abcam

Product datasheet

Anti-CD44 antibody [1M7.8.1] ab119348

Recombinant

20 References 2 Images

Overview

Product name Anti-CD44 antibody [1M7.8.1]

Description Rat monoclonal [1M7.8.1] to CD44

Host species Rat

Specificity Detects a standard 85-kDa isoform of CD44 and a number of high molecular mass variant

isoforms.

Tested applications Suitable for: ICC/IF

Unsuitable for: Flow Cyt, IHC-P or WB

Species reactivity Reacts with: Mouse, Human

Immunogen Full length protein corresponding to Mouse CD44.

Database link: P15379

Positive control ICC/IF: HeLa and NIH/3T3 cells.

General notes This product has switched from a hybridoma to recombinant production method on 02nd

November 2020

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C.

Storage buffer Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number 1M7.8.1

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Isotype IgG2b

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab119348 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		1/250.

Application notes

Is unsuitable for Flow Cyt, IHC-P or WB.

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

lsoform 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).

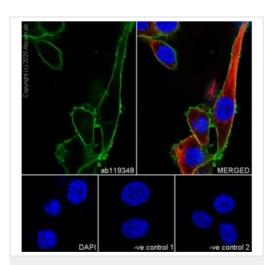
Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive

phosphorylation site), and the phosphorylation of Ser-672.

Cellular localization

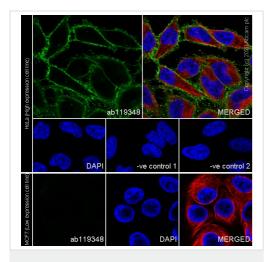
Membrane.

Images



Immunocytochemistry/ Immunofluorescence - Anti-CD44 antibody [1M7.8.1] (ab119348)

NIH/3T3 (Mouse embryo fibroblast cell line) cells were fixed in 4% PFA and permeabilized with 0.1% Triton X-100. Primary antibody, ab119348 at 1/250 was incubated overnight at 4° C, followed by AlexaFluor® 488-conjugated Goat anti-Rat secondary antibody (ab150157) at 1/1000 dilution at RT for 45 min. ab179513 Antibeta Tubulin, used as a counterstain at 1/200 dilution, was coincubated with ab119348 overnight at 4° C, followed by Alexa Fluor® 594 Goat Anti-Rabbit secondary (ab150080) at 1/1000 dilution at RT for 45 min. Nucleus were visualized using DAPI. Confocal image showing strong membranous staining in NIH/3T3 cells.



Immunocytochemistry/ Immunofluorescence - Anti-CD44 antibody [1M7.8.1] (ab119348)

HeLa (Human epithelial cell line from cervix adenocarcinoma) cells were fixed in 4% PFA and permeabilized with 0.1% Triton X-100. Primary antibody, ab119348 at 1/250 was incubated overnight at 4° C, followed by AlexaFluor® 488-conjugated Goat anti-Rat secondary antibody (ab150157) at 1/1000 dilution at RT for 45 min. ab179513 Anti-beta Tubulin, used as a counterstain at 1/200 dilution, was co-incubated with ab119348 overnight at 4° C, followed by Alexa Fluor® 594 Goat Anti-Rabbit secondary (ab150080) at 1/1000 dilution at RT for 45 min. Nucleus were visualized using DAPI.

Confocal image showing strong membranous staining in HeLa cells.

Low expression control: MCF7 (PMID: 23039365).

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