

ANP (23/1): sc-80686

BACKGROUND

Natriuretic peptides comprise a family of three structurally related molecules: atrial natriuretic peptide (ANP), brain natriuretic peptide (BNP) and C-type natriuretic peptide (CNP). ANP and BNP act mainly as cardiac hormones, produced primarily by the atrium and ventricle, respectively, while the gene encoding C-type natriuretic peptide is expressed mainly in the brain. These peptides possess potent natriuretic, diuretic and vasodilating activities and are implicated in body fluid homeostasis and blood pressure control. ANP, BNP and CNP are highly homologous within the 17-residue ring structure formed by an intramolecular disulfide linkage. The genes which encode for ANP and BNP map to human chromosome 1p36.2. The gene which encodes for CNP maps to human chromosome 2q24-qter.

REFERENCES

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6. Cameron, V.A., et al. 2000. Atrial (ANP) and brain natriuretic peptide (BNP) expression after myocardial infarction in sheep: ANP is synthesized by fibroblasts infiltrating the infarct. *Endocrinology* 141: 4690-4697.
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CHROMOSOMAL LOCATION

Genetic locus: NPPA (human) mapping to 1p36.22.

SOURCE

ANP (23/1) is a mouse monoclonal antibody raised against ANP of human origin, with epitope mapping to amino acids 4-28.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

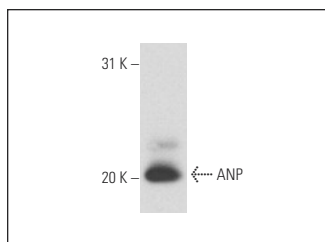
ANP (23/1) is recommended for detection of ANP of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for ANP siRNA (h): sc-37062, ANP shRNA Plasmid (h): sc-37062-SH and ANP shRNA (h) Lentiviral Particles: sc-37062-V.

Molecular Weight of ANP: 17 kDa.

Positive Controls: rat heart extract: sc-2393 or Caki-1 cell lysate: sc-2224.

DATA



ANP (23/1): sc-80686. Western blot analysis of ANP expression in rat heart tissue extract.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.