



## Polyclonal Anti-ATP5J (Sepharose Bead Conjugate)

**Catalogue No.** PA1012-S

**Lot No.** 04J01

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Specificity**

Human, mouse, rat. No cross reactivity with other proteins.

**Recommended application**

*Immunoprecipitation(IP)*

**Immunogen**

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

**Purification**

Immunogen affinity purified.

**Formulation**

50% slurry in PBS pH 7.2 with 0.01mg NaN<sub>3</sub> preservative.

**Storage**

Store at 4°C for frequent use.

**Description:**

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

### BACKGROUND

ATP synthase, H<sup>+</sup> transporting, mitochondrial F<sub>0</sub> complex, subunit F<sub>6</sub> (ATP5J) is a multisubunit membrane-bound enzyme complex consisting of an F<sub>0</sub> segment embedded in the membrane and an F<sub>1</sub> segment attached to the F<sub>0</sub>. 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 A<sub>2</sub>.

### 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.

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