

**2018 Shetland Sheepdog DMS Test Results\***  
**Animal Genetics, Eurovetgene, OptiGen & VetGen Laboratories**

Total tested all genotypes		USA	Can	Fra	Ger	Belg	UK	Brazil	Asia	Other	
<b>Totals all</b>	<b>644</b>	<b>100%</b>	469	28	56	42	1	36	7	1	4
<b>Low Risk</b>											

**Total low risk**

Alternate alleles to DLA-DRB1 002:01 are **BOLD**.

A, B genotype	DLA-DRB1	539	84%	USA	Can	Fra	Ger	Belg	UK	Brazil	Asia	Other
aabb	002:01/002:01	142		77	15	13	8	1	22	4	0	2
aabb	002:01/ <b>023:01</b>	23		19	0	0	3	0	0	1	0	0
aabb	<b>023:01/023:01</b>	2		2	0	0	0	0	0	0	0	0
aabb	002:01/ <b>015:01</b>	10		0	0	3	0	0	7	0	0	0
Aabb	002:01/002:01	54		39	0	9	5	0	1	0	0	0
Aabb	002:01/ <b>023:01</b>	19		18	1	0	0	0	0	0	0	0
Aabb	<b>023:01/023:01</b>	1		1	0	0	0	0	0	0	0	0
Aabb	002:01/ <b>015:01</b>	2		1	0	0	1	0	0	0	0	0
aaBb	002:01/002:01	116		95	3	7	8	0	3	0	0	0
aaBb	002:01/ <b>023:01</b>	36		30	0	0	6	0	0	0	0	0
aaBb	<b>023:01/023:01</b>	7		7	0	0	0	0	0	0	0	0
aaBb	002:01/ <b>015:01</b>	1		0	0	1	0	0	0	0	0	0
aaBb	<b>015:01/015:01</b>	1		0	0	1	0	0	0	0	0	0
AaBb	002:01/002:01	80		56	4	12	5	0	1	0	0	2
AaBb	002:01/ <b>023:01</b>	18		13	1	0	2	0	0	2	0	0
AaBb	<b>023:01/023:01</b>	4		4	0	0	0	0	0	0	0	0
AaBb	002:01/ <b>015:01</b>	1		0	0	1	0	0	0	0	0	0
aaBB	002:01/ <b>023:01</b>	22		19	0	1	2	0	0	0	0	0
aaBB	002:01/ <b>015:01</b>	0		0	0	0	0	0	0	0	0	0
<b>Total low/country</b>				<b>381</b>	<b>24</b>	<b>48</b>	<b>40</b>	<b>1</b>	<b>34</b>	<b>7</b>	<b>0</b>	<b>4</b>

<b>Moderate Risk</b>	USA	Can	Fra	Ger	Belg	UK	Brazil	Asia	Other
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**Total moderate risk**

A, B genotype	DLA-DRB1	62	10%
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AAbb	002:01/002:01	4	3	0	0	1	0	0	0	0	0
AAbb	002:01/ <b>023:01</b>	1	1	0	0	0	0	0	0	0	0
aaBB	002:01/002:01	42	37	1	2	0	0	2	0	0	0
AaBB	002:01/ <b>023:01</b>	11	11	0	0	0	0	0	0	0	0
AaBB	002:01/ <b>015:01</b>	0	0	0	0	0	0	0	0	0	0
AABb	002:01/ <b>023:01</b>	4	4	0	0	0	0	0	0	0	0

Total <b>mod/</b> country	56	1	2	1	0	2	0	0	0
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<b>High risk</b>	USA	Can	Fra	Ger	Belg	UK	Brazil	Asia	Other
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**Total high risk**

A, B genotype	DLA-DRB1	39	6%
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AABb	002:01/002:01	11	7	0	3	1	0	0	0	0	0
AaBB	002:01/002:01	20	15	3	1	0	0	0	0	1	0
AABB	002:01/002:01	6	4	0	2	0	0	0	0	0	0
AABB	002:01/ <b>023:01</b>	2	2	0	0	0	0	0	0	0	0

Total <b>high/</b> country	28	3	6	1	0	0	0	1	0
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<b>Unknown risk</b>	USA	Can	Fra	Ger	Belg	UK	Brazil	Asia	Other
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**Total Unknown Risk**

<b>4</b>	<b>1%</b>
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AaBB	<b>023:01/023:01</b>	3	3	0	0	0	0	0	0	0	0	0
AaBB	<b>015:01/015:01</b>	0	0	0	0	0	0	0	0	0	0	0
aaBB	<b>015:02/023:01</b>	0	0	0	0	0	0	0	0	0	0	0
aaBB	<b>023:01/023:01</b>	1	1	0	0	0	0	0	0	0	0	0
AaBb	<b>002:01/006:01</b>	0	0	0	0	0	0	0	0	0	0	0
Aabb	<b>002:01/006:01</b>	0	0	0	0	0	0	0	0	0	0	0
AABb	<b>002:01/006:01</b>	0	0	0	0	0	0	0	0	0	0	0
AAbb	<b>002:01/006:01</b>	0	0	0	0	0	0	0	0	0	0	0

<b>Total Unknown</b>	4	0	0	0	0	0	0	0	0	0	0
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\*Data do not reflect the incidence of DMS within the breed as it is **not** a random sampling of Shelties within the general population. One can only assess the distribution of genotypes of the dogs tested.