

## Dog Information

**Reba Pearl McKay (Reba)**  
 NAME  
**Female**  
 SEX  
**Golden Retriever**  
 BREED ANCESTRY  
**December 23rd, 2022**  
 DATE OF BIRTH  
**American Kennel Club (AKC) SS38531008**  
 REGISTRATION  
**n/a**  
 MICROCHIP

**Joel m. Estes**  
 OWNER NAME  
**Canine Genetic Health Screen**  
 TEST  
**October 27th, 2023**  
 TEST DATE

## BREED HEALTH TESTS

DISEASE	GENE	GENOTYPE	RESULT	TESTING RECOMMENDED BY
Degenerative Myelopathy, DM	SOD1A	GG	Clear	
Golden Retriever Progressive Retinal Atrophy 1, GR-PRA1	SLC4A3 Exon 16	NN	Clear	
Golden Retriever Progressive Retinal Atrophy 2, GR-PRA2	TTC8 Exon 8	NN	Clear	
Ichthyosis, ICH1	PNPLA1 (Exon 8)	AAC/AAC	Clear	
Muscular Dystrophy	DMD	AA	Clear	
Progressive Retinal Atrophy, prcd	PRCD Exon 1	GG	Clear	
Congenital Myasthenic Syndrome, CMS	COLQ	GG	Clear	
Dystrophic Epidermolysis Bullosa	COL7A1 (Exon 68)	GG	Clear	
Neuronal Ceroid Lipofuscinosis 5, NCL 5	CLN5 (Exon 4 Deletion)	NN	Clear	
Osteogenesis Imperfecta, Brittle Bone Disease	COL1A1 (Exon 18)	GG	Clear	
Retina Dysplasia and/or Optic Nerve Hypoplasia	SIX6 Exon 1	CC	Clear	

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## INBREEDING AND DIVERSITY

Genetic Diversity	RESULT	GENETIC RESULT
Coefficient Of Inbreeding		16%
MHC Class II - DLA DRB1		High Diversity
MHC Class II - DLA DQA1 and DQB1		High Diversity

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## TRAIT TESTS (1/3)

Coat Color	RESULT	GENETIC RESULT
E Locus (MC1R)	No dark hairs anywhere	ee
K Locus (CBD103)	Not expressed	K <sup>B</sup> K <sup>B</sup>
Intensity Loci LINKAGE	Any pigmented hair likely yellow or tan	Intermediate Red Pigmentation
A Locus (ASIP)	Not expressed	a <sup>+</sup> a
D Locus (MLPH)	Not expressed	DD
Cocoa (HPS3)	No co alleles, not expressed	NN
B Locus (TYRP1)	Likely black colored nose/feet	BB
Saddle Tan (RALY)	Not expressed	NI
S Locus (MITF)	Likely to have little to no white in coat	SS
M Locus (PMEL)	No merle alleles	mm
R Locus (USH2A) LINKAGE	Likely no impact on coat pattern	rr

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## TRAIT TESTS (2/3)

	RESULT	GENETIC RESULT
Coat Color		
H Locus (Harlequin)	No harlequin alleles	hh
Other Coat Traits		
Furnishings (RSPO2) LINKAGE	Likely unfurnished (no mustache, beard, and/or eyebrows)	II
Coat Length (FGF5)	Likely long coat	TT
Shedding (MC5R)	Likely heavy/seasonal shedding	CC
Hairlessness (FOXI3) LINKAGE	Very unlikely to be hairless	NN
Hairlessness (SGK3)	Very unlikely to be hairless	NN
Oculocutaneous Albinism Type 2 (SLC45A2) LINKAGE	Likely not albino	NN
Coat Texture (KRT71)	Likely straight coat	CC
Other Body Features		
Muzzle Length (BMP3)	Likely medium or long muzzle	CC
Tail Length (T)	Likely normal-length tail	CC
Hind Dewclaws (LMBR1)	Unlikely to have hind dew claws	CC

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## TRAIT TESTS (3/3)

Other Body Features	RESULT	GENETIC RESULT
Blue Eye Color (ALX4) LINKAGE	Less likely to have blue eyes	NN
Back Muscling & Bulk, Large Breed (ACSL4)	Likely normal muscling	CC
Body Size	RESULT	GENETIC RESULT
Body Size (IGF1)	Larger	NN
Body Size (IGFR1)	Larger	GG
Body Size (STC2)	Larger	TT
Body Size (GHR - E191K)	Larger	GG
Body Size (GHR - P177L)	Larger	CC
Performance	RESULT	GENETIC RESULT
Altitude Adaptation (EPAS1)	Normal altitude tolerance	GG
Appetite (POMC) LINKAGE	Normal food motivation	NN