

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Atrial Natriuretic Peptide/ANP in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Atrial Natriuretic Peptide/ANP Asn26-Tyr151 Accession # P01160
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.
Immunocytochemistry	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

ANP (Atrial Natriuretic Peptide; also known as γ -ANP, CDP/cardiostatin-related peptide and CDD-ANP) is a secreted member of the natriuretic peptide family of molecules. It is expressed in multiple cell types, including atrial myocytes, macrophages and select hypothalamic neurons. The C-terminus of ANP (or ANF) is reported to have a wide range of activities. It is best known to promote sodium and water excretion, but is also known to inhibit aldosterone and vasopressin secretion, while promoting testosterone and LH release. Human (pro)ANP is synthesized as a 153 amino acid (aa) prepropeptide that contains a 25 aa signal sequence, cardiostatin-related peptide (aa 26-55), a prosequence (aa 56-123) and a C-terminal atrial natriuretic factor motif (aa 124-151) that may or may not be accompanied by a dibasic Arg fragment. Although multiple enzymes are reported to be active on proANP, transmembrane Corin would appear to be central to normal extracellular proteolytic processing and the generation of ANP. Notably, and depending upon the tissue, proANP can also be cleaved at alternate sites, including Ala120 and Arg126. There is at least one isoform variant that contains a 12 aa addition to the C-terminus of the prepropeptide, resulting in an ANP that is 40 aa in length. Over aa 26-151 (proANP), human proANP shares 84% aa sequence identity with mouse proANP.

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