



Product Information Sheet

Polyclonal Anti-ATP5J

Catalogue No. PA1012

Lot No. 04J01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

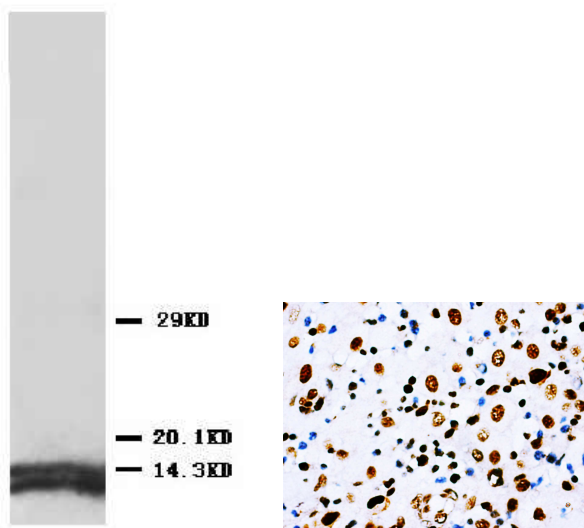
Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)



Immunogen

A synthetic peptide mapping at the middle region of human mature ATP5J (CF6), different from the related mouse sequence by two amino acids.

Purity

Immunogen affinity purified.

Application

Western blot

At 0.5-1µg/ml with the appropriate system to detect ATP5J in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect ATP5J in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

also be aliquotted and stored frozen at -20°C for longer time.

BACKGROUND

ATP synthase, H⁺ transporting, mitochondrial F₀ complex, subunit F₆ (ATP5J) is a multisubunit membrane-bound enzyme complex consisting of an F₀ segment embedded in the membrane and an F₁ segment attached to the F₀. It is also a component of mitochondrial ATP synthase which is required for the interactions of the catalytic and proton-translocating segments. Human ATP5J shares 72% sequence identity with rat ATP5J. This import signal peptide is rich in basic amino acids, devoid of acidic amino acids, and amphiphilic, which allows it to be water-soluble yet capable of passage through the phospholipid membrane bilayers. Moreover, it is circulating and functions as an endogenous vasoconstrictor by inhibiting cytosolic phospholipase A₂.

REFERENCE

1. Javed AA, Ogata K, Sanadi DR. Human mitochondrial ATP synthase: cloning cDNA for the nuclear-encoded precursor of coupling factor 6. *Gene*. 1991 Jan 15; 97(2):307-10.
2. Higuti T, Tsurumi C, Kawamura Y, Tsujita H, Osaka F, Yoshihara Y, Tani I, Tanaka K, Ichihara A. Molecular cloning of cDNA for the import precursor of human coupling factor 6 of H(+)-ATP synthase in mitochondria. *Biochem Biophys Res Commun*. 1991 Jul 31; 178(2):793-9.
3. Osanai T, Magota K, Tanaka M, Shimada M, Murakami R, Sasaki S, Tomita H, Maeda N, Okumura K. Intracellular signaling for vasoconstrictor coupling factor 6: novel function of beta-subunit of ATP synthase as receptor. *Hypertension*. 2005 Nov; 46(5):1140-6.