

**DESCRIPTION**

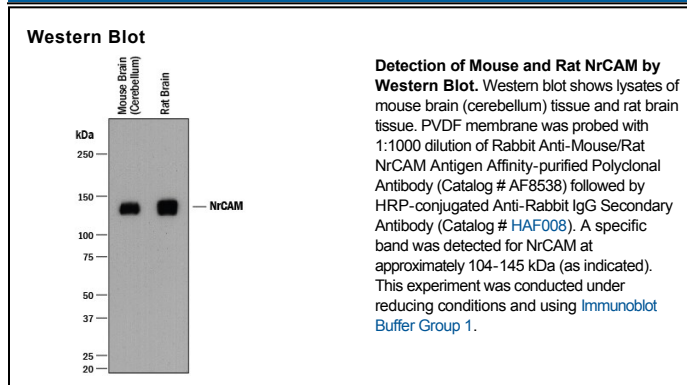
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Mouse/Rat   |
| <b>Specificity</b>        | Detects mouse and rat NrCAM in direct ELISAs and Western blots. In direct ELISAs, less than 25% cross-reactivity with recombinant human NrCAM is observed.                                    |
| <b>Source</b>             | Polyclonal Rabbit IgG   |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse NrCAM<br>Leu30-Pro630<br>Accession # Q810U4   |
| <b>Formulation</b>        | Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                     | <b>Recommended Concentration</b> | <b>Sample</b> |
|---------------------|----------------------------------|---------------|
| <b>Western Blot</b> | 1:1000 dilution                  | See Below     |

**DATA**



**PREPARATION AND STORAGE**

|                                |   |
|--------------------------------|---|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C  |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C, as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after opening.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after opening.</li> </ul> |

**BACKGROUND**

NrCAM related cell adhesion molecule (NrCAM), also known as Bravo, belongs to the L1 family of cell adhesion molecules, which also include L1, neurofascin and close homolog of L1 (CHL-1) (1). These molecules are type I transmembrane proteins that have 6 Ig-like domains and 4-5 fibronectin type III-like domains in their extracellular domain. They also shared a conserved cytoplasmic region containing an ankyrin-binding site. L1 family cell adhesion molecules are expressed primarily in the nervous system where they share overlapping functions in controlling axonal growth and guidance (1, 2). NrCam mediates homophilic adhesion as well as heterophilic adhesion with a number of neuronal adhesion molecules including contactin, TAG-1/contactin-2, neurofascin and receptor tyrosine phosphatase β (RPTPβ) (3-5). NrCAM has been implicated in the axogenesis of multiple neuronal populations including sensory axons and commissural axons in the spinal cord of chick embryos. It also plays a role in cerebellar granule cell development, and is required in node of Ranvier formation (5, 6).

**References:**

Hortsch, M. (2000) Mol. Cell. Neurosci. 15:1. Stoeckli, E.T. and L.T. Landmesser (1995) Neurosci 14:1165. Mauro, V.P. et al. (1992) 119:191. Fustig, M. et al. (1999) Dev. Bio. 209:340. Sakurai, T. et al. (2001) J. Cell Bio. 154:1259. Custer, A.W. et al. (2003) J. Neuroscience 23:10032.