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www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 200-301-W74

NrCAM Antibody

Overview

Description:	Anti-NrCAM (MOUSE) Monoclonal Antibody - 200-301-W74
Item No.:	200-301-W74
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

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 cystoskeletal 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. Anti-NrCam is ideal for research in Cancer and Neuroscience. 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.
Synonyms:	Neuronal cell adhesion molecule, Bravo, hBravo, KIAA0343, MGC138845, MGC138846, Neuronal surface protein Bravo, Ng CAM related, Ng-CAM-related, NgCAM related cell adhesion molecule, NgCAM-related cell adhesion molecule, Nr CAM, Nr-CAM
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	S364-51
Format:	IgG2a

Target Details

Gene Name:	Nrcam
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-NrCAM Antibody was produced by repeated immunization of mice with a fusion protein containing amino acids 30-845 of mouse NrCAM.
Purity/Specificity:	Anti-NrCAM Antibody was purified from concentrated tissue culture supernate by Protein G chromatography. BLAST analysis suggests that it is 96% identical to rat, 91% identical to human and ~50% identical to Neurofascin.
Relevant Links:	• UniProtKB - Q810U4 • GeneID - 319504

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-NrCAM Antibody is suitable for Western Blots and Immunocytochemistry. Expect a band approximately ~160kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	1:1000

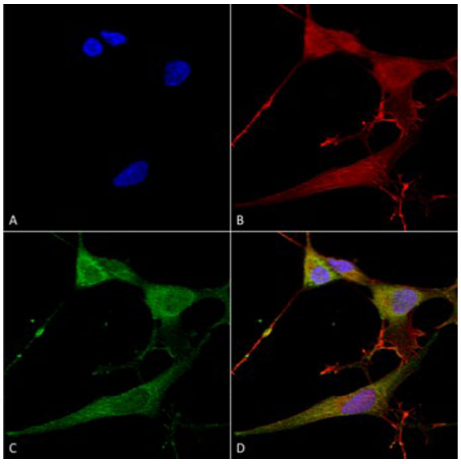
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

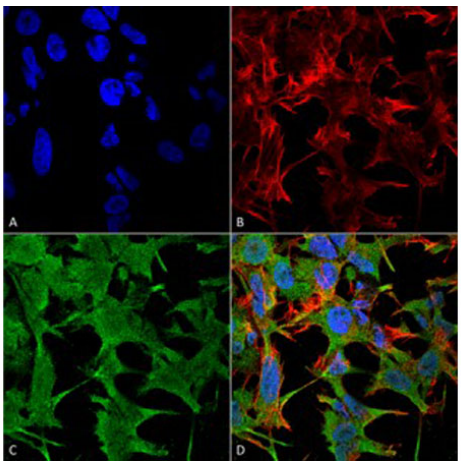
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

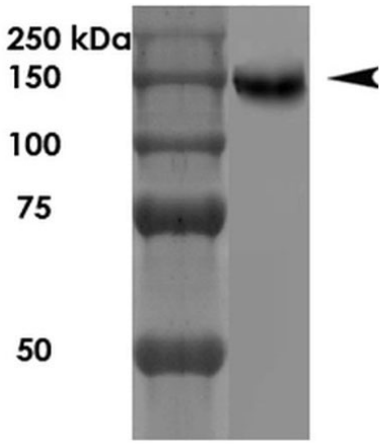
Images



Immunofluorescence Microscopy
Immunofluorescence of Mouse Anti-NrCAM Monoclonal Antibody.
Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human.
Fixation: 4% PFA for 15 min.
Primary Antibody: Mouse Anti-NrCAM Monoclonal Antibody at 1:100 for overnight at 4°C.
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, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) NrCAM Antibody (D) Composite.



Immunofluorescence Microscopy
Immunofluorescence of Mouse Anti-NrCAM Monoclonal Antibody.
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.



Western Blot
Western Blot of Mouse Anti-NrCam Monoclonal Antibody. Load: 10 µg. Lane 1: MW. Lane 2: Rat Brain. 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.

Disclaimer

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