

Natriuretic peptides A Rabbit mAb [VJY1]

Cat NO. :A20596

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC	H,R	P01160	16 kDa	Rabbit	IgG	100ul,200ul

Applications detail:

Application	Dilution
WB	1:1000-2000
IHC	1:100
The optimal dilutions should be determined by the end user	

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human Natriuretic peptides A

Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt.Avoid repeated freeze / thaw cycles.

Tissue specificity:

[Urodilatin]: Detected in the kidney distal tubular cells (at protein level) (PubMed:9794555, PubMed:8384600).

Present in urine (at protein level) (PubMed:2972874, PubMed:9794555, PubMed:8351194,

Subcellular location:

[Long-acting natriuretic peptide]: Secreted.

Function:

Introduction: **WB:** Western Blot **IP:** Immunoprecipitation **IHC:** Immunohistochemistry **ChIP:** Chromatin Immunoprecipitation **ICC/IF:** Immunocytochemistry/Immunofluorescence **F:** Flow Cytometry

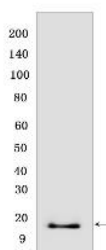
Cross Reactivity: **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Ml:** mink **C:** chicken **Dm** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Hr:** horse

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[Atrial natriuretic peptide]: Hormone that plays a key role in mediating cardio-renal homeostasis, and is involved in vascular remodeling and regulating energy metabolism (PubMed:8653797, PubMed:7595132, PubMed:2825692, PubMed:7720651, PubMed:8087923, PubMed:2532366, PubMed:22307324, PubMed:18835931, PubMed:21672517, PubMed:15741263, PubMed:16875975). Acts by specifically binding and stimulating NPR1 to produce cGMP, which in turn activates effector proteins, such as PRKG1, that drive various biological responses (PubMed:25401746, PubMed:9893117, PubMed:1672777, PubMed:1660465, PubMed:2162527, PubMed:2825692, PubMed:7720651, PubMed:22307324, PubMed:8384600, PubMed:21098034). 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 (PubMed:8653797, PubMed:7595132, PubMed:2825692, PubMed:7720651, PubMed:2532366, PubMed:8087923). Also involved in inhibiting cardiac remodeling and cardiac hypertrophy by inducing cardiomyocyte apoptosis and attenuating the growth of cardiomyocytes and fibroblasts (PubMed:16875975). Plays a role in female pregnancy by promoting trophoblast invasion and spiral artery remodeling in uterus, and thus prevents pregnancy-induced hypertension (By similarity). In adipose tissue, acts in various cGMP- and PKG-dependent pathways to regulate lipid metabolism and energy homeostasis (PubMed:22307324, PubMed:18835931, PubMed:21672517, PubMed:15741263). 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 (PubMed:22307324, PubMed:18835931, PubMed:21672517, PubMed:15741263). Binds the clearance receptor NPR3 which removes the hormone from circulation (PubMed:1672777).., [Long-acting natriuretic peptide]: May have a role in cardio-renal homeostasis through regulation of natriuresis, diuresis, vasodilation, and inhibiting aldosterone synthesis (PubMed:8653797, PubMed:7955907, PubMed:8087923, PubMed:2825692, PubMed:7595132, PubMed:2532366). In vitro, promotes the production of cGMP and induces vasodilation (PubMed:2825692). May promote natriuresis, at least in part, by enhancing prostaglandin E2 synthesis resulting in the inhibition of renal Na⁺-K⁺-ATPase (PubMed:7720651). However reports on the involvement of this peptide in mammal blood volume and blood pressure homeostasis are conflicting, according to a report, in vivo it is not sufficient to activate cGMP and does not inhibit collecting duct transport nor effect diuresis and natriuresis (By similarity). Appears to bind to specific receptors that are distinct from the receptors bound by atrial natriuretic peptide and vessel dilator (PubMed:2162527, PubMed:2825692). Possibly enhances protein excretion in urine by

Validation Data:

Natriuretic peptides A Rabbit mAb [VJY1] Images



Western blot (SDS PAGE) analysis of extracts from Human fetal heart. Using Natriuretic peptides A Rabbit mAb [VJY1] at dilution of 1:1000 incubated at 4°C over

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IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.