

Combination Package HERDA, GBED, HYPP, OLWS (Horses) 2015

The Combination Package HERDA, GBED, HYPP, OLWS covers several important traits and can be requested on animals any age. This Combination Package contains the following markers:

- [HERDA](#)
- [GBED](#)
- [HYPP](#)
- [OLW](#)

HERDA

Genetic researchers at Cornell University have developed a DNA-test for hereditary equine regional dermal asthenia (HERDA). HERDA is a devastating skin disease in horses caused by a homozygous recessive mutation that weakens collagen fibers, compromising the adhesive ability of the skin. Horses with HERDA are typically euthanized due to severe problems associated with the skin trauma, including difficult healing, skin tearing and disfiguring scars.

GBED

Due to a mutation in the Glycogen branching enzyme (GBED) the enzyme loses its function. The clinical time-of-onset of this disease may vary, resulting sometimes in late term abortion or stillbirth. In several cases, foals are born alive but are often weak. The foals may appear healthy for some time but eventually they develop seizures, become too weak or they die suddenly. Despite treatment, all known cases of GBED have been euthanized or died within half a year of age.

HYPP

HYPP was recognized and described in the 1980s. The development of a diagnostic test illustrates the power of knowledge in other species (including humans). For this particular disease, which has identical characteristics between humans and horses, human research directly led to the identification of a mutation in horses with HYPP. Horses affected by HYPP have severe muscle problems following exercise. Even horses which are heterozygous may show symptoms of the disease.

OLWS

Several theories about the genetics of coat colour have been described in the past decades. Recent knowledge about genetic factors has led to new developments, via which more than 10 coat colour factors have been described in several species. Coat colour is influenced by many hereditary factors. One of the basic factors distinguishes between Black/Bay and Chestnut. The DNA-test for Black/Bay and Chestnut is based on the physical in the body. In a Black/Bay individual, pigment is actively produced because this production is switched on. In Chestnut individuals, the pigment production is only partially active. In Bay animals, the amount of pigmentation is different, resulting in a brown coat colour. Amongst the other genetic factors, many exist which dilute the pigment in hairs. This phenomenon results in spectacular colours such as Pearl, Silver, Champagne, Cremello and Sabino.

Sample requirements: Hair roots; Blood or any tissue.

**Price : Single samples: R1500 per sample
 More than 5 samples: R1300 per sample**