Datasheet: MCA1451G

Description:	MOUSE ANTI HUMAN AGGRECAN
Specificity:	AGGRECAN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	7E1
Isotype:	IgG1
Quantity:	0.2 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting	▪			
Immunocytochemistry	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Bovine
Does not react with:Chicken, Fish, Rat
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified human articular cartilage aggrecan.
External Database Links	**UniProt:** P16112 Related reagents **Entrez Gene:** 176 ACAN Related reagents
Synonyms	AGC1, CSPG1, MSK16
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	**Mouse anti Human aggrecan antibody, clone 7E1** recognizes human aggrecan, a proteoglycan and member of the aggrecan/versican proteoglycan family, which forms a major component of the extracellular matrix (ECM) of both cartilage and the central nervous system (CNS). A panel of core protein-directed antibodies against human aggrecan, revealed the distribution of different aggrecan isoforms within the CNS, and sub-divided the isoforms into clusters 1-5 accordingly. There is a difference in the relative abundance of these isoforms when comparing brain and cartilage tissues (Virgintino *et al.* 2009). Mouse anti Human aggrecan antibody, clone 7E1 recognizes a ~205 kDa trypsin derived fragment of aggrecan. **Note:** Originally described as being of the isotype IgM, clone 7E1 was found to be unstable and was re-cloned by the originator and the new stable sub-clone was confirmed as being an IgG1.
References	1. Aigner, T. *et al.* (2002) Prognostic relevance of cell biologic and biochemical features in conventional chondrosarcomas. Cancer. 94: 2273-81. 2. Mukherjee, D.P. *et al.* (2009) Effect of 3D-microstructure of bioabsorbable PGA:TMC scaffolds on the growth of chondrogenic cells. J Biomed Mater Res B Appl Biomater. 88 (1): 92-102. 3. Virgintino, D. *et al.* (2009) Differential distribution of aggrecan isoforms in perineuronal nets of the human cerebral cortex. J Cell Mol Med. 13 (9B): 3151-73.

4. Garciadiego-Cázares, D. *et al.* (2015) Regulation of α5 and αV Integrin Expression by GDF-5 and BMP-7 in Chondrocyte Differentiation and Osteoarthritis. PLoS One. 10 (5): e0127166.
5. Wei, A. *et al.* (2016) Expression of growth differentiation factor 6 in the human developing fetal spine retreats from vertebral ossifying regions and is restricted to cartilaginous tissues. J Orthop Res. 34 (2): 279-89.

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1451G 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com
Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com
Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com