

For Research Use Only

# ATP5J Polyclonal antibody

Catalog Number: 14114-1-AP **3 Publications**



## Basic Information

<b>Catalog Number:</b> 14114-1-AP	<b>GenBank Accession Number:</b> BC066310	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 1000 µg/ml by Nanodrop and 400 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 522	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:20-1:200
<b>Source:</b> Rabbit	<b>Full Name:</b> ATP synthase, H <sup>+</sup> transporting, mitochondrial F <sub>0</sub> complex, subunit F <sub>6</sub>	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 13 kDa	
<b>Immunogen Catalog Number:</b> AG5263	<b>Observed MW:</b> 9 kDa	

## Applications

### Tested Applications:

IHC, IP, WB, ELISA

### Cited Applications:

WB

### Species Specificity:

human, mouse, rat

### Cited Species:

rat, mouse, rabbit

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** HUVEC cells, mouse liver tissue, human heart tissue, SKOV-3 cells, mouse heart tissues, rat heart tissues

**IP:** HEK-293 cells,

**IHC:** human osteosarcoma tissue,

## Background Information

ATP5J, also known as coupling factor 6 (CF6), is a soluble integral component of mitochondrial ATP synthase. Mitochondrial ATP synthase is a multi-subunit membrane-bound enzyme that catalyzes the synthesis of ATP by utilizing a proton electrochemical gradient. It consists of three domains, namely the extrinsic and intrinsic membrane domains (F<sub>1</sub> and F<sub>0</sub>, respectively) joined by a stalk. CF6 is one of the subunits in the stalk and an essential component for energy transduction. Recently CF6 has also been reported to play a crucial role in the development of INS resistance and hypertension. CF6 is first synthesized as an immature form in the cytosol, then transported to the mitochondria by an import signal peptide and becomes an active form with the signal peptide cleaved. Western blot analysis of CF6 demonstrates a single band around 9 kDa to 12 kDa in various tissues including heart, liver, brain and HUVEC (human umbilical vein endothelial cells).

## Notable Publications

Author	Pubmed ID	Journal	Application
Fan Wang	33942232	Arch Pharm Res	WB
Linyi Song	35370945	Front Endocrinol (Lausanne)	WB
Weijie Sun	37467890	J Proteomics	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

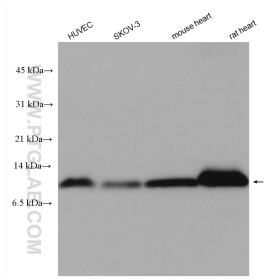
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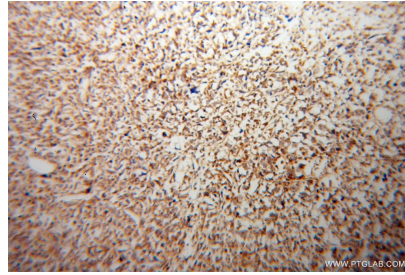
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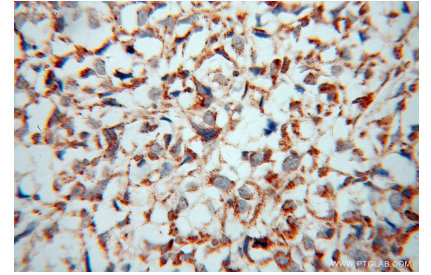
## Selected Validation Data



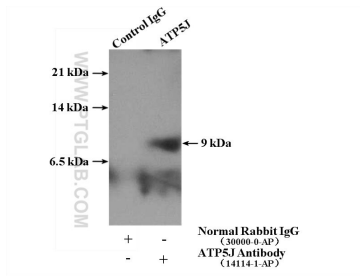
Various lysates were subjected to SDS PAGE followed by western blot with 14114-1-AP (ATP5J) antibody at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human osteosarcoma using 14114-1-AP (ATP5J) antibody at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human osteosarcoma using 14114-1-AP (ATP5J) antibody at dilution of 1:100 (under 40x lens).



IP Result of anti-ATP5J (IP:14114-1-AP, 4ug; Detection:14114-1-AP 1:300) with HEK-293 cells lysate 3680ug.