

NrCAM Antibody

NrCAM Antibody, Clone S364-51 Catalog # ASM10294

Specification

NrCAM Antibody - Product Information

Application **Primary Accession** Other Accession Host Isotype Reactivity Clonality Description Mouse Anti-Mouse NrCAM Monoclonal IgG2a

WB, ICC O810U4 NP 001139503.1 Mouse lgG2a Human, Mouse, Rat Monoclonal

Target/Specificity Detects ~160kDa.

Other Names

Neuronal cell adhesion molecule Antibody, Bravo Antibody, hBravo Antibody, KIAA0343 Antibody, MGC138845 Antibody, MGC138846 Antibody, Neuronal surface protein Bravo Antibody, Ng CAM related Antibody, Ng-CAM-related Antibody, NgCAM related cell adhesion molecule Antibody, NgCAM-related cell adhesion molecule Antibody, Nr CAM Antibody, Nr-CAM Antibody

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.

Purification Protein G Purified

Storage **Storage Buffer** PBS pH 7.4, 50% glycerol, 0.1% sodium azide -20°C

Blue Ice or 4ºC

Shipping Temperature **Certificate of Analysis** 1 μ g/ml of SMC-462 was sufficient for detection of NrCAM in 20 μ g of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization Cell Membrane

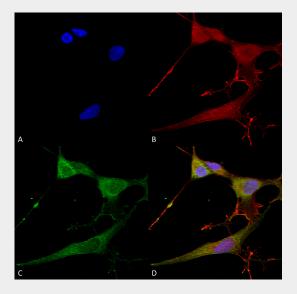
NrCAM Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.



- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

NrCAM Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-NrCAM Monoclonal Antibody, Clone N364/51 (ASM10294). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-NrCAM Monoclonal Antibody (ASM10294) 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, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) NrCAM Antibody (D) Composite.

NrCAM Antibody - 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.

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.