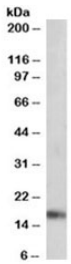
ANF Antibody / ANP / Atrial Natriuretic Factor (R35636)

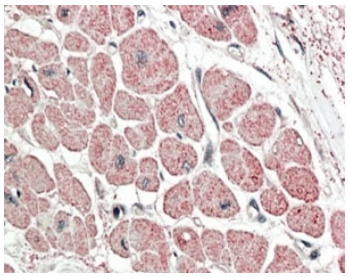
Catalog No.	Formulation	Size
R35636-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Predicted Reactivity	Dog, Pig, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	4878
Applications	Western blot: 0.01-0.03ug/ml Immunohistochemistry (FFPE): 5-10ug/ml ELISA (peptide) LOD: 1:32000
Limitations	This ANF antibody is available for research use only.



ANF Antibody Mouse Heart WB. Western blot testing of mouse heart lysate with ANF antibody at 0.01ug/ml. Predicted molecular weight ~17 kDa.



ANF Antibody Human Heart IHC. Immunohistochemistry staining of FFPE human heart tissue using ANF antibody demonstrates diffuse cytoplasmic staining throughout cardiomyocytes, consistent with expression of Atrial Natriuretic Factor (ANF/ANP). ANF is a cardiac-derived peptide hormone encoded by the NPPA gene and functions as a central regulator of cardiovascular homeostasis, fluid balance, and natriuretic peptide signaling. The observed staining pattern is consistent with the established role of cardiac muscle cells as a primary source of ANF production and endocrine regulation. These findings support the utility of ANF antibody for studies of cardiac hormone biology, cardiovascular signaling pathways, and peptide hormone expression. HIER: steamed with pH6 citrate buffer. Detection was performed using an AP staining system.

Description

ANF Antibody is intended for the detection and study of Atrial Natriuretic Factor (ANF), a biologically active peptide hormone produced primarily by cardiac tissue. Also known as Atrial Natriuretic Peptide (ANP), ANF is encoded by the NPPA gene and functions as an important endocrine regulator of cardiovascular physiology. The hormone is released in response to physiologic stimuli affecting circulatory balance and contributes to signaling pathways that help coordinate cardiovascular, renal, and systemic homeostatic processes.

ANF belongs to the natriuretic peptide family, a group of peptide hormones that mediate communication between organ systems involved in fluid regulation and cardiovascular function. Following synthesis and processing within cardiac cells, ANF is secreted into the circulation where it interacts with specific receptors to initiate downstream signaling cascades. These pathways influence diverse physiologic processes associated with cardiovascular adaptation and maintenance of internal homeostasis.

Because ANF is produced predominantly by the heart, it has become one of the most widely studied markers of cardiac endocrine activity. Research involving ANF has contributed significantly to understanding how the heart functions not only as a mechanical pump but also as an endocrine organ capable of regulating systemic physiologic responses. The ability of ANF to coordinate communication between the cardiovascular and renal systems highlights its importance in maintaining normal physiologic balance.

In addition to its role in cardiovascular biology, ANF has been investigated in studies of developmental physiology, endocrine signaling, tissue remodeling, and homeostatic regulation. Natriuretic peptide pathways remain an active area of research because of their involvement in complex signaling networks that integrate responses across multiple organ systems. As a result, ANF continues to serve as an important molecular target for investigations of hormone-mediated regulation and cardiovascular signaling mechanisms.

ANF Antibody is useful for investigating cardiac endocrine function, natriuretic peptide signaling, cardiovascular physiology, hormone biology, and systemic homeostatic regulation. Researchers utilize ANF Antibody reagents to evaluate protein expression patterns and study molecular pathways governing endocrine communication, cardiovascular adaptation, and peptide hormone-mediated signaling processes.

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.

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