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HORSE COAT COLOR / PATTERN TEST RESULTS

ANNA KARLBERG
OLAV ENGELBREKTSSONS ALLE 55
7040 TRONDHEIM
NORWAY

Case: **NQ38335**
Date Received: 28-Aug-2017
Print Date: 06-Sep-2017
Report ID: 0473-5344-0351-7066
Verify report at www.vgl.ucdavis.edu/myvgl/verify.html

Horse: **TK MOEMA** *Reg:*

DOB: **08/11/2017** *Sex:* **Mare** *Breed:* **Kiger Mustang**

Sire: SWS DURANGO DE DBLE L *Reg:* KMA#0581-P

Dam: MAHANA *Reg:* KMA#0653-W

RED FACTOR		Not requested.
AGOUTI	**a/a**	If present, black pigment is distributed uniformly over the body.
CREAM		Not requested.
PEARL		Not requested.
SILVER		Not requested.
DUN	**D/nd2**	1 copy of Dun dilution and 1 copy of nd2.
CHAMPAGNE		Not requested.
LETHAL WHITE OVERO		Not requested.
SABINO 1		Not requested.
DOMINANT WHITE (W5, W10, W20)		Not requested.

SPLASHED WHITE		Not requested.
TOBIANO		Not requested.
LEOPARD		Not requested.
PATTERN-1		Not requested.
BRINDLE 1		Not requested.
TIGER EYE		Not requested.
GRAY		Not requested.
ROAN		Not requested.

For more detailed information on Horse Coat Color results, please visit:
www.vgl.ucdavis.edu/services/coatcolorhorse.php

Tests for Gray, Leopard/Appaloosa, Lethal White Overo and Tobiano are performed under license.

Horse Coat Color / Pattern Results

Red Factor

e/e - Only red factor detected. Basic color is red in the absence of modifying genes.

E/e - Both black and red factors detected.

E/E - No red factor detected. Offspring cannot be chestnut/sorrel.

Agouti

A/A - 2 copies of agouti present. If present, black pigment is restricted to the points.

A/a - 1 copy of agouti. If present, black pigment is restricted to the points.

a/a - If present, black pigment is distributed uniformly over the body.

Cream

N/N - No copies of Cream dilution detected.

N/Cr - 1 copy of Cream dilution detected.

Cr/Cr - 2 copies of Cream dilution detected.

Pearl

N/N - No copies of Pearl dilution detected.

N/Prl - 1 copy of Pearl dilution detected.

Prl/Prl - 2 copies of Pearl dilution detected. On a red background, an apricot color will result.

Tobiano

N/N - No copies of Tobiano detected.

N/TO - 1 copy of Tobiano detected.

TO/TO - 2 copies of Tobiano detected.

Dominant White (W5, W10, W20)

N/N - No copies of W5, W10 or W20 detected.

N/W5 - 1 copy of W5 detected.

W5/W10 - 1 copy of W5 and 1 copy of W10 detected.

W5/W20 - 1 copy of W5 and 1 copy of W20 detected.

W5/W5 - 2 copies of W5 detected.

N/W10 - 1 copy of W10 detected.

W10/W20 - 1 copy of W10 and 1 copy of W20 detected.

W10/W10 - 2 copies of W10 detected.

N/W20 - 1 copy of W20 detected.

W20/W20 - 2 copies of W20 detected.

Leopard / Appaloosa

N/N - No copies of Leopard Complex detected.

LP/N - 1 copy of Leopard Complex detected.*

LP/LP - 2 copies of Leopard Complex detected. Horse will have congenital stationary night blindness (CSNB).

* Expression of Leopard Complex is variable and white patterning may not be present in all horses that inherit the gene.

Appaloosa Pattern-1

N/N - No copies of PATN1 detected.*

N/PATN1 - 1 copy of PATN1 detected.*

PATN1/PATN1 - 2 copies of PATN1 detected.*

* In order for high levels of white spotting to be visible on horses that inherit PATN1, LP must also be present.

Gray

N/N - No copies of the gray gene. Horse will not turn gray.

N/G - 1 copy of the gray gene. Horse will turn gray and approximately 50% of offspring will be gray.

G/G - 2 copies of the gray gene. Horse will turn gray and all offspring will be gray.

Brindle 1

N/N - No copies of BR1 mutation detected in female horse.

N - No copies of BR1 mutation detected in male horse.

N/BR1 - 1 copy of BR1 mutation detected in female horse.

BR1/BR1 - 2 copies of BR1 mutation detected in female horse.

BR1 - 1 copy of BR1 mutation detected in male horse.

Silver

N/N - No copies of Silver dilution detected.

N/Z - 1 copy of Silver dilution detected.

Z/Z - 2 copies of Silver dilution detected. Horse is expected to have MCOA eye abnormalities.

Lethal White Overo

N/N - No copies of lethal white overo detected.

N/O - 1 copy of lethal white overo detected.

O/O - 2 copies of lethal white overo. Result only seen in LWO-affected foals.

Sabino 1

N/N - No copies of Sabino 1 detected.

N/SB1 - 1 copy of Sabino 1 detected.

SB1/SB1 - 2 copies of Sabino 1 detected.

Champagne

N/N - No copies of Champagne dilution detected.

N/Ch - 1 copy of Champagne dilution detected.

Ch/Ch - 2 copies of Champagne dilution detected.

Dun

D/D - 2 copies of Dun dilution detected.

D/nd1 - 1 copy of Dun dilution and 1 copy of nd1.

D/nd2 - 1 copy of Dun dilution and 1 copy of nd2.

nd1/nd1 - Horse is not Dun dilute but may have primitive markings.

nd1/nd2 - Horse is not Dun dilute but may have primitive markings.

nd2/nd2 - Horse is not Dun dilute. Primitive markings are absent.

Splashed White/MITF (SW1, SW3)

N/N - No copies of MITF Splashed White detected.

N/SW1 - 1 copy of SW1 detected.

SW1/SW3 - 1 copy of SW1 and 1 copy of SW3 detected.

SW1/SW1 - 2 copies of SW1 detected.

SW3/SW3 - 2 copies of SW3 detected.

N/SW3 - 1 copy of SW3 detected.

Splashed White/PAX3 (SW2, SW4)

N/N - No copies of PAX3 Splashed White detected.

N/SW2 - 1 copy of SW2 detected.

SW2/SW4 - 1 copy of SW2 and 1 copy of SW4 detected.

SW2/SW2 - 2 copies of SW2 detected.

SW4/SW4 - 2 copies of SW4 detected.

N/SW4 - 1 copy of SW4 detected.

Roan

Rn/Rn - 2 copies of classic Roan detected.

Rn/N - 1 copy of classic Roan detected.

Rn*/Rn* - 2 copies of alternative roan variant detected.*

Rn/Rn* - 1 copy of classic Roan and 1 copy of alternative roan variant detected.*

Rn*/N - 1 copy of alternative roan variant detected.*

N/N - No copies of classic Roan detected.

The Roan Zygosity test is not a direct test for the Roan gene. The analysis is based on markers associated with Classic Roan in Belgian Draft Horses, Gypsy Cobs, Miniature Horses, Quarter Horses, Tennessee Walking Horses and Welsh Ponies.

Note: There are horses with a roaned appearance that test negative for the Classic Roan gene. The genetic basis for this pattern called roaning is not known at this time.

Tiger Eye

N/N - No copies of the Tiger Eye variants.

N/TE1 - Carrier of the Tiger Eye 1 variant.

TE1/TE1 - 2 copies of the Tiger eye 1 variant, horse should display a lighter eye color.

N/TE2 - Carrier of the Tiger Eye 2 variant.

TE2/TE2 - 2 copies of the Tiger eye 2 variant horse should display a lighter eye color.

TE1/TE2 - 1 copy of Tiger eye variant 1 and 1 copy of Tiger eye 2 variant, horse should display a lighter eye color.