

Datasheet for ABIN7043350
anti-CD56 antibody (Extracellular)



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3 Images

Overview

Quantity:	25 µL
Target:	CD56 (NCAM1)
Binding Specificity:	AA 261-276, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CD56 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Neural Cell Adhesion Molecule 1 (CD56)
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)DEKHIFSDDSSSELTIR, corresponding to amino acid residues 261-276 of rat NCAM-1
Isotype:	IgG
Specificity:	Extracellular, N-terminus
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse - identical, human - 13,15 amino acid residues identical
Characteristics:	Anti-CD56/NCAM1 (extracellular) Antibody (ABIN7043350, ABIN7044686 and ABIN7044687) is

Product Details

a highly specific antibody directed against rat Neural cell adhesion molecule 1. The antibody can be used in western blot, live cell imaging, and immunohistochemistry applications. The antibody recognizes an extracellular epitope and is thus ideal for detecting the protein in living cells. It has been designed to recognize NCAM1 from rat, mouse and human samples.

Purification: Affinity purified on immobilized antigen.

Grade: KO Validated

Target Details

Target: CD56 (NCAM1)

Alternative Name: NCAM1 ([NCAM1 Products](#))

Background: Neural cell adhesion molecule 1, NCAM-1, Neural cell adhesion molecule 1 (NCAM-1) is a member of a large family of cell-surface glycoproteins and plays a major role during development and controls various functions in the nervous system such as cell migration, neurite growth, axonal guidance, and synaptic plasticity¹. NCAM-1 mediates adhesion between cells through homophilic bonds formed between its extracellular domains, which comprise five tandem Ig domains and two juxtamembrane fibronectin type III (Fn III) domains². There are three major protein isoforms of NCAM-1: 180 kd, 140 kd, and 120 kd. The 180-kd and 140-kd isoforms of NCAM-1 are transmembrane proteins, whereas the 120-kd isoform is linked to the plasma membrane via a glycosyl phosphatidyl-inositol (GPI) lipid anchor³. NCAM-1 is widely expressed in the central nervous system, skeletal muscle and natural killer cells⁴. Several lines of evidence have supported the idea that dysregulation of NCAM-1 isoforms in the brain might be involved in the pathophysiology of neuropsychiatric disorders, particularly bipolar affective disorder⁵.

Alternative names: CD56 (NCAM1), Neural cell adhesion molecule 1, NCAM-1

Gene ID: 24586

NCBI Accession: [NM_000615](#)

UniProt: [P13596](#)

Application Details

Application Notes: Antigen preadsorption control: 1 µg peptide per 1 µg antibody

Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:300

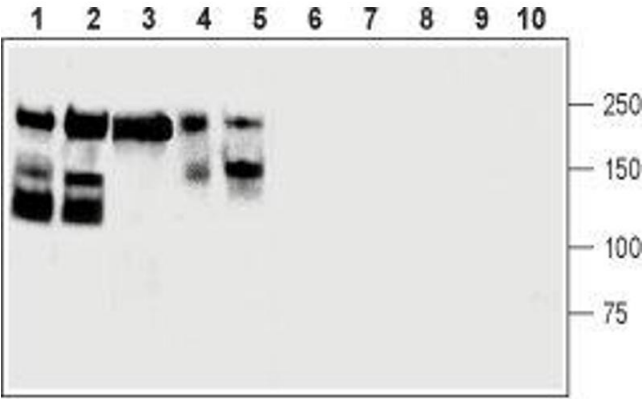
Application Details

	Application Dilutions Western blot wb: 1:200-1:400
Comment:	Negative Control: (ABIN7236018) Blocking Peptide: (ABIN7236018)
Restrictions:	For Research Use only

Handling

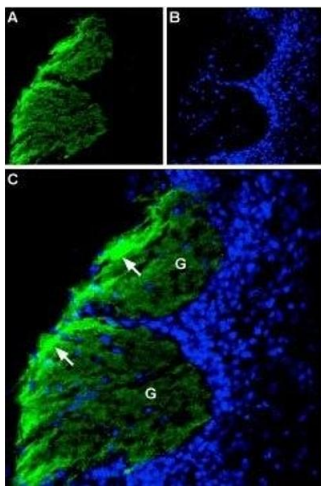
Format:	Lyophilized
Reconstitution:	Reconstitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Western Blotting

Image 1. Western blot analysis of mouse brain (lanes 1 and 6), rat cerebellum (lanes 2 and 7), rat eye (lanes 3 and 8), human SH-SY5Y brain neuroblastoma (lanes 4 and 9) and PC12 rat pheochromocytoma (lanes 5 and 10) cells lysates: - 1-5. Anti-CD56/NCAM1 (extracellular) Antibody (ABIN7043350, ABIN7044686 and ABIN7044687), (lanes 1-3 1:400 and lanes 4-5 1:200).6-10. Anti-CD56/NCAM1 (extracellular) Antibody, preincubated with CD56/NCAM1 (extracellular) Blocking Peptide (#BLP-NR041).



Immunohistochemistry

Image 2. Expression of NCAM1 in rat olfactory bulb - Immunohistochemical staining of rat olfactory bulb frozen section using Anti-CD56/NCAM1 (extracellular) Antibody (ABIN7043350, ABIN7044686 and ABIN7044687), (1:300). A. NCAM1 staining (green) appears in glomeruli (G) and is particularly intense in the outer border (arrows). B. Nuclei are stained using DAPI as the counterstain. C. Merged image of A and B panels.

Immunocytochemistry

Image 3. Expression of NCAM1 in rat PC12 cells - Cell surface detection of NCAM1 in intact living rat pheochromocytoma (PC12) cells using Anti-CD56/NCAM1 (extracellular) Antibody (ABIN7043350, ABIN7044686 and ABIN7044687), (1:100). A, B. Extracellular staining of cells merged with a live view of the cells.

