

## Product datasheet

### Anti-CD44 antibody [OX49] ab238464

Recombinant

[1 References](#) [5 Images](#)

#### Overview

<b>Product name</b>	Anti-CD44 antibody [OX49]
<b>Description</b>	Mouse monoclonal [OX49] to CD44
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, Flow Cyt, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Rat
<b>Immunogen</b>	Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Rat spleen tissue. ICC/IF: C6 cells. Rat splenocytes.Flow Cyt: C6 cells.
<b>General notes</b>	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	OX49
<b>Isotype</b>	IgG2a

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab238464 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
ICC/IF		Use a concentration of 0.854 µg/ml.
Flow Cyt		Use a concentration of 0.474 µg/ml.
IHC-P		Use a concentration of 0.085 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

## 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.

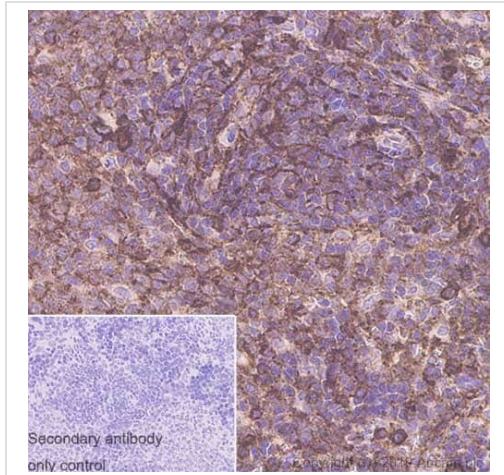
O-glycosylated; contains more-or-less-sulfated chondroitin sulfate glycans, whose number may affect the accessibility of specific proteinases to their cleavage site(s).

Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672.

### Cellular localization

Membrane.

## Images

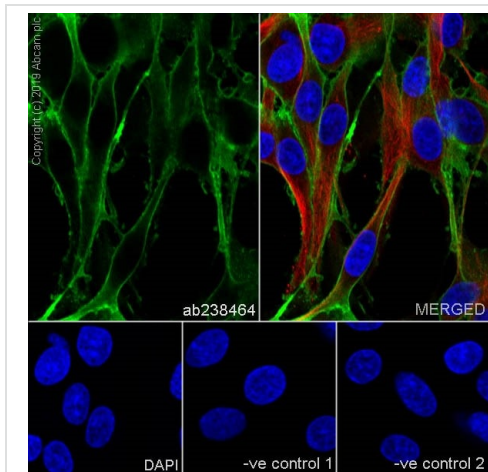


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [OX49] (ab238464)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling CD44 with ab238464 at 0.085µg/ml, followed by a ready to use secondary. Membranous staining on rat spleen is observed. The section was incubated with ab238464 for 5 mins at room temperature. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, followed by ready to use secondary.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

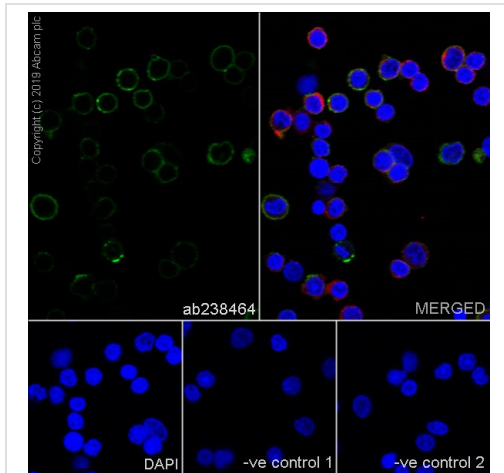


Immunocytochemistry/ Immunofluorescence - Anti-CD44 antibody [OX49] (ab238464)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized C6 (rat glial tumor glial cell) cells labeling CD44 with ab238464 at 0.854µg/ml, followed by **ab150113** AlexaFluor®488 Goat anti-Mouse secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining on C6 cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with **ab179504** Anti-beta IV Tubulin antibody - Microtubule Marker at a 1/200 dilution followed by **ab150080** AlexaFluor®594 Goat anti-Rabbit secondary at a 1/1000 dilution. The negative controls are as follows:

-ve control 1: ab238464 at 1/500 dilution, followed by **ab150080** AlexaFluor®594 Goat anti-Rabbit secondary at 1/1000 dilution.

-ve control 2: **ab179504** at 1/200 dilution, followed by **ab150113** AlexaFluor®488 Goat anti-Mouse secondary at 1/1000 dilution.



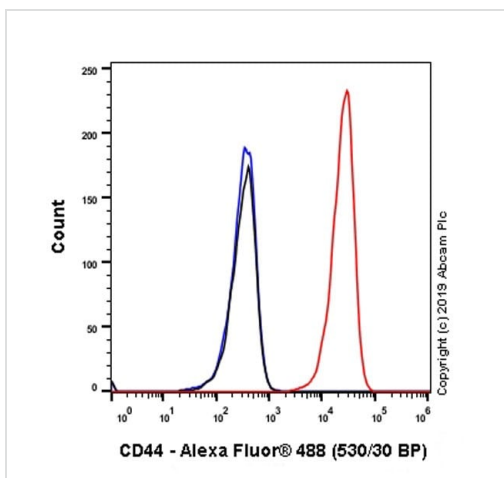
Immunocytochemistry/ Immunofluorescence - Anti-CD44 antibody [OX49] (ab238464)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized rat splenocytes labeling CD44 with ab238464 at 0.854µg/ml, followed by **ab150113** AlexaFluor®488 Goat anti-Mouse secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining on rat splenocytes. The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab179504** Anti-beta IV Tubulin antibody - Microtubule Marker at a 1/200 dilution followed by **ab150080** AlexaFluor®594 Goat anti-Rabbit secondary at a 1/1000 dilution. The negative controls are as follows:

-ve control 1: ab238464 at 1/200 dilution, followed by **ab150080** AlexaFluor®594 Goat anti-Rabbit secondary at 1/1000 dilution.

-ve control 2: **ab179504** at 1/200 dilution, followed by **ab150113** AlexaFluor®488 Goat anti-Mouse secondary at 1/1000 dilution.



Flow Cytometry - Anti-CD44 antibody [OX49] (ab238464)

Flow cytometric analysis of C6 (Rat glial tumor glial cell) cell line labeling CD44 with ab238464 at 0.474µg/ml (red) compared with a Mouse monoclonal IgG Isotype Control (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti mouse IgG (Alexa Fluor® 488, **ab150113**) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-CD44 antibody [OX49] (ab238464)

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

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- Extensive multi-media technical resources to help you
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