

## DESCRIPTION

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|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Rat                                                                                                                                                                                                                                                                         |
| <b>Specificity</b>        | Detects rat Nogo-A in direct ELISAs.                                                                                                                                                                                                                                        |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2A</sub> Clone # 387521                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | KLH-coupled rat Nogo-A synthetic peptide<br>SYDSIKLEPENPPPYEEA (aa 623-640)<br>Accession # Q9JK11                                                                                                                                                                           |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Nogo-A, also known as Reticulon-4, is the longest of four splice variants of Nogo. It is a CNS myelin-associated neurite outgrowth inhibitor that is highly expressed in oligodendrocytes. Nogo-A is synthesized as an 1163 amino acid protein and lacks a signal peptide. Within conserved C-terminal reticulon homology domain (RHD), two transmembrane domains, which are separated by a 66 amino acid extracellular loop, exist. Both the N-terminal domain and the 66 amino acid domain (Nogo-66) can be detected on the cell surface and show neurite outgrowth inhibitory activity. The amino acid sequence of rat Nogo-A N-terminal domain is 76% identical to that of human Nogo-A. Within the RHD domain, rat Nogo-A shares 99% and 97% amino acid sequence identity with mouse and human Nogo, respectively.

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