

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
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 Human NPRA/NPR1

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

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 natrietic 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.