


# Data Sheet

# KERATAN-SULFATE

## **ANTIBODY,** MONOCLONAL

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|---|---|
| **Catalog no.:** | AH 1005.1 / AH 1005.2 |
| **Immunogen:** | Purified human aggrecan |
| **Host:** | Mouse Balb/c |
| **Clone no.:** | 4B3/D10 |
| **Isotype:** | $IgG_{1kappa}$ |
| **Matrix:** | Cell culture supernatant, Protein G purified, 50 mM TRIS pH 7.4 |
| **Specificity:** | Aggrecan is the major proteoglycan of human articular cartilage. 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. Monoclonal Ab 4B3/D10 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 crossreactivity with keratan sulfate from intervertebral disc. This is in contrast to the epitope recognized by the known mAb 5D4, which recognizes a widely distributed keratan sulfate epitope. Therefore, in addition to 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. |
| **Contents:** | 10 µg / 100 µg (lyophilized)<br>Resuspend in 10 µl / 100 µl aqua bidest. |
| **Known applications:** | ELISA (less than 1µg/ml)[1], Western Blot (1µg/ml)[1], immunohistochemistry (1µg/ml)<br>This antibody has not been tested for use in all applications. This does not necessarily exclude its use for non-tested procedures. The stated dilutions are recommendations only. We suggest that the applicant titrates the antibody in his/her system using appropriate negative/positive controls. |
| **Store at:** | 2-8 °C (lyophilized); - 20 °C (dissolved)<br>Repeated thawing and freezing must be avoided |

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**References:**

1. Fischer DC, Kolbe-Busch S, Stöcker G, Hoffmann A, Haubeck HD (1994). Development of enzyme immuno assays specific for keratan sulfate- and core-protein-epitopes of the large aggregating proteoglycan from human articular cartilage. *Eur J Clin Chem Clin Biochem* **32**: 285-91.

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