

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat Nogo-A in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 391401
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant rat Nogo-A Glu2-Val172 Accession # Q9JK11
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Rat Nogo-A Fc Chimera (Catalog # 2445-NG)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.