

Equine Elisa Kit Coll2-1

This assay allows measuring in serum, plasma or synovial fluid a degradation fragment containing 9 amino acid sequence (HRGYPGLDG). This degradation fragment, named Coll2-1, is derived from type II collagen and is released into the synovial fluid following the action of collagenases and gelatinase B.

This assay is considered as a gold biomarker to assess degradation of cartilage affected by orthopedic diseases like osteochondrosis in the sport horses (1-3) and degenerative juvenile arthropathy in draft horses (4). This biomarker associated to others could be also used, as in human medicine, to monitor the evolution of degenerative joint disease and treatment efficacy (5).

1. [A type II-collagen derived peptide and its nitrated form as new markers of inflammation and cartilage degradation in equine osteochondral lesions.](#) Gangl M, Serteyn D, Lejeune JP, Schneider N, Grulke S, Peters F, Vila T, Deby-Dupont G, Deberg M, Henrotin Y. Res Vet Sci. 2007 Feb;82(1):68-75.
2. [Relationship between arthroscopic joint evaluation and the levels of Coll2-1, Coll2-1NO\(2\), and myeloperoxidase in the blood and synovial fluid of horses affected with osteochondrosis of the tarsocrural joint.](#) Verwilghen DR, Enzerink E, Martens A, Franck T, Balligand M, Henrotin Y, Detilleux J, Serteyn D. Osteoarthritis Cartilage. 2011 Nov;19(11):1323-9.
3. [Coll2-1, Coll2-1NO2 and myeloperoxidase concentrations in the synovial fluid of equine tarsocrural joints affected with osteochondrosis.](#) Verwilghen DR, Martens A, Busschers E, Franck T, Deberg M, Henrotin Y, Vanderheyden L, Serteyn D. Vet Res Commun. 2011 Oct;35(7):401-8.
4. [Plasma concentrations of a type II collagen-derived peptide and its nitrated form in growing Ardenner sound horses and in horses suffering from juvenile digital degenerative osteoarthropathy.](#) Lejeune JP, Serteyn D, Gangl M, Schneider N, Deby-Dupont G, Deberg M, Henrotin Y. Vet Res Commun. 2007 Jul;31(5):591-601.
5. [Early decrease of serum biomarkers of type II collagen degradation \(Coll2-1\) and joint inflammation \(Coll2-1 NO₂\) by hyaluronic acid intra-articular injections in patients with knee osteoarthritis: a research study part of the Biovisco study.](#) Henrotin Y, Chevalier X, Deberg M, Balblanc JC, Richette P, Mulleman D, Maillet B, Rannou F, Piroth C, Mathieu P, Conrozier T; Osteoarthritis Group of French Society of Rheumatology. J Orthop Res. 2013 Jun;31(6):901-7.