



Product Information Sheet

Polyclonal Anti-ATP5J (Magnetic Bead Conjugate)

Catalogue No. PA1012-M	Immunogen A synthetic peptide mapping at the middle region of human mature ATP5J (CF6), different from the related mouse sequence by two amino acids.
Lot No. 04J01	Purity Immunogen affinity purified.
Ig type: rabbit IgG	
Size: 100µg/vial	Contents Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN ₃ .
Specificity Human, mouse, rat. No cross reactivity with other proteins.	Storage Store at 4°C for frequent use.
Recommended application <i>Immunoprecipitation (IP)</i>	Description This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

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.