www.antibodiesinc.com
orders@antibodiesinc.com
530-758-4400

PRODUCT DATASHEET

Anti-Atrial Natriuretic Peptide Antibody

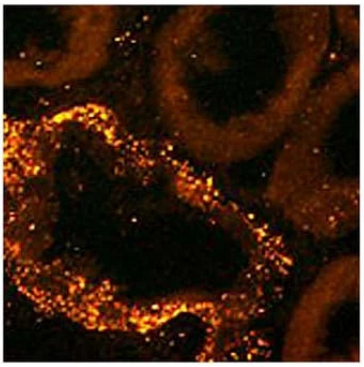
Product Details

Available Variants	50 µg (SKU:R-1500-50)
Conjugate	Unconjugated
Isotype	IgG
Host Species	Rabbit
Format	Affinity-purified
Physical State	Lyophilized
Buffer	Lyophilized with BSA.
Applications	ICC, IHC
Dilution Ranges	IHC: 5-15 µg/mL ICC: 5-15 µg/mL
Species Reactivity	Bovine, Canine, Feline, Horse, Human, Mouse, Pig, Rat
Immunogen	Synthetic rat Atrial natriuretic peptide (123-150 aa) conjugated to BSA.
Specificity	Human; mouse; rat. Highly conserved and expected to interact with feline, canine, porcine, bovine, and equine ANP.
Storage	Spin vial briefly before opening. Reconstitute in 0.05 mL of sterile-filtered PBS (pH 7.4). Centrifuge to remove any insoluble material. At least 12 months after purchase at 2 - 8°C (lyophilized formulations). After reconstitution, aliquot and store at -20°C for up to 6 months for a higher stability and at 2-8°C with an appropriate antibacterial agent for up to 2 weeks.Avoid freeze-thaw cycles
UniProt ID	P01161 UniProt Summary: [Atrial natriuretic peptide]: Hormone that plays a key role in mediating cardio-renal homeostasis, and is involved in vascular remodeling and regulating energy metabolism. Acts by specifically binding and stimulating NPR1 to produce cGMP, which in turn activates effector proteins, such as PRKG1, that drive various biological responses. Regulates vasodilation, natriuresis, diuresis and aldosterone synthesis and is therefore essential for

regulating blood pressure, controlling the extracellular fluid volume and maintaining the fluid-electrolyte balance. Also involved in inhibiting cardiac remodeling and cardiac hypertrophy by inducing cardiomyocyte apoptosis and attenuating the growth of cardiomyocytes and fibroblasts. Plays a role in female pregnancy by promoting trophoblast invasion and spiral artery remodeling in uterus, and thus prevents pregnancy-induced hypertension. In adipose tissue, acts in various cGMP- and PKG-dependent pathways to regulate lipid metabolism and energy homeostasis. This includes up-regulating lipid metabolism and mitochondrial oxygen utilization by activating the AMP-activated protein kinase (AMPK), and increasing energy expenditure by acting via MAPK11 to promote the UCP1-dependent thermogenesis of brown adipose tissue. Binds the clearance receptor NPR3 which removes the hormone from circulation.

Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.
NCBI Gene ID	24602

Product Images



Immunohistochemical staining in convoluted tubules in rat kidney. 4% paraformaldehyde fixed rat kidney crystostat sections (10 µm) were incubated overnight at 4°C with Rabbit polyclonal antibody to rat Atrial Natriuretic Peptide (10 µg/mL) followed by incubation with donkey anti-rabbit Rhodamine Red conjugated secondary antibody (1:200).