



VETERINARY GENETICS LABORATORY
 SCHOOL OF VETERINARY MEDICINE
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AQHA GENETIC DISEASE PANEL TEST RESULTS

AMERICAN QUARTER HORSE ASSOCIATION P.O. BOX 200 AMARILLO, TX 79168-0001	Case: Date 17-May-2018 Print Date: 16-Sep-2019 Report ID: 6443-2165-5286-2088 Verify report at www.vgl.ucdavis.edu/myvgl/verify.htm
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Horse: COOL N HOT YOB: 2014 Sex: Stallion Breed: Quarter Horse Alt. ID: 6621833	Reg: 5629768
Sire: HOTTISH Dam: DONAS COOL CAT	Reg: 5069512 Reg: 4204959

GBED	N/N	N/N - Normal - Does not possess the disease-causing GBED gene
HERDA	N/HRD	N/HRD - Carrier - horse carries one copy of the HERDA gene
HYPP	N/N	N/N - Normal - Does not possess the disease-causing HYPP gene
MH	N/N	N/N - Normal - horse does not have the MH gene
PSSM1	N/N	N/N - Normal - horse does not have the PSSM1 gene

GBED - Glycogen Branching Enzyme Deficiency. Fatal disease of newborn foals caused by defect in glycogen storage. Affects heart and skeletal muscles and brain. Inherited as recessive disease.

HERDA - Hereditary Equine Regional Dermal Asthenia. Skin disease characterized by hyperextensible skin, scarring, and severe lesions along the back of affected horses. Typical onset is around 2 years of age. Inherited as a recessive disease.

HYPP - Hyperkalemic Periodic Paralysis. Muscle disease caused by defect in sodium channel gene that causes involuntary muscle contraction and increased level of potassium in blood. Inherited as dominant disease. Two copies of defective gene produce more severe signs than one copy.

MH - Malignant Hyperthermia. Rare but life-threatening skeletal muscle disease triggered by exposure to volatile anesthetics (halothane), depolarizing muscle relaxants (succinylcholine), and stress. Presumed inheritance as dominant disease.

PSSM1 - Polysaccharide Storage Myopathy Type 1. Muscle disease characterized by accumulation of abnormal complex sugars in skeletal muscles. Signs include muscle pain, stiffness, skin twitching, sweating, weakness and reluctance to move. Inherited as a dominant disease.

GBED testing performed under a license agreement with the University of Minnesota.
 HERDA testing performed under a license agreement with the University of California, Davis.
 PSSM1 testing performed under a license agreement with the American Quarter Horse Association.

Equine Genetic Testing Report



Submitted By

Debbie Patterson
Brazos Valley Stallion Station LP
21351 N US Hwy 377
Stephenville, TX 76401

Subject Horse

Date Received: 1/12/2021

Horse Name: Cool N Hot Breed: Quarter Horse Phenotype: Chestnut Sex: Stallion	Lab Reference #: 00147204 Registration: 5629768 Birth: 2014
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Sire

Sire Name: Hottish
Breed: Quarter Horse
Registration:
Phenotype:

Dam

Dam Name: Donas Cool Cat
Breed: Quarter Horse
Registration: 4204959
Phenotype: Sorrel

Coat Color and Pattern Testing

Tobiano	Not Tested
Frame Overo	Not Tested
Sabino 1	Not Tested
Splashed White 1	Not Tested
Splashed White 2	Not Tested
Splashed White 3	Not Tested
Appaloosa (LP)	Not Tested
PATN1	Not Tested
Red/Black Factor	Not Tested
Agouti	Not Tested
Cream Dilution	Not Tested
Dun Dilution	Not Tested
Silver Dilution	Not Tested
Champagne	Not Tested
Pearl Dilution	Not Tested
Gray	Not Tested

Genetic Disorders

HYPP	Not Tested
HERDA	Not Tested
GBED	Not Tested
MH	Not Tested
X IMM	N/N Horse tested negative for the mutation associated with IMM.
PSSM 1	Not Tested
FIS	Not Tested
JEB1	Not Tested
JEB2	Not Tested
CA	Not Tested
LFS	Not Tested
SCID	Not Tested
OAAM1	Not Tested
WFFS1	Not Tested

Additional Comments

None

Genetic Marker Results Run Date: Not Tested

-	-	-	-	-	-	-
AHT4	AHT5	ASB17	ASB2	ASB23	AME	CA125UK
-	-	-	-	-	-	-
HMS3	HMS6	HMS7	HTG10	HTG4	LEX3	LEX33
-	-	-	-	-	-	-
VHL20	UM011	HMS1	HMS2	HTG6	HTG7	

EQUINE JUVENILE SPINOCEREBELLAR ATAXIA TEST REPORT

<p><i>Provided Information:</i></p> <p><i>Name:</i> COOL N HOT</p> <p><i>Registration:</i> 5629768</p>	<p><i>Case:</i></p> <p><i>Date Received:</i> 02-Aug-2024</p> <p><i>Report Issue Date:</i> 06-Aug-2024</p> <p><i>Report ID:</i> 6277-3501-6021-4184</p> <p style="text-align: center; font-size: small;">Verify report at vgl.ucdavis.edu/verify</p>
<p><i>DOB:</i> 03/20/2014 <i>Sex:</i> Stallion <i>Breed:</i> Quarter Horse</p>	
<p><i>Sire:</i> HOTTISH</p> <p><i>Reg:</i> 5069512</p> <p><i>Microchip:</i></p>	<p><i>Dam:</i> DONAS COOL CAT</p> <p><i>Reg:</i> 4204959</p> <p><i>Microchip:</i></p>

RESULT

INTERPRETATION

Equine Juvenile Spinocerebellar Ataxia	N/N
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Normal. No copies of the allele associated with equine juvenile spinocerebellar ataxia (EJSCA) detected.