

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CNP Propeptide in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-react with recombinant human (rh) ANP precursor or rhBNP precursor is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 347625
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human CNP Lys24-Cys126 Accession # P23582
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.
Immunohistochemistry	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

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 (aa 24-72) and a 53 aa mature peptide (aa 74-126). Additional cleavage of the mature peptide generates 29 aa (aa 98-126) and 22 aa (aa 105-126) peptides, which have comparable activity in some assays. The human CNP prohormone shares 91% and 94% aa sequence identity with mouse and rat, respectively.

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