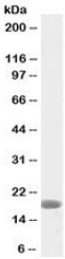
ANF Antibody Biotin Conjugate / Atrial Natriuretic Peptide/Factor (R35636BTN)

Catalog No.	Formulation	Size
R35636BTN	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Predicted Reactivity	Dog, Pig, Cow
Format	Biotin Conjugate
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	4878
Applications	Western Blot : 1-3ug/ml Immunohistochemistry (FFPE) : suitable ELISA (peptide) LOD : 1:32000
Limitations	This ANF antibody is available for research use only.



Biotinylated ANF Antibody Mouse Heart WB. Western blot analysis of mouse heart tissue lysate using biotinylated ANF antibody demonstrates detection of a distinct immunoreactive band at approximately 17 kDa, consistent with the expected molecular weight of Atrial Natriuretic Factor (ANF/ANP). ANF is a cardiac-derived peptide hormone encoded by the NPPA gene that functions as a key regulator of cardiovascular homeostasis, fluid balance, and natriuretic peptide signaling. The observed band supports expression of ANF in cardiac tissue and demonstrates the utility of this biotin-conjugated antibody for sensitive detection of cardiac endocrine signaling proteins in blotting and streptavidin-based assay applications. Western blot was performed using 2 ug/ml primary antibody. Predicted molecular weight: ~17 kDa.

Description

ANF Antibody Biotin Conjugate is designed for the detection and study of Atrial Natriuretic Factor (ANF), also known as

Atrial Natriuretic Peptide (ANP) and encoded by the NPPA gene. ANF is a cardiac-derived peptide hormone that functions as a central regulator of cardiovascular homeostasis, fluid balance, and endocrine signaling. Produced primarily by cardiac tissue, ANF helps coordinate physiologic responses that maintain circulatory function and systemic homeostasis. The biotinylated format of this antibody enables sensitive detection strategies utilizing avidin-biotin and streptavidin-based assay systems.

ANF is synthesized as a precursor protein that undergoes proteolytic processing to generate biologically active natriuretic peptides. Following release from cardiac cells, ANF interacts with natriuretic peptide receptors to regulate signaling pathways involved in cardiovascular adaptation, fluid regulation, and vascular homeostasis. Through these endocrine signaling mechanisms, ANF serves as an important molecular link between the heart and other organ systems responsible for maintaining physiologic balance.

As a cardiac hormone, ANF occupies a central position within cardiovascular endocrine networks. Its biologic activities help coordinate communication between the cardiovascular, renal, and endocrine systems, making ANF an important marker for studies of cardiac physiology and hormone-mediated signaling pathways. Because ANF expression is closely associated with cardiac endocrine function, it remains one of the most widely studied peptide hormones in cardiovascular research.

Beyond its established role in cardiovascular regulation, ANF has attracted significant research interest in developmental biology, endocrine communication, tissue homeostasis, and natriuretic peptide signaling. Researchers continue to investigate how ANF contributes to physiologic adaptation and systemic regulation through hormone-dependent signaling mechanisms. These studies have established ANF as an important target for understanding cardiovascular biology and endocrine control pathways.

ANF Antibody Biotin Conjugate is useful for investigating cardiovascular signaling, cardiac hormone biology, endocrine regulation, natriuretic peptide pathways, and fluid homeostasis. Researchers utilize ANF Antibody Biotin Conjugate in immunohistochemistry, ELISA, blotting applications, and other streptavidin-based detection systems to evaluate ANF expression and study molecular mechanisms governing cardiovascular function and endocrine communication.

Learn more about atrial natriuretic peptide signaling, cardiovascular hormone regulation, and natriuretic factor biology on our ANF Antibody page.

Application Notes

Optimal dilution of the ANF antibody should be determined by the researcher.

Immunogen

Amino acids RIGAQSGLGCNSFR were used as the immunogen for this ANF antibody.

Storage

Aliquot and store the ANF antibody at -20oC.