

Product datasheet

Anti-Aggrecan antibody [6-B-4] ab3778

Recombinant

★★★★★ [7 Abreviews](#) [168 References](#) [5 Images](#)

Overview

| | |
|----------------------------|--|
| Product name | Anti-Aggrecan antibody [6-B-4] |
| Description | Mouse monoclonal [6-B-4] to Aggrecan |
| Host species | Mouse |
| Specificity | This antibody detects recombinant human Aggrecan by Western Blotting. We have been unable to detect endogenous protein in WB with this antibody. However, there are many citations indicating this antibody is able to detect Aggrecan in endogenous sample lysates. |
| Tested applications | Suitable for: WB, IHC-P |
| Species reactivity | Reacts with: Human, Recombinant fragment |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: Recombinant human Aggrecan protein. C-terminal 10 His tagged Human Aggrecan recombinant protein (aa 20 to 675). IHC-P: Human cartilage sections. |
| General notes | <p>This product has switched from a hybridoma to recombinant production method on 08th October 2020.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> |

Properties

| | |
|-------------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |
| Storage buffer | <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59.04% PBS</p> |
| Purity | Protein A purified |
| Primary antibody notes | This antibody detects aggrecan metabolites (intact or matrix protease-catabolised) in human synovial fluid samples. |

| | |
|-------------------------|------------|
| Clonality | Monoclonal |
| Clone number | 6-B-4 |
| Isotype | IgG1 |
| Light chain type | kappa |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab3778 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|--------------|-----------|--|
| WB | | Use a concentration of 1 µg/ml. Predicted molecular weight: 250 kDa. |
| IHC-P | ★★★★★ (4) | Use a concentration of 0.05 µg/ml. Perform enzymatic antigen retrieval before commencing with IHC staining protocol. |

Target

Relevance 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.

Cellular localization Secreted; extracellular matrix.

Images



Western blot - Anti-Aggrecan antibody [6-B-4] (ab3778)

Anti-Aggrecan antibody [6-B-4] (ab3778) at 1/1000 dilution + C-terminal 10 His tagged Human Aggrecan recombinant protein (aa 20 to 675) 15ng

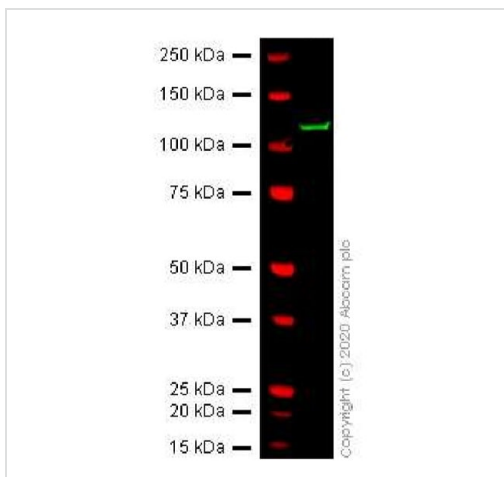
Secondary

Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution

Predicted band size: 250 kDa

Buffer and Concentration: 2% BSA/TBST

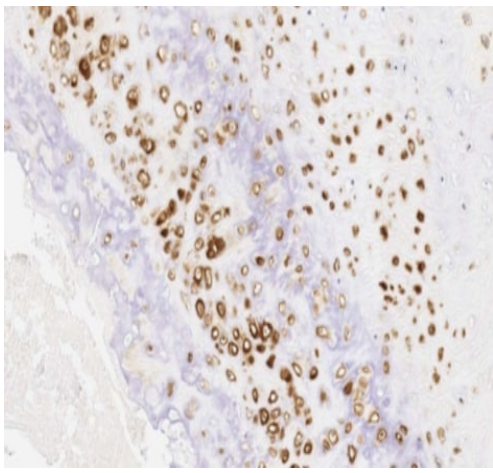
Exposure time: 180 seconds



Western blot - Anti-Aggrecan antibody [6-B-4] (ab3778)

ab3778 was shown to react with recombinant human Aggrecan protein in western blot.

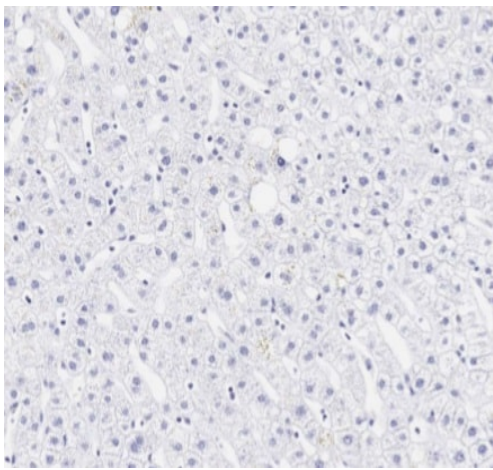
Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with ab3778 at 1 µg/ml overnight at 4°C. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye®800CW) preabsorbed ([ab216772](#)) at a 1/20000 dilution for 1 hour at RT.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aggrecan antibody [6-B-4] (ab3778)

Secreted staining of cartilage cells.

Staining performed on a Leica BOND RXTM system using the standard protocol F. The section was pre-treated using enzymatic retrieval, for 15mins. The section was then incubated with ab3778, 0.05µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

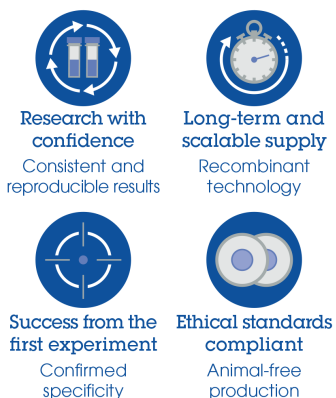


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aggrecan antibody [6-B-4] (ab3778)

No staining in negative control tissue (human normal liver).

Staining performed on a Leica BOND RXTM system using the standard protocol F. The section was pre-treated using enzymatic retrieval, for 15mins. The section was then incubated with ab3778, 0.05µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Why choose a recombinant antibody?



Anti-Aggrecan antibody [6-B-4] (ab3778)

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