UCDAVIS VETERINARY MEDICINE
Veterinary Genetics Laboratory

LABRADOR RETRIEVER GENETIC HEALTH PANEL TEST REPORT

Provided Information:

Name: **RVK'S CHLOE'S CHARLIE BROWN**

Registration: **SS52505901**

Case: **NCD265498**
Date Received: 09-Mar-2026
Report Issue Date: 30-Mar-2026
Report ID: 6748-4756-7148-7086

Verify report at vgl.ucdavis.edu/verify

DOB: **05/16/2025** *Sex:* **Male** *Breed:* **Labrador Retriever** *Microchip:* **956000017848240** *Color:* **Chocolate**

Call Name: **Chuck**

Sire: SIR REED OF SOUTHHAMPTON
Reg: SS27841405
Microchip:

Dam: PAIGE'S LITTLE CHLOE OF RVK
Reg: SS26310601
Microchip:

	RESULT		INTERPRETATION
Centronuclear Myopathy (CNM)	**N/N**		No copies of the CNM mutation detected. Dog is normal.
Congenital Myasthenic Syndrome (CMS)	**N/N**		No copies of the CMS mutation detected. Dog is normal.
Copper Toxicosis	**ATP7A**	**N**	No copies of the ATP7A and ATP7B variants.
	ATP7B	**N/N**	
Cystinuria Type I-A	**N/N**		No copies of the cystinuria type I-A mutation detected. Dog is normal.
Exercise Induced Collapse (EIC)	**N/N**		No copies of the EIC mutation detected. Dog is normal.
Degenerative Myelopathy (DM)	**N/N**		No copies of the DM mutation.
Hereditary Nasal Parakeratosis (HNPK)	**N/N**		No copies of the HNPK mutation detected. Dog is normal.
Hyperuricosuria (HUU)	**N/N**		No copies of the hyperuricosuria mutation detected. Dog is normal.
Narcolepsy	**N/N**		Normal. Dog does not carry the Labrador narcolepsy associated variant.
Pyruvate Kinase Deficiency (PKDef)	**N/N**		No copies of the PKDef mutation. Dog is normal.
Stargardt Disease	**N/N**		Normal. No copies of the Labrador Retriever Stargardt disease variant detected.
Skeletal Dysplasia 2 (SD2)	**N/N**		No copies of the SD2 mutation detected. Dog is normal.
X-Linked Myotubular Myopathy (XLMTM)	**N**		No copy of the MTM1 mutation detected. Male is unaffected.
Progressive Rod-Cone Degeneration (PRCD)	**N/N**		Normal. No copies of this progressive rod-cone degeneration (PRA-prcd) allele detected.
DILUTE (D LOCUS)	**D/D**		No known dilution variants present.

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Client/Owner/Agent Information:	*Case:* **NCD265498**
RICHARD MCCULLOUGH 2501 BEULAHTOWN RD KENLY, NC 27542-8441	***Date Received:*** 09-Mar-2026 ***Report Issue Date:*** 30-Mar-2026 ***Report ID:*** 6748-4756-7148-7086 Verify report at vgl.ucdavis.edu/verify
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Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

For more detailed information on Labrador Retriever Genetic Health Panel test results, please visit our website at: vgl.ucdavis.edu/services/dog/labrador-genetic-health-panels

License Information

The HNPK test is performed under a license agreement with Laboklin GmbH & Co.KG

For terms and conditions of testing, please see vgl.ucdavis.edu/about/terms-and-conditions

Results are determined using PCR-based methods. The results relate only to the sample tested as identified by the submitter (for example, identity and/or breed).

Report authorized by Dr. Rebecca Bellone, VGL Director

ANAB ANSI National Accreditation Board ACCREDITED ISO/IEC 17025 TESTING LABORATORY

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Degenerative Myelopathy

Degenerative Myelopathy is associated with a genetic variant in the *SOD1* gene (c.118G>A). We therefore denote this associated allele as DM on our reports.

Many dog breeds carry the *SOD1* allele associated with Degenerative Myelopathy. The following breeds have been reported as having **clinically-affected** individuals with two copies of the *SOD1* associated variant (denoted on our report as **DM/DM**): American Eskimo Dog, Australian Shepherd, Bernese Mountain Dog, Bloodhound, Borzoi, Boxer, Cardigan Welsh Corgi, Cavalier King Charles Spaniel, Chesapeake Bay Retriever, Czech Wolfdog, English Springer Spaniel, German Shepherd, Golden Retriever, Hovawart, Kerry Blue Terrier, Labrador Retriever, Pembroke Welsh Corgi, Pug, Rhodesian Ridgeback, Rough Collie, Soft Coated Wheaten Terrier, Standard Poodle, and Wire Fox Terrier. Testing is advisable for these breeds.

There have also been reports of crossbred dogs with two copies of the SOD1 allele that were clinically affected by degenerative myelopathy.

What do the results mean for my dog?

Within clinically-affected breeds, dogs with two copies of DM (**DM/DM**) are considered at higher risk for developing clinical signs of DM. However, not all dogs that are DM/DM will develop clinical signs of disease, and not all cases of degenerative myelopathy are explained by the DM/DM result.

Why some DM/DM dogs display symptoms of disease and others do not, is not yet known, but one hypothesis is that there are other genetic modifiers that contribute to risk. This is still under investigation.

Dogs with one copy of DM (**N/DM**) are not expected to develop clinical signs of degenerative myelopathy. They are considered carriers, because they carry the allele associated with disease.

Dogs with **N/N** genotype do not have this *SOD1* variant associated with degenerative myelopathy.

Please note that there may be other causes for degenerative myelopathy in the dog that are not explained by the *SOD1* variant (c.118G>A) tested by the VGL.

What about breeding my dog?

Dogs with a DM/DM genotype will pass on the DM allele to all of their offspring.

Dogs with an N/DM genotype may pass on the DM allele to ~50% of their offspring. If bred to another N/DM dog, 25% of puppies will be expected to have a DM/DM genotype and be at increased risk for developing DM.

For more detailed information about DM, visit https://vgl.ucdavis.edu/test/degenerative-myelopathy