

## Mouse Aggrecan Monoclonal Antibody | anti-ACAN antibody

Mouse Anti Human Aggrecan

| CATALOG # | HOST  | REACTIVITY                                               | APPLICATIONS                                                                        |
|-----------|-------|----------------------------------------------------------|-------------------------------------------------------------------------------------|
| AAA50331  | Mouse | Human, Bovine<br>Does not react with: Chicken, Fish, Rat | Western Blot, Immunoprecipitation, Immunocytochemistry, ELISA, Immunohistochemistry |

### PRODUCT SYNONYMS

Aggrecan; Monoclonal Antibody; Mouse Anti Human Aggrecan; Aggrecan antibody (7E1); anti-ACAN antibody

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Mouse                                                                                                                                                                                                                                                                                                                                                                                 |
| Reactivity                                     | Human, Bovine<br>Does not react with: Chicken, Fish, Rat                                                                                                                                                                                                                                                                                                                              |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                                                                                                                            |
| Isotype                                        | IgG1                                                                                                                                                                                                                                                                                                                                                                                  |
| Clone Number                                   | 7E1                                                                                                                                                                                                                                                                                                                                                                                   |
| Purity/Purification                            | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant                                                                                                                                                                                                                                                                                         |
| Form/Format                                    | Liquid; Phosphate Buffered Saline                                                                                                                                                                                                                                                                                                                                                     |
| Concentration                                  | 1.0 mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                                                             |
| Sequence Length                                | 2415                                                                                                                                                                                                                                                                                                                                                                                  |
| Applicable Applications for anti-ACAN antibody | WB (Western Blot), IP (Immunoprecipitation), ICC (Immunocytochemistry), ELISA, IHC (Immunohistochemistry)                                                                                                                                                                                                                                                                             |
| Immunogen                                      | Purified human articular cartilage aggrecan                                                                                                                                                                                                                                                                                                                                           |
| Carrier Free                                   | Yes                                                                                                                                                                                                                                                                                                                                                                                   |
| Fusion Partners                                | Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.                                                                                                                                                                                                                                                                                     |
| Preservative Stabilizers                       | 0.09% Sodium Azide                                                                                                                                                                                                                                                                                                                                                                    |
| Preparation and 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. |

IMAGES



Application Data

Published customer image: Mouse anti Human aggrecan antibody, clone 7E1 used for the detection of aggrecan expressing cells in murine micromass cultures by immunocytochemistry. Image caption: Regulation of Extracellular matrix (ECM) composition by Bone morphogenetic protein (BMP) family growth factors during chondrogenesis. Mouse micromass cultures without treatment (A-E), Gdf-5 treatment (F-J), and Bmp-7 treatment (K-O); Alcian blue stain (A-K) showed cartilage nodules, Immunohistochemical stain for type I collagen (A, F, K), type II collagen (C, H, M), aggrecan (D, I, N), and fibronectin (E, J, O). Statistical analysis for histochemical and immunohistochemical data, (P) = percentage of positive area for Alcian blue, type I collagen, type II collagen, aggrecan, and fibronectin stains in micromasses with different treatments; mean values are shown with Standard deviations (SD) (n = three independent experiments), One-way Analysis of variance (ANOVA). \*\*\*P

ADDITIONAL INFORMATION

Related Product Information for anti-ACAN antibody

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).  
Studies using 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. These studies also showed 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.

NCBI AND UNIPROT INFORMATION

|                                  |                                                 |
|----------------------------------|-------------------------------------------------|
| NCBI GI #                        | 129886                                          |
| NCBI GeneID                      | 176                                             |
| UniProt Accession #              | P16112                                          |
| NCBI Official Full Name          | Aggrecan core protein                           |
| NCBI Official Synonym Full Names | aggrecan                                        |
| NCBI Official Symbol             | ACAN                                            |
| NCBI Official Synonym Symbols    | AGC1; SEDK; AGCAN; CSPG1; MSK16; CSPGCP; SSOAOD |
| NCBI Protein Information         | aggrecan core protein                           |
| UniProt Protein Name             | Aggrecan core protein                           |
| UniProt Gene Name                | ACAN                                            |
| UniProt Synonym Gene Names       | AGC1; CSPG1; MSK16; CSPCP                       |
| UniProt Entry Name               | PGCA_HUMAN                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.