

For Research Use Only

# UCP1 Polyclonal antibody

Catalog Number: 23673-1-AP

Featured Product

124 Publications



## Basic Information

### Catalog Number:

23673-1-AP

### Size:

150ul, Concentration: 560 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG20388

### GenBank Accession Number:

BC098168

### GeneID (NCBI):

7350

### UNIPROT ID:

P25874

### Full Name:

uncoupling protein 1 (mitochondrial, proton carrier)

### Calculated MW:

307 aa, 33 kDa

### Observed MW:

33 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:6000

IHC: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, bovine, hamster, goat

**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: mouse brown adipose tissue, mouse skeletal muscle tissue

IHC: mouse brown adipose tissue, rat brain tissue

## Background Information

UCP-1 (Mitochondrial uncoupling protein 1), is a mitochondrial transporter protein that creates proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation from ATP synthesis. It has been identified a key molecule for metabolic thermogenesis to avoid an excess of fat accumulation. UCP-1 expression is usually restricted to brown adipose when induced by cold exposure and thyroid hormone.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiaoqian Zeng	36169214	Food Funct	WB, IHC
Lijun Zhao	30258363	Front Pharmacol	IHC
Ping He	31484405	Biomolecules	WB

## Storage

### Storage:

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

### Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

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

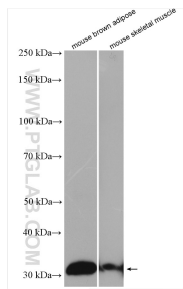
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

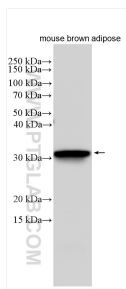
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

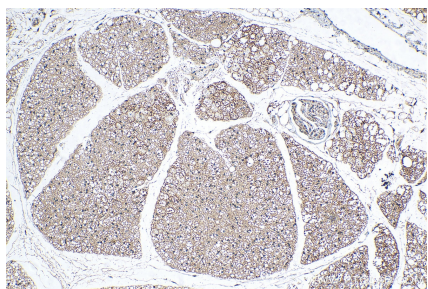
## Selected Validation Data



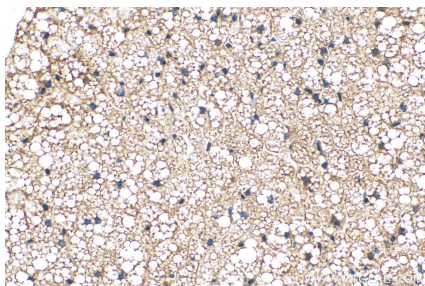
Various lysates were subjected to SDS PAGE followed by western blot with 23673-1-AP (UCP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



mouse brown adipose tissue were subjected to SDS PAGE followed by western blot with 23673-1-AP (UCP1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brown adipose tissue slide using 23673-1-AP (UCP1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brown adipose tissue slide using 23673-1-AP (UCP1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).