

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NPRA/NPR1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse NPR1 or recombinant human NPR2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 377029
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human NPRA/NPR1 Gly33-Glu473 Accession # P16066
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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.

Western Blot 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

Natriuretic peptide receptor A/guanylate cyclase A (NPR1), also called NPRA or GC-A, is a 120-140 kDa type I transmembrane glycoprotein that is the primary receptor for natriotic peptides ANP and BNP. Binding of ANP to the extracellular ligand binding domain (aa 54-415), plus ATP to the intracellular kinase homology domain (aa 528-805) activates a cytoplasmic guanylate cyclase (aa 840-1023). NPR1 is expressed most highly in kidney, adrenal and adipose tissue. Human NPR1 extracellular domain shows 86%, 44% and 34% aa identity with mouse NPR1, human NPRB and human NPRC, respectively.

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