



Micah Halpern, PhD  
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## CERTIFICATE OF RESULTS FOR SAMPLE ID #:

512777

PET'S NAME\*: LEWIS  
PET'S REGISTRATION #: NP70358002  
PET'S BREED: BULLDOG  
DATE TESTED: 8/5/2025

TEST	RESULT**	TEST RESULT EXPLANATION***
Canine Multifocal Retinopathy 1 (CMR1)	B	(CARRIER/NOT AFFECTED): These dogs have one copy of the normal gene and one copy of the mutation associated with this disease. They will not develop canine multifocal retinopathy.
Degenerative Myelopathy (DM)	A	(CLEAR/NORMAL): These dogs have two copies of the normal gene and will not develop degenerative myelopathy.
Hyperuricosuria (HU)	A	(CLEAR/NORMAL): These dogs have two copies of the normal gene and will not develop a urate stone disorder.

\*GenSol warrants its test results to be accurate for the sample obtained from the above pet. In the event of a valid claim, owner's sole remedy is a refund of the fee paid. IN NO EVENT SHALL GENSOL BE LIABLE FOR INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND. Any claim must be asserted within one year of the report of test results.

\*\*All samples submitted to GenSol become the property of GenSol and may be used for internal quality control and/or research purposes. Test results provide information concerning a pet's DNA sequence and are not an indication or guarantee of pet's disease state or condition. Test results alone should not be used to diagnosis, treat or prevent disease.

\*\*\*For detailed result explanation visit [www.gensoldx.com](http://www.gensoldx.com). Please consult a licensed veterinarian to discuss the implications.

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**DNA Testing: Owner/Patient Report 8/13/2025**

### **Patient Information**

<b>Official Name</b>	Lilly of the Valley's Lewis	<b>DOB</b>	8/9/2021 (4 Years 0 Months)
<b>Call Name</b>	Lewis	<b>Sex</b>	Male (Intact)
<b>Breed</b>	Bulldog (English)	<b>Microchip #</b>	956000012487881
<b>Registration #</b>	NP703580002		

### **Testing Information**

<b>Submission ID</b>	51498	<b>Processed By</b>	Michael Raducha
<b>Testing Date</b>	8/13/2025		
<b>Test</b>	Cystinuria-Associated Marker (Type 3)-DNA [Cheek brushes/swabs]		

### **Result Information**

<b>Genotype</b>	1-1 (Homozygous for Normal Markers)
<b>Phenotype</b>	See Interpretation
<b>Interpretation</b>	1-1 (Homozygous Normal) dogs have two copies for the normal markers and NO COPIES of the markers associated with cystine stone formation in your dog's breed. A male dog with this result has the lowest risk for forming cystine stones. However, we have identified several 1-1 dogs with elevated urinary cystine levels putting them at risk for cystine stone formation. Therefore, we recommend annual urine nitroprusside test screening for intact male dogs starting between one and two years of age.

**Sincerely,**

Margret Casal, Dr. med. vet., PhD  
Dipl. ECAR  
Professor of Medical Genetics

Michael Raducha, BS  
Research Specialist