

## Canine Genetic Health Certificate™

<b>Call Name:</b>	Hustler	<b>Laboratory #:</b>	108259
<b>Registered Name:</b>	-	<b>Registration #:</b>	-
<b>Breed:</b>	Toy Australian Shepherd	<b>Certificate Date:</b>	Nov. 5, 2018
<b>Sex:</b>	Female		
<b>DOB:</b>	Oct. 2018		

**This canine's DNA showed the following genotype(s):**

Disease	Gene	Genotype	Interpretation
Intestinal Cobalamin Malabsorption (Australian Shepherd Type)	AMN	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	PRCD	WT/M	Carrier

WT, wild type (normal); M, mutant; Y, Y chromosome (male)



**Helen F Smith, PhD**  
Assistant Laboratory Director



**Casey R Carl, DVM**  
Associate Medical Director

Paw Print Genetics® performed the tests listed on this dog. See the Laboratory Report for interpretation and recommendations based on these findings. The genes/diseases reported here were selected by the client. Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the tests' accuracy and precision. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results. Genetic counseling is available at Paw Print Genetics.

## Canine Genetic Health Certificate™

**Call Name:** Agent  
**Registered Name:** -  
**Breed:** Miniature Australian Shepherd  
**Sex:** Male  
**DOB:** May 2017

**Laboratory #:** 54837  
**Registration #:** -  
**Certificate Date:** June 20, 2017

This canine's DNA showed the following genotype(s):

Disease	Gene	Genotype	Interpretation
Collie Eye Anomaly	NHEJ1	WT/WT	Normal (clear)
Cone Degeneration	CNGB3	WT/WT	Normal (clear)
Degenerative Myelopathy	SOD1	WT/WT	Normal (clear)
Hereditary Cataracts (Australian Shepherd Type)	HSF4	WT/WT	Normal (clear)
Hyperuricosuria	SLC2A9	WT/WT	Normal (clear)
Multidrug Resistance 1	ABCB1	WT/WT	Normal (clear)
Multifocal Retinopathy 1	BEST1	WT/WT	Normal (clear)
Neuronal Ceroid Lipofuscinosis 6	CLN6	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	PRCD	WT/WT	Normal (clear)

WT, wild type (normal); M, mutant

**Christina J Ramirez, PhD, DVM, DACVP**  
Medical Director

**Casey R Carl, DVM**  
Associate Medical Director

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## Canine Genetic Health Certificate™

<b>Call Name:</b>	Agent	<b>Laboratory #:</b>	54837
<b>Registered Name:</b>	-	<b>Registration #:</b>	-
<b>Breed:</b>	Miniature Australian Shepherd	<b>Certificate Date:</b>	Nov. 7, 2018
<b>Sex:</b>	Male		
<b>DOB:</b>	May 2017		

**This canine's DNA showed the following genotype(s):**

Disease	Gene	Genotype	Interpretation
Collie Eye Anomaly	<i>NHEJ1</i>	WT/WT	Normal (clear)
Cone Degeneration	<i>CNGB3</i>	WT/WT	Normal (clear)
Degenerative Myelopathy	<i>SOD1</i>	WT/WT	Normal (clear)
Hereditary Cataracts (Australian Shepherd Type)	<i>HSF4</i>	WT/WT	Normal (clear)
Hyperuricosuria	<i>SLC2A9</i>	WT/WT	Normal (clear)
Intestinal Cobalamin Malabsorption (Australian Shepherd Type)	<i>AMN</i>	?/?	Inconclusive
Intestinal Cobalamin Malabsorption (Border Collie Type)	<i>CUBN</i>	WT/WT	Normal (clear)
Multidrug Resistance 1	<i>ABCB1</i>	WT/WT	Normal (clear)
Multifocal Retinopathy 1	<i>BEST1</i>	WT/WT	Normal (clear)
Neuronal Ceroid Lipofuscinosis 6	<i>CLN6</i>	WT/WT	Normal (clear)
Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd Type)	<i>CLN8</i>	?/?	Inconclusive
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	<i>PRCD</i>	WT/WT	Normal (clear)

WT, wild type (normal); M, mutant; Y, Y chromosome (male)



**Blake C Ballif, PhD**  
 Laboratory & Scientific Director



**Casey R Carl, DVM**  
 Associate Medical Director

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Hustler Dam



## Canine Genetic Health Certificate™

**Call Name:** Gambles  
**Registered Name:** -  
**Breed:** Miniature Australian Shepherd  
**Sex:** Female  
**DOB:** May 2017

**Laboratory #:** 54855  
**Registration #:** -  
**Certificate Date:** June 20, 2017

This canine's DNA showed the following genotype(s):

Disease	Gene	Genotype	Interpretation
Collie Eye Anomaly	<i>NHEJ1</i>	WT/WT	Normal (clear)
Cone Degeneration	<i>CNGB3</i>	WT/WT	Normal (clear)
Degenerative Myelopathy	<i>SOD1</i>	WT/WT	Normal (clear)
Hereditary Cataracts (Australian Shepherd Type)	<i>HSF4</i>	WT/WT	Normal (clear)
Hyperuricosuria	<i>SLC2A9</i>	WT/WT	Normal (clear)
Multidrug Resistance 1	<i>ABCB1</i>	WT/WT	Normal (clear)
Multifocal Retinopathy 1	<i>BEST1</i>	WT/WT	Normal (clear)
Neuronal Ceroid Lipofuscinosis 6	<i>CLN6</i>	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	<i>PRCD</i>	WT/M	Carrier

WT, wild type (normal); M, mutant

**Christina J Ramirez, PhD, DVM, DACVP**  
Medical Director

**Casey R Carl, DVM**  
Associate Medical Director

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