Animal Genetics INCORPORATED
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Canine Genetic Testing Report

Submitted By

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2014 A Mine Road
Paradise, PA 17562

Subject Dog 00366321

Date Received: 4/25/2022

Dog Name: **Twila**
Breed: German Shepherd Dog
Phenotype: Sable

Registration: AKC DN59597408
Microchip:
Sex: Female Birth:

Sire

Sire Name:
Breed:
Registration:
Phenotype:

Dam

Dam Name:
Breed:
Registration:
Phenotype:

Coat Color Testing

X	A Locus-Ay	n/n	Dog does not carry the gene responsible for fawn/sable coat color.
X	A Locus-Aw	n/Aw	Dog has one copy of wild-sable.
X	A Locus-At	n/At	Dog has one copy of the tan points/tricolor gene.
X	A Locus-a	n/n	Dog does not carry the gene responsible for recessive black coat color.
X	B Locus	B/B	Dog does not carry the brown allele, and can never pass on the gene for brown to future offspring
	Cocoa		*Not Tested*
X	D Locus	D/D	Dog is negative for the dilution gene.
X	E Locus- EM	n/EM	Dog has one copy of the allele for melanistic mask
X	E Locus- e	E/E	Dog does not carry the gene responsible for yellow coat color. This dog will never pass on the allele for yellow coat color.
X	K Locus-KB	n/n	Dog does not have the dominant black gene, and the color pattern is determined by the Agouti gene.
X	Spotting	N/N	Negative: Dog is negative for the MITF variant associated with part-color in some breeds.
	Harlequin		*Not Tested*
	Merle		*Not Tested*

Coat Type Testing

X	Hair Length	L/L	Short Hair: Dog does not have the long-hair allele.
X	Hair Curl	n/n	Non-Curly Coat: Dog does not carry the mutation for coat curl.
X	Furnishings	n/n	Dog is negative for the Furnishings mutation.
X	Shedding	SD/SD	High: Dog has two copies of the shedding allele, and is more likely to be a high shedder.

Genetic Disorders

X	DM	n/DM	Carrier: Dog carries one copy of the mutation associated with SOD1A Degenerative Myelopathy, and could pass on the mutation to any offspring.
X	HUU	n/n	Clear: Dog tested negative for the Hyperuricosuria.
X	MDR1	n/n	Clear: Only normal unaltered allele detected. Dog should not exhibit any sensitivity to ivermectin or other drugs associated with this disorder.
X	MH	n/n	Clear: Dog tested negative for the MH mutation.
X	vWD1	n/n	Clear: Dog tested negative for the von Willebrand's Type I mutation.

Genetic Marker Results

Run Date: 4/30/2022

102/102	147/147	223/233	246/252	87/89	288/288	116/125
AHT121	AHT137	AHTh171	AHTk260	AHTk211	AHTk253	C22-279
224/224	152/164	240/240	95/95	124/126	146/150	218/220
CAN-AMEL	FH2054	FH2848	INRA21	INU005	INU030	INU055
234/238	200/212	216/216	158/168	270/270		
REN54P11	REN162C04	REN169D01	REN169O18	REN247M23		

Additional Comments

A-Panel: Aw/At - Dog is wild-sable and carries black-and-tan.
E-Panel: EM/E-Dog has one copy of the melanistic mask allele and does not carry the recessive yellow allele.