

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 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.