



# Mouse anti-Rat Nogo-A monoclonal antibody, clone 28/Ophp-B (CABT-B9245)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                           |   |
|---------------------------|---|
| <b>Immunogen</b>          | Rat Nogo-A aa. 424-627  |
| <b>Isotype</b>            | IgG1  |
| <b>Source/Host</b>        | Mouse   |
| <b>Species Reactivity</b> | Rat   |
| <b>Clone</b>              | 28/Ophp-B   |
| <b>Purification</b>       | The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. |
| <b>Conjugate</b>          | Unconjugated  |
| <b>Applications</b>       | WB; IF  |
| <b>Format</b>             | Liquid  |
| <b>Concentration</b>      | 250 µg/ml   |
| <b>Size</b>               | 50 µg   |
| <b>Buffer</b>             | Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.                                |
| <b>Storage</b>            | Store undiluted at -20°C.   |

## BACKGROUND

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|---------------------|--|
| <b>Introduction</b> | During neural development, many axons must travel long distances before reaching their |
|---------------------|--|

dendritic targets and establishing synapses. After injury, these axonal connections can only regenerate in the peripheral nervous system, but not in the central nervous system (CNS). This difference in axon regeneration is thought to involve various inhibitory molecules found in the myelin of axons in the CNS. Nogo was identified in assays that examined fractions from myelin extracts for the antigen of monoclonal antibody IN-1, an antibody that allows modest axon regeneration after spinal cord injury. Nogo is expressed as three different proteins, Nogo-A, -B, and -C, which are members of the Reticulon family of ER anchoring proteins. Nogo-A is the full length protein, while Nogo-B contains 172 amino acids of the N-terminus and 188 amino acids of the C-terminus of Nogo-A, and Nogo-C contains only the 188 amino acid C-terminus of Nogo-A. These splice variants are all found in optic nerve, spinal cord, and cerebral cortex, but differ in expression in other neuronal and non-neuronal tissues. Thus, Nogo-A is a myelin-associated protein that may have roles in the ER, as well as during axon regeneration.

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**Keywords**

RTN4; reticulon 4; ASY; NSP; NOGO; NOGOC; RTN-X; NOGO-A; NSP-CL; Nogo-B; Nogo-C; RTN4-A; RTN4-C; RTN4-B1; RTN4-B2; NI220/250; Nbla00271; Nbla10545; reticulon-4; foocen; Human NogoA; reticulon 5; My043 protein; neurite outgrowth inhibitor; neurite growth inhibitor 220; neuroendocrine-specific protein C homolog;

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## GENE INFORMATION

**Entrez Gene ID**

[57142](#)

**UniProt ID**

[Q9NQC3](#)

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