

Anti-CD44 antibody [KM81] ab112178

★★★★★ [5 Abreviews](#) [8 References](#) [3 Images](#)

Overview

Product name	Anti-CD44 antibody [KM81]
Description	Rat monoclonal [KM81] to CD44
Host species	Rat
Tested applications	Suitable for: IHC-P, Flow Cyt
Species reactivity	Reacts with: Mouse
Immunogen	Tissue, cells or virus corresponding to Mouse CD44. Mouse Bone Marrow Derived Stromal Cells (clone BMS2)
Positive control	Flow Cyt: Mouse Bone Marrow cells (BALB/c strain). IHC-P: Mouse lung FFPE tissue sections, mouse spleen tissue
General notes	<p>This product was changed from ascites to tissue culture supernatant on 21st December 2017. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.02% Sodium azide Constituent: 99% PBS
Purity	Protein G purified
Purification notes	ab112178 is purified from ascitic fluid via Protein G Chromatography.
Clonality	Monoclonal
Clone number	KM81

Myeloma	Sp2/0
Isotype	IgG2a

Applications

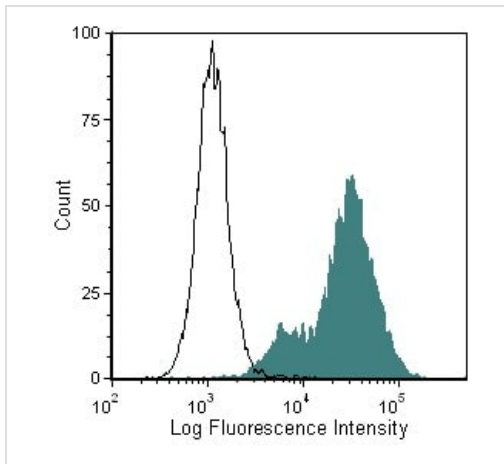
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab112178 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (1)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt	★★★★☆ (2)	Use 0.2µg for 10 ⁶ cells. ab18450 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target

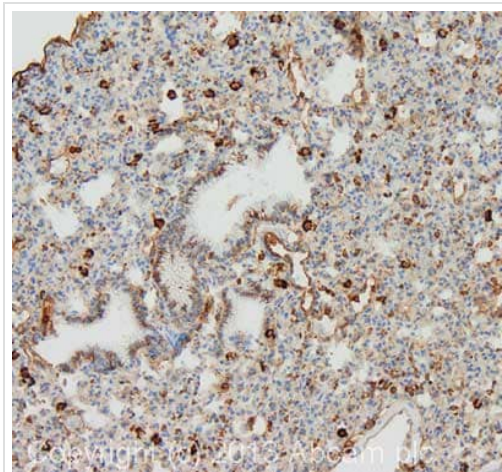
Function	Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Altered expression or dysfunction causes numerous pathogenic phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-translational modification events.
Tissue specificity	Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells.
Sequence similarities	Contains 1 Link domain.
Domain	The lectin-like LINK domain is responsible for hyaluronan binding.
Post-translational modifications	Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in several cell lines and tumors. N-glycosylated. O-glycosylated; contains more-or-less-sulfated chondroitin sulfate glycans, whose number may affect the accessibility of specific proteinases to their cleavage site(s). Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672.
Cellular localization	Membrane.

Images



Flow Cytometry - Anti-CD44 antibody [KM81]
(ab112178)

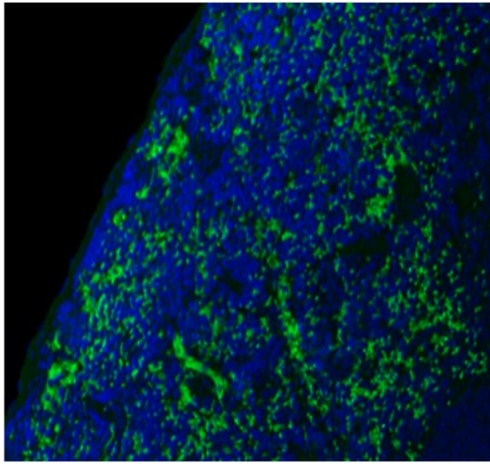
Flow Cytometry analysis of ATH mouse bone marrow cells (green) or Rat IgG2a isotype control (black) labeling CD44 with ab112178 at $0.2 \mu\text{g}/10^6$ cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [KM81]
(ab112178)

IHC image of CD44 staining in mouse lung formalin fixed paraffin embedded tissue section, performed on a Leica Bond system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab112178, $1 \mu\text{g}/\text{ml}$, for 15 mins at room temperature. A goat anti-rat biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [KM81] (ab112178)

Purified Anti-Mouse CD44 (ab112178) staining of paraformaldehyde-fixed paraffin-embedded mouse spleen sections at 400x magnification with DAPI counterstain. (Rat anti-mouse CD44 mAb (ab112178) 1:100; Alexa Fluor 488 Goat anti-rat 1:500 (Molecular Probes) and Normal Goat Serum (blocking))

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors