

DESCRIPTION

Species Reactivity	Human
Specificity	Detects the Pro form of human CNP (amino acids 24-126) in direct ELISAs and Western blots. Does not detect the CNP29 peptide (amino acids 98-126). In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) ANP precursor or rhBNP precursor is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 347608
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. Additional cleavage of the mature peptide generates 29 aa and 22 aa peptides which have comparable activity in some assays. Within the 103 aa pro CNP, human shares 91% aa sequence identity with mouse and rat pro CNP.