



P90225Ov01
Atrial Natriuretic Peptide (ANP)
Organism: Ovis aries (Sheep)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

3th Edition (Revised in February, 2012)

[DESCRIPTION]

Protein Names: Atrial Natriuretic Peptide

Gene Names: NPPA

Size: 100µg

Source: Recombinant

Expression Host: *E.coli*

Function: Hormone playing a key role in cardiovascular homeostasis through regulation of natriuresis, diuresis, and vasodilation. Also plays a role in female pregnancy by promoting trophoblast invasion and spiral artery remodeling in uterus. Specifically binds and stimulates the cGMP production of the NPR1 receptor. Binds the clearance receptor NPR3.

Subcellular Location: Secreted

[PROPERTIES]

Residues: Asn25~Arg152 (Accession # O46540), with a N-terminal His-tag.

Grade & Purity: >97%, 15.5 kDa as determined by SDS-PAGE reducing conditions.

Form & Buffer: Supplied as lyophilized form in PBS, pH 7.4.

Endotoxin Level: <1.0 EU per 1µg (determined by the LAL method).



Applications: SDS-PAGE; WB; ELISA; IP.

(May be suitable for use in other assays to be determined by the end user.)

Predicted Molecular Mass: 15.5 kDa

[PREPARATION]

Reconstitute in PBS.

[STORAGE AND STABILITY]

Storage: Store at 4°C for short time storage (1-2 weeks). Aliquot and store at -20°C or -80°C for long term storage.

Avoid repeated freeze/thaw cycles.

Valid period: 12 months stored at -80°C.

[BACKGROUND]

The target protein is fused with a His-tag and its sequence is listed below. The first Met is an initiator amino acid. Moreover, Gly and Ser are added to improve the flexibility of N-terminus at both ends of the His-tag, which will increase the chelating ability of the tag to Ni-Sepharose during purification.

MGHHHHHSGSEF-NPVYGS VSNADLMDFK NLLDRLEDKM PLEDEAVPSQ VLSEQNEEAG APLSPLSEVP
PWDGGRSTQP REMGAPSDGD PGNPPRSVLL KSKLRALLTA PRSLRRSSCF GGRMDRIGAQ SGLGCNSFRY
RR

[REFERENCES]

1. Aitken G.D., et al. (1999) Domest. Anim. Endocrinol. 16:115-121.

