/WT	Normal (clear)
Retinal Dysplasia/Oculoskeletal Dysplasia 1	*COL9A3*	WT/WT	Normal (clear)
Skeletal Dysplasia 2	*COL11A2*	WT/WT	Normal (clear)

WT, wild type (normal); M, mutant; Y, Y chromosome (male)

Blake C Ballif, PhD
Laboratory & Scientific Director

Christina J Ramirez, PhD, DVM, DACVP
Medical Director

Paw Print Genetics® performed the testing on the dog listed on this certificate. See the Laboratory Report for interpretation and recommendations based on these findings. The genes/diseases reported here were selected by the client. Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. The results included in this report relate only to the items tested using the sample provided. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the test(s)' accuracy and precision with >99.9% sensitivity and specificity. The presence of mosaicism may not be detected by this test. Non-paternity may lead to unexpected results. This is not a breed identification test. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results. Genetic counseling is available at Paw Print Genetics.

Companion Animal Eye Registry (CAER)

Orthopedic Foundation for Animals
2300 E Nifong Blvd, Columbia, MO 65201-3806
Phone: (573) 442-0418; Fax: (573)875-5073
www.ofa.org, A not-for-profit organization

Call name: Ritz
Registered name: N/A
Breed: Lab Sex: F
ID Number (if any): ☐ Tattoo ☒ Microchip: 956000012313498
Registration Number: ☒ AKC ☐ Other: 55155795021
Date of Birth (mm/dd/yy): 101819 Date of Exam (mm/dd/yy): 022920

Owner Name: Casey + Jessica Baxter
Co-Owner Name: Phone: 605 691-3494
Owner Address: P.O. Box 72
City: Britton State: SD Zip/postal code: 57430
E-Mail (use both lines if needed): Frlabs@yahoo.com

I hereby certify that the animal examined is the animal described on this application, and understand that the results of this exam will be submitted by the examining ophthalmologist to the database for statistical gathering purposes. I understand that only passing results will be released to the public unless the initials of a registered owner or authorized agent appear in the authorization box below which permits the OFA to release non-passing results to the public.

Signature of owner or authorized agent/representative

I hereby authorize the OFA to release the results of the evaluation of the animal described on this application to the public if the results are non-passing (initials) _____

☒	**I DID** verify microchip/tattoo on this dog
☐	**I DID NOT** verify microchip/tattoo on this dog
☐	**NO MICROCHIP/TATTOO PRESENT**

I certify that I have performed this ophthalmic examination using pharmacological mydriasis, ophthalmoscopy, and biomicroscopy.

Signature: Dr. Betts EC101 ACVO # Date: 5-29-20
Diplomate, American College of Veterinary Ophthalmologists

FEES AND CREDIT CARD INFORMATION ON THE BACK OF THE WHITE (OWNER) COPY

650639

Ophthalmologist Name: Dr. Daniel M. Betts EC101
Ophthalmologist Address: 2108 Hughes Ave
City: Ames State: IA Zip/postal code: 50014
Phone: 515-230-0413 ACVO #:
Email:

GLOBE
- ☐ microphthalmos
- ☐ keratoconjunctivitis sicca
- ☐ glaucoma

EYELIDS
- ☐ entropion
- ☐ ectropion
- ☐ distichiasis
- ☐ ectopic cilia
- ☐ imperforate lacrimal punctum

NICTITANS
- ☐ cartilage anomaly/eversion
- ☐ gland prolapse
- ☐ plasmoma/atypical pannus

CORNEA
- ☐ dystrophy—epithelial/stromal
- ☐ dystrophy—endothelial
- ☐ pannus
- ☐ pigmentary keratitis/keratopathy

UVEA
- ☐ uveal cyst (☐ free floating ☐ single ☐ multiple)
- ☐ iris coloboma
- ☐ iris hypoplasia
- ☐ iris sphincter dysplasia
- ☐ pigmentary uveitis
- ☐ uveal melanoma
- ☐ persistent pupillary membranes (☐ endothelial opacity/no strands ☐ lens pigment foci/no strands ☐ iris sheets ☐ iris to cornea ☐ iris to lens ☐ iris to iris)

LENS

	Incomp.	Incip.	Punc.		Punc.	Incip.	Incomp.
anterior cortex	☐	☐	☐		☐	☐	☐
posterior cortex	☐	☐	☐		☐	☐	☐
equatorial cortex	☐	☐	☐		☐	☐	☐
anterior sutures	☐	☐	☐		☐	☐	☐
posterior sutures	☐	☐	☐		☐	☐	☐
nucleus	☐	☐	☐		☐	☐	☐
capsular	☐	☐	☐		☐	☐	☐

- ☐ generalized/complete
- ☐ resorbing/hypermature
- ☐ ***Significance Unknown/Suspect Not Inherited***
- ☐ subluxation/luxation

VITREOUS
- ☐ PHPV/PHTVL
- ☐ persistent hyaloid artery
- ☐ degeneration (☐ ant. chamber ☐ syneresis)

FUNDUS
- ☐ retinal detachment (☐ detached ☐ geographic ☐ folds)
- ☐ retinal atrophy—generalized
- ☐ retinopathy (☐ folds ☐ geographic ☐ detached)
- ☐ retinal dysplasia
- ☐ choroidal hypoplasia
- ☐ coloboma
- ☐ optic nerve coloboma
- ☐ optic nerve hypoplasia
- ☐ micropapilla

OTHER CONDITIONS
- ☐ Unlisted conditions suspected as **inherited**. Describe in comments
- ☐ Unlisted conditions suspected as **not inherited**

☐ **NORMAL**

Comments

02/27/19

WHITE = Owner/OFA Registration copy; PINK = ACVO Diplomate copy; YELLOW = ACVO Research copy

Coat Color and Trait Certificate

Call Name:	Ritz	**Laboratory #:**	163742
Registered Name:	FR's Little Quacker Dealer	**Registration #:**	SS15579502
Breed:	Labrador Retriever	**Microchip #:**	956000012313498
Sex:	Female	**Certificate Date:**	Nov. 13, 2020
DOB:	Oct. 2019		

This canine's DNA showed the following genotype(s):

Coat Color/Trait Test	Gene	Genotype	Interpretation
B Locus (Brown)	*TYRP1*	B/B	Black coat, nose and foot pads
D Locus (Dilute)	*MLPH*	D/D	Non dilute

Interpretation:

This dog carries two copies of **B** at all three of the b^c, b^d and b^s loci making the overall B locus genotype of this dog **B/B**. The overall B locus genotype for a dog is determined by the combination of the genotypes at the b^c, b^d, and b^s loci. The b^c, b^d, and b^s variants confer brown coat, nose, and foot pads when at least one of these DNA changes is present on both genes of the dog at the B locus. If the dog has one or no copies of **b** then the dog will have a black coat, nose, and foot pads. However, this dog's coat color is also dependent on the E, K, and A genes. This dog will pass on **B** to 100% of its offspring.

This dog carries two copies of **D** which does not result in the "dilution" or lightening of the black and yellow/red pigments that produce the dog's coat color. The base coat color of this dog will be primarily determined by the E, K, A, and B genes. This dog will pass on **D** to 100% of its offspring.

Paw Print Genetics® has genetic counseling available to you at no additional charge to answer any questions about these test results, their implications and potential outcomes in breeding this dog.

Christina J Ramirez, PhD, DVM, DACVP
Medical Director

Casey R Carl, DVM
Associate Medical Director