

Optimal Selection™

POWERED BY  GENOSCOOPER

BR10 847

Gwyn, Border Collie

Registered Name: Gwyn

Call Name: Gwyn

Registration ID: 466182 ABC

Microchip: 985113002143577

Breed: Border Collie

Gender: Female

Owner: Karen Moureaux

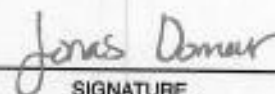
Country: United States

Testing date: 2019/12/16

Test results - Known disorders in the breed

Disorder	Type	Mode of Inheritance	Result
Degenerative Myelopathy, (DM; SOD1A)	Neurological Disorders	Autosomal Recessive (Incomplete Penetrance)	Clear
Dental Hypomineralization; mutation originally found in Border Collie	Other Disorders	Autosomal Recessive	Clear
Early Adult Onset Deafness (EAOD) in Border Collies (linked marker test)	Other Disorders	Autosomal Recessive (Incomplete Penetrance)	Clear
Goniodysgenesis and glaucoma; mutation originally found in Border Collie	Ocular Disorders	Autosomal Recessive	Clear
Intestinal Cobalamin Malabsorption or Imerslund-Gräsbeck Syndrome, (IGS); mutation originally found in Border Collie	Metabolic Disorders	Autosomal Recessive	Clear
Sensory Neuropathy; mutation originally found in Border Collie	Neurological Disorders	Autosomal Recessive	Clear
Trapped Neutrophil Syndrome, (TNS)	Blood Disorders	Autosomal Recessive	Clear

On behalf of Genoscooper Laboratories,


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Jonas Donner, PhD, Head of Research and Development
at Genoscooper Laboratories

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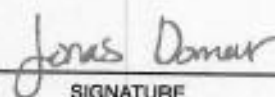
Test results - New potential disorders in the breed

Disorder	Type	Mode of Inheritance	Result
Cystinuria Type II-A; mutation originally found in Australian Cattle Dog	Renal Disorders	Autosomal Dominant	Clear
Myotonia Congenita; mutation originally found in Australian Cattle Dog	Muscular Disorders	Autosomal Recessive	Clear

Test results for pharmacogenetics

Disorder	Mode of Inheritance	Result
Multi-Drug Resistance 1, (MDR1) or Ivermectin Sensitivity	Autosomal Dominant	Clear

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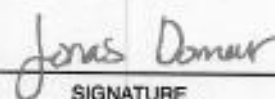
Gender: Female

Test results - Traits - page 1

Coat Type

Trait	Genotype	Description
Coat Length	ll	The dog is genetically long-haired.
Furnishings / Improper Coat in Portuguese Water Dogs (marker test)	GG/CC	The dog is not genetically likely to express furnishings.
KRT71 c.451C>T (p.Arg151Trp)	C/C	The dog does not carry any copies of the tested allele causing curly coat. The dog most likely has non-curly hair.
MC5R c.237A>T	C/C	The dog does not carry the tested allele associated with low shedding. This genotype has no effect on a dog with furnishings, but non-wire-haired dog with this genotype is likely heavy or seasonal shedder.
SGK3 (p.Val96Glyfs)	ll	The dog does not carry the tested hairlessness allele of the American Hairless Terrier.
SGK3 c.137_138insT (p.Glu47Glyfs)	D/D	The dog does not carry the tested hairlessness allele of the Scottish Deerhound.

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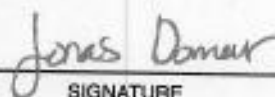
Gender: Female

Test results - Traits - page 2

Coat Color

Trait	Genotype	Description
Color Locus E - Extensions	E/E	The dog is likely to express the coat color defined by the K and A loci.
Color Locus B - Brown	B/B	The dog is not likely to have brown pigment.
Color Locus K - Dominant Black	ky/ky	The dog is likely to express the coat color defined by the color locus A.
Color Locus A - Agouti	at/at	The dog has genetically tan points or saddle tan pattern.
Color Locus S - Piebald or extreme white spotting	S/S	The dog is likely to have solid coat color with minimal white.
Color Locus H - Harlequin	h/h	The dog doesn't have harlequin pattern.
Dilution (d ² allele)	G/G	The dog does not carry any copies of the rare d ² allele associated with dilution in Chow Chow, Sloughi and Thai Ridgeback.
Merle (M allele)	m/m	The dog is genetically non-merle and does not carry a SILV gene SINE insertion.
Saddle Tan (RALY gene dupl.)	-/dup	The dog may have saddle tan pattern if it has also tan point genotype at the A locus.
Albinism (caI-allele)	C/C	The dog does not carry the tested mutation for albinism.

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