



Handed out directly
from your vet

RAT & TAT







Die moderne Informationsreihe von Ihrem
Tierarzt und Laboklin

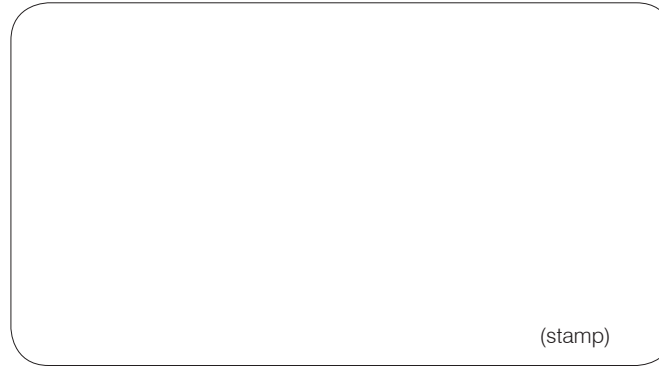


Our quality assurance programme

All tests performed in house are run in duplicates from the very beginning (isolation of DNA, test itself) thus producing highest possible standard of quality. All procedures are accredited according to DIN/ISO 17025. In addition to a constant panel of internal controls all tests are regularly checked with external controls as well.

Topic overview

-  **CA - Cerebellar Abiotrophy**
-  **LFS - Lavender Foal Syndrome**
-  **SCID – Severe Combined Immunodeficiency**
-  **Sprinting Ability and Racing Stamina (Speed-Gene)**
-  **Coat colours**
-  **DNA-Profile markers according to ISAG**



Service

This info-flyer together with further useful informations are available for downloads on www.laboklin.com/service/Animal Owner Information.

Genetics
Arabic Horse

www.laboklin.com

Sample material for all genetic tests:

1 ml EDTA-blood or 15-20 hair roots from mane or tail.
Storage of samples for 10 years



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The name „LABOKLIN“ represents excellence in veterinary laboratory diagnostics. Since 1989 LABOKLIN has been providing the veterinary community with a wide array of high quality laboratory analysis.

For the past ten years LABOKLIN has also been providing genetic and parentage DNA testing to veterinary professionals, breeders and animal owners. Our DNA testing covers wide range of inherited conditions.

We continue to offer and develop new genetic tests to keep pace with the growing awareness of the risks associated with inherited diseases and the aim of many breeders, breeding clubs, veterinary professionals and owners to control genetic diseases in the different breeds.

Below please find an overview of the tests we offer for the Arabian Horse. For more information please do not hesitate to contact us, contact details can be found on the back of this brochure.

CA - Cerebellar Abiotrophy

Foals affected with CA appear normal at birth. Around six weeks of age (although sometimes as late as four months), the disease causes the death of neurons in the cerebellum, leading to head tremor and a lack of balance equilibrium

(ataxia), among other neurological deficits. The neurological problems may not be apparent to owners and frequently thought to be a consequence of a fall rather than CA. Signs of CA are variable. Some foals show very severe signs, including the exaggerated gaits and a dramatic lack of balance. Others have little more than the head tremor, which may only manifest itself during goal-directed movement.

LFS - Lavender Foal Syndrome

LFS is an autosomal recessive inherited disease which has been reported mainly in the Egyptian Arabian.

Affected foals can display an array of neurological signs including tetanic-like seizures, opisthotonus, stiff or paddling leg movements and nystagmus. These neurologic impairments prevent the foal from standing and nursing normally and, if not lethal on their own, are often the cause for euthanasia.



In addition to these abnormalities, affected foals possess a characteristic diluted „lavender“ coat color. This resulting coat color, variously described as pale gray, pewter, and light chestnut, as well as lavender, has coined the name „Lavender Foal Syndrome“ (LFS), also called „Coat Color Dilution Lethal“. There is currently no treatment for LFS available.

Additionally, initial diagnosis can be difficult as the clinical signs of LFS can easily be confused with a number of neonatal conditions including neonatal maladjustment syndrome and encephalitis.

SCID – Severe Combined Immunodeficiency

SCID of Arabian foals is a fatal disease caused by the lack of B- and T-lymphocytes. Thus a foal affected by SCID is born with no immune system, and generally dies of an opportunistic infection such as pneumonia, usually before the age of five or six months. The disease is inherited as an autosomal recessive condition.

Sprinting Ability and Racing Stamina (Speed-Gene)

Known as MSTN, the gene regulates myostatin, a protein that controls muscle cell

production. There are three different variants of the myostatin gene a horse can inherit: TT, CC and CT. Horses with the TT version develop muscles later in life. Horses with the CC version develop their muscles earlier.

Horses with the myostatin gene combination designated as C/C are better suited to fast, short races; those with the C/T variation tend to compete better over middle distances; and T/T animals have more stamina and thus are better suited to long distances.

Coat colours

- Greying
- Chestnut
- Agouti (brown/black)
- Cream
- Champagne
- Pearl*
- Silver dapple
- Dun zygosity*
- Roan zygosity*



- Tobiano
- Sabino-1
- GQ Santana Dominant White W10*
- Leopard complex

DNA-Profile (markers according to ISAG)

DNA-Profile (Identity)
Parentage testing

