

Dog Information

Liberty (Liberty)	Female
NAME	SEX
German Shepherd Dog	June 23rd, 2024
BREED ANCESTRY	DATE OF BIRTH
Society for German Shepherd Dogs (SV)	n/a
DN79891810	MICROCHIP
REGISTRATION	

Joel & Shannon Shupp
OWNER NAME

Canine Genetic Health Screen
TEST

November 3rd, 2025
TEST DATE

BREED HEALTH TESTS

To ensure completeness, this report includes all carrier and at risk results for this dog.

DISEASE	GENE	GENOTYPE	RESULT	TESTING RECOMMENDED BY
Canine Leukocyte Adhesion Deficiency Type III, CLAD III	FERMT3	NN	Clear	
Degenerative Myelopathy, DM	SOD1A	GG	Clear	
Factor VIII Deficiency, Hemophilia A	F8 Exon 1	GG	Clear	
Factor VIII Deficiency, Hemophilia A	F8 Exon 11	GG	Clear	
Hyperuricosuria and Hyperuricemia or Urolithiasis, HUU	SLC2A9 (Exon 5)	GG	Clear	
MDR1 Drug Sensitivity	ABCB1	NN	Clear	
Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII	GUSB	GG	Clear	
Achromatopsia	CNGA3 (Exon 7 SNP)	CC	Clear	
Ichthyosis	ASPRV1 Exon 2	TT	Clear	
Platelet Factor X Receptor Deficiency, Scott Syndrome	TMEM16F	GG	Clear	
Renal Cystadenocarcinoma and Nodular Dermatofibrosis, RCND	FLCN	GG	Clear	
X-linked Ectodermal Dysplasia, Anhidrotic Ectodermal Dysplasia, XHED	EDA	GG	Clear	
Copper Toxicosis (Accumulating)	ATP7B	AA	2 Variants	

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INBREEDING AND DIVERSITY

Genetic Diversity	RESULT	GENETIC RESULT
Coefficient Of Inbreeding		38%
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 mask or grizzle	EE
K Locus (CBD103)	More likely to have a patterned haircoat	k ^Y k ^Y
Intensity Loci	No impact on coat pattern	Intermediate Red Pigmentation
A Locus (ASIP)	Recessive Black/Brown	aa
D Locus (MLPH)	Dark areas of hair and skin are not lightened	DD
Cocoa (HPS3)	No co alleles, not expressed	NN
B Locus (TYRP1)	Black or gray hair and skin	BB
Saddle Tan (RALY)	Not expressed	NN
S Locus (MITF)	Likely to have little to no white in coat	SS
M Locus (PMEL)	No merle alleles	mm
R Locus (USH2A)	Likely no impact on coat pattern	Rr

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TRAIT TESTS (2/3)

Coat Color	RESULT	GENETIC RESULT
H Locus (Harlequin)	No harlequin alleles	hh
Panda White Spotting	Not expected to display Panda pattern	NN

Other Coat Traits	RESULT	GENETIC RESULT
Furnishings (RSP02)	Likely unfurnished (no mustache, beard, and/or eyebrows)	II
Coat Length (FGF5)	Likely short or mid-length coat	ShLh
Shedding (MC5R)	Likely heavy/seasonal shedding	CC
Coat Texture (KRT71)	Likely straight coat	CC
Hairlessness (FOXI3)	Very unlikely to be hairless	NN
Hairlessness (SGK3)	Very unlikely to be hairless	NN
Oculocutaneous Albinism Type 2 (SLC45A2)	Likely not albino	NN

Other Body Features	RESULT	GENETIC RESULT
Muzzle Length (BMP3)	Likely medium or long muzzle	CC
Tail Length (T)	Likely normal-length tail	CC

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TRAIT TESTS (3/3)

Other Body Features		RESULT	GENETIC RESULT
Hind Dewclaws (LMBR1)	Unlikely to have hind dew claws	CC	
Chondrodysplasia (Chr. 18 FGF4 Retrogene)	Not indicative of chondrodysplasia (normal leg length)	NN	
Blue Eye Color (ALX4)	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)	Normal food motivation	NN	