

DNA TESTING RESULTS

Horse: QH / 2006 Foal "TC Dun In Ice" (pending)

Registry #: AQHA pending

Gender: Stallion

Owner: Audra Balkan

PDSAz #: H1303

Date: 7/24/2006

Gene/Locus	Result	Note
Extension (Red Factor)	<i>e/e</i>	The horse has two doses of the recessive Red Factor allele 'e'. The horse does not produce black hair pigment, and the base color is chestnut. Expected to pass 'e' to all foals.
Agouti	<i>A/a</i>	The horse has one dose of the dominant Agouti allele 'A' and one dose of the recessive non-Agouti allele 'a'. This gene shows an effect on color in horses producing the black hair pigment (= are either E/E, or E/e at the Extension gene); there is no visible effect in a chestnut/red based (e/e) horse. The dominant allele 'A' restricts black hair to the points (mane, tail, ears, lower legs), and an [E/E A/a] or [E/e A/a] horse is expected to have a bay or brown base color. When bred, there is a 50% probability of this horse passing either the 'A' or 'a' allele to the offspring.
Cream Dilution	<i>Cr/cr</i>	The horse has one dose of the Cream Dilution 'Cr' gene. Depending on the base color (and in the absence of additional color modifying genes), a Cr/cr horse can be either a Palomino (chestnut base color), Buckskin (bay base color), or Smoky Black (black base color). When bred, the horse is expected to pass the Cream Dilution gene to approximately 50% of the offspring.
Lethal White Overo (LWO/OLWS)	<i>LWO-negative</i>	The horse is not a carrier of the LWO/OLWS mutation. Not expected to pass LWO/OLWS to the offspring.

I certify that these results were produced at *Pet DNA Services of Arizona®*.

PET DNA SERVICES OF AZ

MICHAL PROCHAZKA M.D.
 DIRECTOR

THANK YOU FOR USING OUR SERVICES!

ANDREA SYA
KREUZTELDSTRASSE 6
36151 BURGHAWN, ,
GERMANY

07/24/08

CHAMPAGNE GENE TEST RESULTS

LAB NO.: C08-00405 BREED:

HORSE NAME: TC DUNIN ICE

TYPE: CH/N

COMMENT: THIS HORSE WAS HETEROZYGOUS FOR THE CHAMPAGNE GENE

CHAMPAGNE GENE- This horse is heterozygous for the Champagne mutation. It will pass a Champagne gene to 50% of its foals. Champagne affects all base colors and produces a diluted coat color as well as pink skin that is mottled in exposed areas. It is a dominant trait and therefore is expressed even if only one copy of the gene is present.



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DUN ZYGOSITY TEST REPORT

ANDREA SYA KREUZFELDSTRASSE 6 36151 BURGHAUN HESSEN, GERMANY	Case: DT22511 Date Received: 24-Aug-2009 Report Date: 04-Sep-2009 Report ID: 8022-1165-9002-0088
Name: TC DUN IN ICE YOB: 06 Breed: QH Sex: S	Reg: 4903312 Alt. ID:
Sire: DOT HOLLYWOOD JESSIE Dam: COUGARITZY	Reg: 3743320 Reg: 3475419

DUN ZYGOSITY RESULT

D/N

Result Codes:

- D/D:** Horse is homozygous for the Dun gene. All offspring should be Dun dilute.
- D/N:** Horse has one copy of the Dun gene. Horse will transmit Dun gene to 50% of the offspring.
- N/N:** Markers inconsistent with horse being Dun.
- Inconclusive 1:** Dun zygosity cannot be determined for this case.
- Inconclusive 2:** Dun zygosity cannot be determined for this case. Submission of samples from one or both parents may resolve zygosity.

This zygosity test is not a direct test for the Dun gene. The analysis is based on markers associated with Dun dilution.