

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse NPRA/NPR1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant human (rh) NPR1 is observed and 5% cross-reactivity with rhNPR2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse NPRA/NPR1 Ser29-Glu469 Accession # P18293
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	0.1 µg/mL	Recombinant Mouse NPRA/NPR1

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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

Mouse Natriuretic Peptide Receptor-1 (NPR1), also known as NPRA, ANP-R1 or guanylyl cyclase-A, is a 130 kDa member of the guanylyl cyclase family of proteins. NPR1 is a 1029 amino acid type I transmembrane glycoprotein that contains a 441 amino acid extracellular domain and a 567 amino acid 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 n.p.) ANP binding induces bronchodilation and a reduction in blood pressure. Over the extracellular domain, mouse NPR1 is 97% and 86% identical to rat and human NPR1, respectively.