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HORSE COAT COLOR TEST RESULTS

Jennifer Gilson Sonora Veterinary Specialists 4015 East Cactus Road Phoenix, AZ 85032	Case: DT15551 Date Received: 27-Dec-2006 Report Date: 03-Jan-2007 Report ID: 5667-6728-1206-6175
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Horse: MYSTERY YOB: 06 Breed: XX Sex: M	Reg: Alt. ID:
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Sire: CLONONEEN ROMEO Dam: CLONONEEN ONRA	Reg: Reg:
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RED FACTOR E/e	Both black and red factors detected. Either E or e transmitted to offspring. Basic color is black, bay or brown in the absence of other modifying genes.
AGOUTI a/a	Only recessive allele detected. Black pigment distributed uniformly. Basic color is black in the absence of other modifying genes.
CREAM DILUTION N/Cr	Heterozygous, dilute, one copy of Cream gene. Typical colors are palomino, buckskin and smoky black in the absence of other modifying genes.
PEARL DILUTION N/Prl	One copy of the altered sequence detected. If Cream dilution is also present, a pseudo-double Cream dilute phenotype will result.
SILVER DILUTION N/N	No evidence of the altered sequence detected.
LETHAL WHITE OVERO N/N	No evidence for the altered sequence detected.
SABINO 1 N/N	No evidence of altered sequence detected.

Horse Coat Color Results with Explanations

Red Factor

e/e – Only the red factor detected. Basic color is sorrel or chestnut in the absence of other modifying genes.

E/e – Both black and red factors detected. Either E or e transmitted to offspring. Basic color is black, bay or brown in the absence of other modifying genes.

E/E – No red factor detected. It cannot have red foals regardless of the color of mate. Basic color is black, bay or brown in the absence of other modifying genes.

Agouti

A/A – Black pigment distributed in points pattern. Basic color is bay or brown in the absence of other modifying genes.

A/a – Black pigment distributed in points pattern. Basic color is bay or brown in the absence of other modifying genes.

a/a – Only recessive allele detected. Black pigment distributed uniformly. Basic color is black in the absence of other modifying genes.

Cream

N/N – No evidence for the Cream dilution altered sequence detected. Basic color is sorrel or chestnut, bay or black in the absence of other modifying genes.

N/Cr – Heterozygous, dilute, one copy of Cream gene. Typical colors are palomino, buckskin and smoky black in the absence of other modifying genes.

Cr/Cr – Double dilute (two copies of Cream gene). Typical colors are cremello, perlino and smoky cream in the absence of other modifying genes.

Pearl

N/N – No evidence of the altered sequence detected.

N/Prl – One copy of the altered sequence detected. If Cream dilution is also present, a pseudo-double Cream dilute phenotype will result.

Prl/Prl – Two copies of the altered sequence detected. On a chestnut base color, a uniform apricot color of body hair, mane and tail will result.

Silver

N/N – No evidence of the altered sequence detected.

N/Z – One copy of the altered sequence detected. Black-based horses will be chocolate with flaxen or lightened mane and tail. Bay-based horses will have lightened black pigment on lower legs, mane and tail. No effect on chestnut color.

Z/Z – Two copies of altered sequence detected. Black-based horses will be chocolate with flaxen or lightened mane and tail. Bay-based horses will have lightened black pigment on lower legs, mane and tail. No effect on chestnut color.

Lethal White Overo

N/N – No evidence for the altered sequence detected.

N/O – One copy of the altered sequence detected. If bred to another N/O horse, there is a 25% chance of producing a lethal white overo foal. The N/O type has been detected in Paints (including breeding stock), Pintos, Thoroughbreds, Miniatures, Quarter Horses and Tennessee Walking Horses.

O/O – Only the altered sequence in the EDNRB gene detected. This result has only been obtained with samples from lethal white overo foals.

Sabino 1

N/N – No evidence of altered sequence detected.

N/SB1 – One copy of the Sabino 1 gene detected. Horse typically may have 2 or more white legs, blaze, spots or roaning in the midsection and jagged margins around white areas.

SB1/SB1 – Two copies of the Sabino 1 gene detected. Complete or nearly complete white phenotype expected.