

## Product datasheet

# Anti-CD44 antibody [F10-44-2] - BSA and Azide free ab237970

[3 Images](#)

### Overview

---

<b>Product name</b>	Anti-CD44 antibody [F10-44-2] - BSA and Azide free
<b>Description</b>	Mouse monoclonal [F10-44-2] to CD44 - BSA and Azide free
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, Flow Cyt, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Tissue, cells or virus corresponding to CD44.
<b>Positive control</b>	IHC-P: Human kidney carcinoma; ICC/IF: A431 cell line; Flow Cyt: Peripheral blood lymphocytes.
<b>General notes</b>	<p>Ab237970 is a PBS only version of <a href="#">ab6124</a>.</p> <p>This antibody clone is manufactured by Abcam.</p> <p>If you require this antibody in a particular buffer formulation or a particular conjugate for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a> or you can find further information <a href="#">here</a>.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&amp;As.</p>

## Properties

---

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	IgG fraction
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	F10-44-2
<b>Isotype</b>	IgG2a

## Applications

---

Our [Abpromise guarantee](#) covers the use of **ab237970** 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		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt		Use 0.5-1µg for 10 <sup>6</sup> cells. <a href="#">ab170191</a> - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
ICC/IF		Use a concentration of 5 µg/ml.

## Target

---

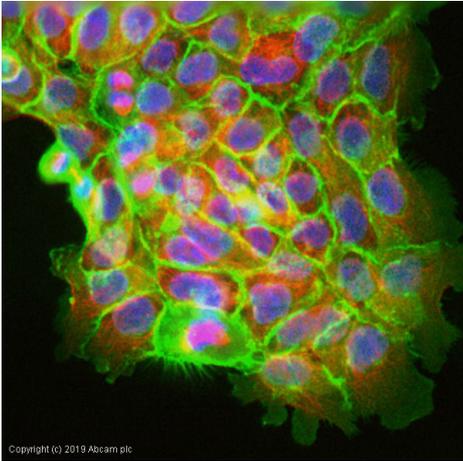
<b>Function</b>	Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell 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.
<b>Tissue specificity</b>	Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells.
<b>Sequence similarities</b>	Contains 1 Link domain.
<b>Domain</b>	The lectin-like LINK domain is responsible for hyaluronan binding.
<b>Post-translational modifications</b>	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.

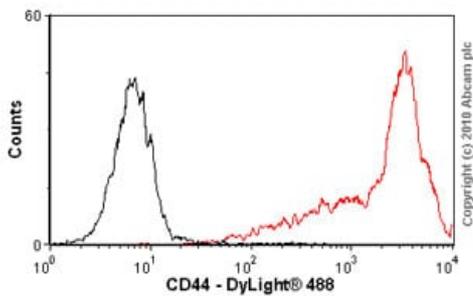
## Images



Immunocytochemistry/ Immunofluorescence - Anti-CD44 antibody [F10-44-2] - BSA and Azide free (ab237970)

[ab6124](#) staining CD44 in A431 cells. The cells were fixed with 100% methanol (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody [ab6142](#) at 5µg/ml and [ab6046](#) (Rabbit polyclonal to beta Tubulin - Loading Control) used at a 1/1000 dilution overnight at +4°C. The secondary antibodies were [ab150117](#), Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) preadsorbed, (pseudo-colored green) and [ab150081](#), Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) preadsorbed, (colored red), both used at a 1/1000 dilution for 1 hour at room temperature. DAPI was used to stain the cell nuclei (colored blue) at a concentration of 1.43 µM for 1hour at room temperature.

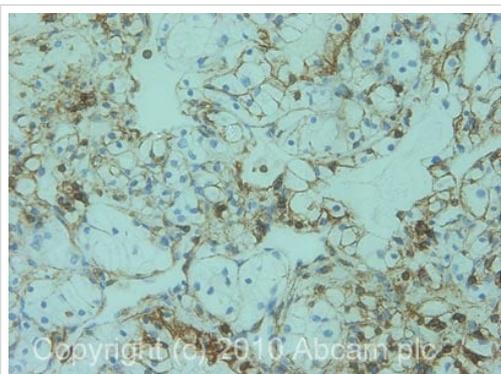
This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-arginine, and sodium azide ([ab6124](#)).



Flow Cytometry - Anti-CD44 antibody [F10-44-2] - BSA and Azide free (ab237970)

Overlay histogram showing peripheral blood lymphocytes stained with [ab6124](#) (red line). The cells were incubated with the antibody ([ab6124](#), 0.5µg/1x10<sup>6</sup> cells) for 30 min at 4°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H&L) ([ab96879](#)) at 1/200 dilution for 30 min at 4°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] ([ab91361](#), 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed gating on peripheral blood lymphocytes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-arginine, and sodium azide ([ab6124](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [F10-44-2] - BSA and Azide free (ab237970)

IHC image of CD44 staining in human kidney carcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. 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 [ab6124](#), 5µg/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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-arginine, and sodium azide ([ab6124](#)).

**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