

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse NG2/MCSP in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human NG2/MCSP/CSPG4 is observed.
Source	Monoclonal Rat IgG ₁ Clone # 546930
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse NG2/MCSP Leu1587-Ser2229 Accession # Q8VHY0
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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

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

BACKGROUND

NG2, also called MCSP (melanoma-associated chondroitin sulfate proteoglycan), CSPG4, or AN2, is a 400-500 kDa proteoglycan found on multiple cell types, including immature oligodendrocytes, osteoblasts, chondroblasts, and pericytes. It interacts with integrin $\alpha\beta 1$, galectin 3, MMP16, collagen VI and PDGFR α . Mature mouse NG2 is a 2298 amino acid (aa) type I transmembrane glycoprotein. The extracellular region is 2200 aa in length (aa 30-2229), while the cytoplasmic domain is 76 aa in size. The glycoprotein component of NG2 is approximately 300-315 kDa in size. Proteolytic cleavage generates a 290 and 275 kDa form (excluding the chondroitin sulfate moiety). There are two splice variants. One shows a 38 aa substitution for aa 1657-2327, while another shows an alternate start site at Met1667. Over aa 31-420, mouse NG2 shares 95% and 80% aa identity with rat and human NG2, respectively.

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