

AM02110PU-N**Monoclonal Antibody to Keratan-Sulfate - Purified**

Quantity:	0.1 mg
Background:	Aggrecan is the major proteoglycan of human articular car-tilage. The core protein is substituted by a number of keratan sulfate and chondroitin sulfate glycosaminoglycan chains. Whereas chondroitin sulfate is widely distributed throughout the body, keratan sulfate is primarily expressed in cartilage (joints, trachea, intervertebral discs) and cornea.
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	4B3/D10
Immunogen:	Purified Human Aggrecan
Format:	State: Lyophilized purified IgG fraction from Cell Culture Supernatant Purification: Protein G Chromatography Buffer System: 50 mM TRIS pH 7,4 Reconstitution: Restore in aqua bidest to 1 mg/ml.
Applications:	ELISA (less than 1 µg/ml). Western blot (1 µg/ml). Immunohistochemistry (1 µg/ml). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This Monoclonal 4B3/D10 antibody is specific for Keratan Sulfate Glycosaminoglycan chains. Preliminary results, based on western blot analysis of keratan sulfate from different sources, indicate that mAb 4B3/10 is specific for keratan sulfate from articular cartilage and shows only minimal if any cross-reactivity with keratan sulfate from intervertebral disc. This is in contrast to the epitope recognized by the known mAb 5D4, that recognizes a widely distributed keratan sulfate epitope. Therefore, in addition to applications in Immunochemistry and Immunohistochemistry, the mAb 4B3/D10 is well suited for detecting keratan sulfate fragments released during human inflammatory or degenerative joint diseases into synovial fluid and serum. Species: Human. Other species not tested.
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Fischer DC, Kolbe-Busch S, Stöcker G, Hoffmann A, Haubeck HD. Development of enzyme immunoassays specific for keratan sulphate- and core-protein-epitopes of the large aggregating proteoglycan from human articular cartilage. Eur J Clin Chem Clin Biochem. 1994 Apr;32(4):285-91. PubMed PMID: 7518698.

2. Fischer DC, Haubeck HD, Eich K, Kolbe-Busch S, Stöcker G, Stuhlsatz HW, et al. A novel keratan sulphate domain preferentially expressed on the large aggregating proteoglycan from human articular cartilage is recognized by the monoclonal antibody 3D12/H7. *Biochem J.* 1996 Sep 15;318 (Pt 3):1051-6. PubMed PMID: 8836155.