

INTRODUCTION

Aggrecan is a member of a family of large, aggregating proteoglycans (also including versican, brevican and neurocan) which is found in articular cartilage. Aggrecan is composed of three major domains: G1, G2, and G3. Between the G1 and G2 domains there is an interglobulin region (IGD). The IGD region is the major site of cleavage by specific proteases like metalloproteinases (MMPs) and aggrecanase. Aggrecan cleavage has been associated with a number of degenerative diseases including rheumatoid arthritis and osteoarthritis. There is evidence that this family of proteoglycans modulates cell adhesion, migration, and axonal outgrowth in the CNS.

This aggrecan degradation product usually remains within the tissue still complexed to hyaluronan and link protein. Its release from the cartilage usually signals that there has been extensive catabolism of aggrecan, which allows large complexes containing this metabolite to be released from the tissue.

IMMUNOGEN

NITEGE synthetic peptide conjugate.

CLONE

BC-13

HOST

Mouse

MYELOMA

x63-Ag8.653

ISOTYPE

IgG1

LIGHT CHAIN TYPE

kappa

SPECIFICITY

Recognizes the aggrecanase (ADAMTS-1, -4 & -5)-generated C-terminal neoepitope ...TEGE after cleavage between amino acids ..EGE373 and 374ARG.. within the interglobular domain of aggrecanase-catabolised aggrecan (Human aggrecan sequence enumeration).

This antibody cross-reacts with Human, Cow, Dog, Horse, Pig.

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PURITY	Affinity purified on protein G
STORAGE BUFFER	PBS, no preservatives
FORM	Liquid, 1 mL/vial
CONCENTRATION	0.1 mg/mL
APPLICATION	<ul style="list-style-type: none">• Western-Blotting Suggested dilution: 1:100 Detects a a band of approximately 60-70 kDa• ELISA• IHC
TECHNICAL NOTES	Samples are usually deglycosylated using 0.01 Units chondroitinase ABC (Sigma), 0.01 Units Keratanase (Seikagaku) and 0.0001 Units Keratanase II (Seikagaku) per 10µg S-GAG of non-deglycosylated aggrecan for optimal epitope recognition in SDS-PAGE and immunohistochemistry (1, 2).
STORAGE	The antibody is stable until the expiry date given on the label if stored at -20 °C. Repeated freezing and thawing should be avoided. Aliquoting is recommended.
EXPIRATION	See Vial Label
REFERENCES	<ol style="list-style-type: none">1. Little CB et al. Matrix metalloproteinases are involved in C-terminal and interglobular domain processing of cartilage aggrecan in late stage cartilage degradation. Matrix Biol 21:271-88 (2002).2. Caterson B et al. Mechanisms involved in cartilage proteoglycan catabolism. Matrix Biol 19:333-44 (2000)

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