

SynchroGait: A genetic variant with a major impact on trotting technique, trotting speed and additional gaits

Applicable breeds: Standardbred, Icelandic horse, coldblooded trotting breeds



SynchroGait is a genetic variant which has a major effect on locomotion and gait in horses. This test is the first of its kind and the research behind it was recently published in the highly-regarded academic journal *Nature*.

Specifically, **SynchroGait** is a major genetic factor that affects performance in trotting horses, and that also allows alternative gaits, such as pacing in Icelandic horses. Crucially, this test can be performed on the foal, allowing you to identify precocious youngsters before committing to training. In addition, testing of breeding stock will allow prediction of likely genotypes in the offspring.

Standardbreds:

SynchroGait will identify whether your horse has an innate ability to trot at high speed and will be more likely to race professionally and earn more money.

Cold-blooded trotters:

SynchroGait will identify whether your horse has an innate good trotting technique.

Icelandic horses:

SynchroGait will identify whether your horse has the innate potential to perform the additional gait 'flying pace'.



SynchroGait has obtained widespread interest and acclaim in the media, catching the attention of publications such as The New York Times. Animal DNA Diagnostics Ltd now offers the **SynchroGait** test under licence from Capilet Genetics. Further details can be sourced at their website <http://www.capiletgenetics.com/en>

References:

Andersson LS, Larhammar M, Memic F, Wootz H, Schwochow D, Rubin C, Patra K, Arnason T, Wellbring L, Hjälms G, Imstrand F, Petersen JL, McCue M, Mickelson JR, Cothran G, Ahituv N, Roepstorff L, Mikko S, Vallstedt A, Lindgren G, Andersson L, & Kullander K (2012) Mutations in *DMRT3* affect locomotion in horses and spinal circuit function in mice. *Nature* 488(7413):642-6.