For Research Use Only

ATP5J Polyclonal antibody

Catalog Number:14114-1-AP 3 Publications

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Basic Information

Catalog Number:
14114-1-AP

Size:
150ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG5263

GenBank Accession Number:
BC066310

GeneID (NCBI):
522

UNIPROT ID:
P18859

Full Name:
ATP synthase, H+ transporting, mitochondrial F0 complex, subunit F6

Calculated MW:
13 kDa

Observed MW:
9 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
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
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
mouse, rat, 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,

IF/ICC : HeLa cells, U-251 cells

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 (F1 and F0, 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

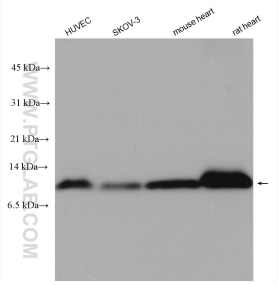
Storage

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

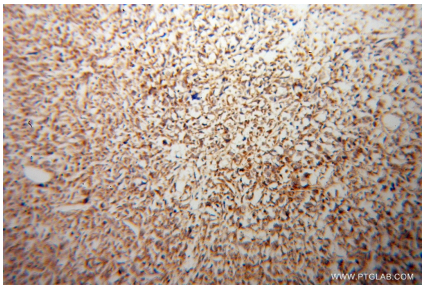
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

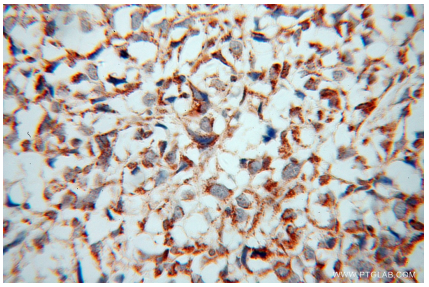
Selected Validation Data



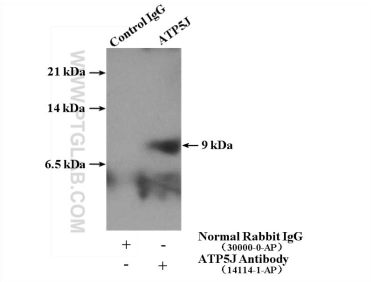
Various lysates were subjected to SDS PAGE followed by western blot with 14114-1-AP (ATP5J antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



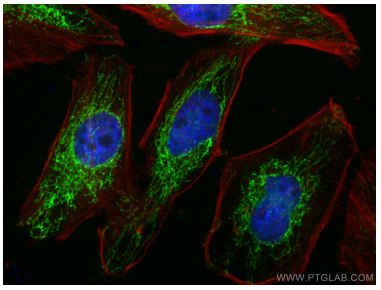
Immunohistochemical analysis of paraffin-embedded human osteosarcoma using 14114-1-AP (ATP5J antibody) at dilution of 1:100 (under 10x lens).



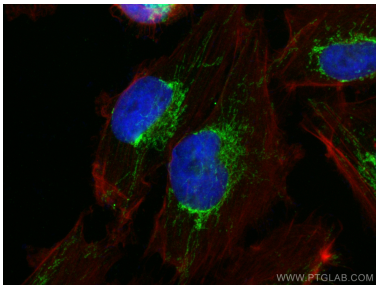
Immunohistochemical analysis of paraffin-embedded human osteosarcoma using 14114-1-AP (ATP5J antibody) at dilution of 1:100 (under 40x lens).



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



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using ATP5J antibody (14114-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed U-251 cells using ATP5J antibody (14114-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).