

Datasheet for ABIN1741297

anti-NrCAM antibody (Extracellular Domain) (APC)**3** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	NrCAM (NRCAM)
Binding Specificity:	AA 30-845, Extracellular Domain
Reactivity:	Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This NrCAM antibody is conjugated to APC
Application:	Western Blotting (WB), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Immunogen:	Fusion protein amino acids 30-845 (extracellular domain) of mouse NrCAM. Rat: 96% identity (795/822 amino acids identical). Human: 91% identity (753/822 amino acids identical) ~50% identity with Neurofascin.
Clone:	S364-51
Isotype:	IgG2a
Specificity:	Detects ~160 kDa.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target:	NrCAM (NRCAM)
Alternative Name:	NrCAM (NRCAM Products)
Background:	Neuronal cell adhesion molecule (NrCAM) is a cell surface protein of the immunoglobulin (Ig) superfamily. NrCAM (also known as Bravo) contains six Ig domains, five fibronectin repeats, a transmembrane region and an intracellular domain. NrCAM is expressed in brain, spinal cord, peripheral nervous system and pancreas. In the spinal cord, NrCAM acts as a ligand for axonin-1 to guide commissural axons across the floor plate. NrCAM also acts as a ligand for F3 to control actin-dependent growth cone motility. NrCAM interacts with neurofascin and may facilitate the clustering of the cytoskeletal protein ankyrin G and the voltage-dependent sodium channel proteins at the node of Ranvier. NrCAM expression may play a role in the severity of certain types of tumors. NrCAM is overexpressed in high-grade astrocytomas, gliomas and glioblastoma tumor tissues. In the pancreas, NrCAM expression is upregulated in intraductal hyperplasia. Antisense NrCAM reduces the tumorigenic properties of human glioblastoma cells in vitro and slowed tumor growth in vivo. The gene encoding human NrCAM maps to chromosome 7q31.1-q31.2.
Gene ID:	319504
NCBI Accession:	NP_001139503
UniProt:	Q810U4
Pathways:	Regulation of Cell Size

Application Details

Application Notes:	<ul style="list-style-type: none">• WB (1:1000)• ICC/IF (1:100)• optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN1741297 was sufficient for detection of NrCAM in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

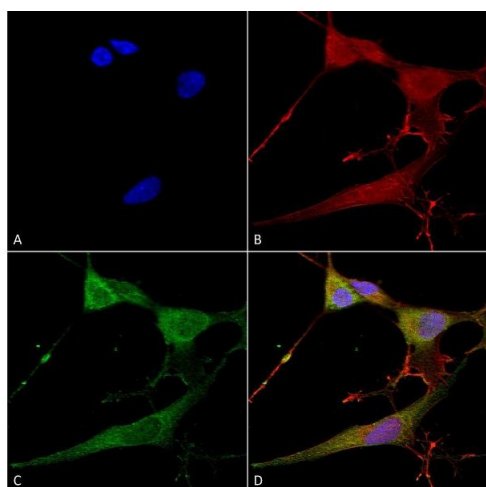
Handling

Format:	Liquid
Concentration:	1 mg/mL

Handling

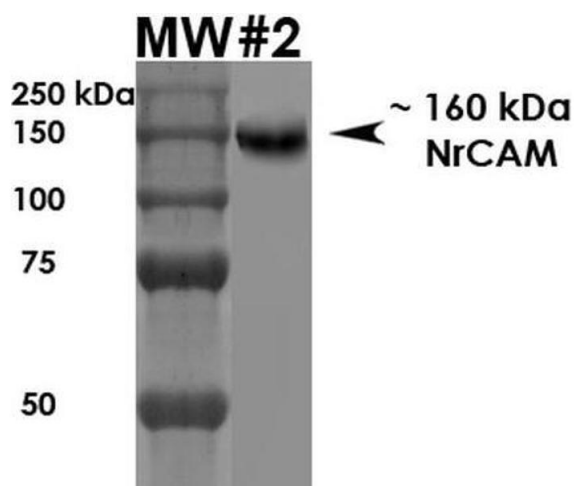
Buffer:	PBS pH 7.4, 50 % glycerol, 0.1 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Validation report #029836 for Western Blotting (WB)



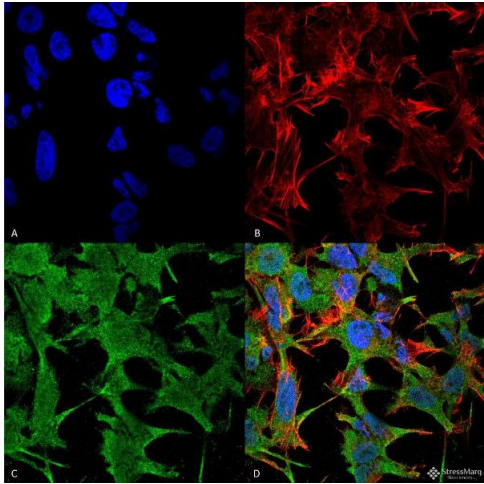
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-NrCAM Monoclonal Antibody, Clone S364-51 (ABIN1741297). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-NrCAM Monoclonal Antibody (ABIN1741297) at 1:100 for overnight at 4 °C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain, Hoechst (blue) nuclear stain at 1:800, 1.6 mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) NrCAM Antibody (D) Composite.



Western Blotting

Image 2. Western Blot analysis of Rat Brain Membrane showing detection of ~160 kDa NrCam protein using Mouse Anti-NrCam Monoclonal Antibody, Clone S364-51 . Load: 10 µg. Primary Antibody: Mouse Anti-NrCam Monoclonal Antibody at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Mouse HRP at 1:200 for 1 hour at RT. Predicted/Observed Size: ~160 kDa.



Immunofluorescence (fixed cells)

Image 3. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-NrCAM Monoclonal Antibody, Clone S364-51 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-NrCAM Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) NrCAM Antibody (D) Composite.