### For Research Use Only

# ATP50 Polyclonal antibody

Catalog Number: 10994-1-AP 9 Publications



**Basic Information** 

Catalog Number: 10994-1-AP BC021233 GeneID (NCBI): Concentration: 900 μg/ml **UNIPROT ID:** Source:

Rabbit Full Name: Isotype:

Immunogen Catalog Number:

AG1458

GenBank Accession Number:

P48047

ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit

Calculated MW: 23 kDa

Observed MW: 23-25 kDa

**Applications** 

**Tested Applications:** WB, IHC, FC (Intra), ELISA

**Cited Applications:** 

WB, IHC

Species Specificity: human, mouse, rat **Cited Species:** human, mouse

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: A549 cells, mouse placenta tissue, mouse liver tissue, mouse heart tissue, mouse colon tissue, Caco-2 cells, HCT116 cells, HEK-293 cells, HeLa cells, HepG2

**Purification Method:** 

WB: 1:500-1:3000 IHC: 1:50-1:500

100 µl suspension

Antigen affinity purification

FC (Intra): 0.40 ug per 10^6 cells in a

Recommended Dilutions:

IHC: human lung cancer tissue, human colon cancer tissue, human testis tissue, human heart tissue

FC (Intra): HepG2 cells,

## **Background Information**

ATP5O(ATP synthase subunit O, mitochondrial) is also named as ATPO, OSCP and belongs to the ATPase delta chain family. The gene encodes the oligomycin sensitivity-conferring protein (OSCP) of ATP synthase. The predicted polypeptide is 213 amino acids long with more than 80% identity to the bovine and mouse homologs and it is expressed at highest levels in muscle and heart by the northern blot(PMID:7490082). Many studies have indicated  $\dot{\text{that}} \ \text{mitochondrial} \ \text{dysfunction} \ \text{is central} \ \text{to} \ \text{the development} \ \text{of most age-related human} \ \text{diseases including}$ neurodegenerative diseases, cancer, and type 2 diabetes.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Robert Wiebringhaus	34885151	Cancers (Basel)	IHC
Yingyan Han	27239088	Dis Markers	WB
Peiyong Li	27313751	Oncol Lett	

Storage

Storage:

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

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

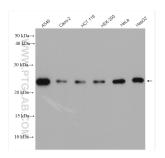
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

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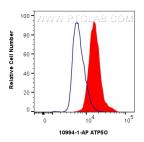
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 10994-1-AP (ATP50 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 10994-1-AP (ATP5O antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HepG2 cells were intracellularly stained with 0.4 ug ATP50 Polyclonal antibody (10994-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit 1gG(H+L) (SA00015-2)(red), or 0.4 ug Rabbit 1gG control Rabbit PolyAb (3000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).