

Testing is simple!

Improve your horse's quality of life in five easy steps:

1. Go to:
www.centerforanimalgenetics.com/pssm2
2. Order the test in our **Webshop**.
3. Send **mane** or **tail** hair (**with roots**)* to CAG GmbH.
4. You will receive your **results** 10-14 days after your sample arrives.
5. If your horse tests **positive** for one or more of the genetic variants, speak with your **veterinarian** for advice.

Test Nr.

H108

About us

CAG GmbH specializes in genetic testing in horses, dogs, and cats.

We offer:

- Genetic testing
- An internal DAkkS EN ISO 15189:2014 accredited Laboratory
- Personalized reports
- Genetic counseling and breeding recommendations
- An active research program
- Presentations and seminars
- Direct interaction with our specialists



Contact us for more information!

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Hereditary muscle disease “PSSM2”



Muscle tension and Tying-up,
Muscle wasting,
Shifting lameness,
Gait abnormalities

www.centerforanimalgenetics.com

CAG GmbH owns the exclusive European licence to EquiSeq's Equine Myopathy (PSSM2) Panel Patent.



CAG can accept hair samples from anywhere in the world. Send by regular post only. We do not recommend using a courier, as additional costs may be incurred. The customer is liable for these costs.

* In order to have genetic test results recognized by an official organisation, the animals identity has to be verified by a veterinarian.

Symptoms

? Is your horse tense and reluctant to move?

? Does your horse have one or more of the following symptoms:

- **Behavioural changes** (can be caused by pain)
- **Severe muscle wasting** (esp. in the hindquarters and topline / shoulder-girdle)
- **Local muscle wasting** with formation of small divots, which can look like kickmarks
- **Muscle tenseness / cramping / Tying-up**
 - stiff hindquarters
 - muscle tremors
- **Changes in gait**
 - reduced stride length
 - lack of drive from hindquarters
 - bunny hopping
- **Coordination problems / Ataxia**
- **Shifting lameness** (esp. in the stifles)
- **Depending on the genetic variant:** (esp. for Arabians and Thoroughbreds)
 - onset of symptoms during / shortly after exercise
 - excessive sweating
 - nervousness and easy excitability
 - dark colored urine (Pigmenturia)

↳ The first symptoms of PSSM2 are usually seen in adulthood, often after 7-10 years of age.



A degenerative muscle disease called Equine Myopathy PSSM2 could be responsible.

“PSSM2”

What is Equine Myopathy / PSSM2?

Like humans, horses can have many different types of **muscle disorders (Myopathies)**.

Many **hereditary muscle diseases** have similar symptoms but are caused by different genetic mutations. Some of these have been lumped under the umbrella term “PSSM2”.

↳ Polysaccharide Storage Myopathy Type 2

Nearly all horse breeds can be affected.



You can now test your horse at CAG GmbH.

Test and Results

The Equine Myopathy Panel detects **all genetic variants** known to be **causative** for or **associated** with PSSM2.

There are three possible results:

1. Your horse does **not have any of the variants** that increase its risk of developing PSSM2.
2. Your horse has **one copy of a variant** that increases its risk of developing PSSM2.
3. Your horse has **two or more copies** of PSSM2 variant(s) and has a very high risk of developing PSSM2. It will have more severe symptoms and a more rapid disease process.



Based on the test result you will receive specific recommendations regarding care and breeding.

Advantages of Genetic Testing



The results of the genetic test can help you better understand an affected horse's behaviour.

A definitive diagnosis can help explain the behaviour and symptoms of your horse. Your horse's **quality of life** can be improved through specific feeding and exercise protocols.



Test your mare or stallion **before breeding:**

A horse can be tested **at any age** to determine its risk of developing PSSM2. Testing a potential breeding horse allows a breeder to determine if the horse can pass the disease on to its offspring, even when the horse itself may still be asymptomatic.



Unlike an invasive muscle biopsy, the genetic test requires only a hair sample.