

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human pro-CNP and mature CNP53 and CNP29 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) ANP or rhBNP is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 462608
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human CNP Lys24-Cys126 Accession # P23582
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 CNP

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

C-Type Natriuretic Peptide (CNP) belongs to the natriuretic peptide family and functions in an autocrine or paracrine fashion. CNP interacts with the GC-B/NPR-B receptor to promote vasorelaxation, vascular remodeling, and the growth and differentiation of bone and neural tissue. CNP is synthesized as a prohormone that is cleaved intracellularly by furin, yielding a 49 aa propeptide and a 53 aa mature peptide (CNP53). Additional cleavage of the mature peptide generates 29 aa and 22 aa peptides (CNP29 and CNP22) which have comparable activity in some assays. Within the 53 aa mature CNP, human shares 96% aa sequence identity with mouse and rat.