

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse NPRA/NPR1 in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 488620
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse NPRA/NPR1 Ser29-Glu469 (predicted) Accession # P18293
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

Mouse NPR1 (natriuretic peptide receptor-1; also ANP-R1 or guanylyl cyclase-A) is a 130 kDa member of the guanylyl cyclase family of proteins. It is a type I transmembrane glycoprotein that contains a 441 aa extracellular domain (ECD) (aa 29-469) and a 567 aa cytoplasmic region. The cytoplasmic region shows a tyrosine kinase and guanylyl cyclase catalytic domain. NPR1 operates as an oligomer and binds both ANP (atrial natriuretic peptide) and BNP (B-type natriuretic peptide). ANP binding induces bronchodilation and a reduction in blood pressure. Over aa 29-469, mouse NPR1 is 97% and 86% aa identical to rat and human NPR1, respectively.

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