

For Research Use Only

# UCP1 Polyclonal antibody

Catalog Number: 23673-1-AP **85 Publications**



## Basic Information

<b>Catalog Number:</b> 23673-1-AP	<b>GenBank Accession Number:</b> BC098168	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 560 µg/ml	<b>GeneID (NCBI):</b> 7350	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P25874	
<b>Isotype:</b> IgG	<b>Full Name:</b> uncoupling protein 1 (mitochondrial, proton carrier)	
<b>Immunogen Catalog Number:</b> AG20388	<b>Calculated MW:</b> 307 aa, 33 kDa	
	<b>Observed MW:</b> 33 kDa	

## Applications

<b>Tested Applications:</b> IHC, WB, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IF, IHC	<b>WB:</b> mouse brown adipose tissue, mouse skeletal muscle tissue
<b>Species Specificity:</b> human, mouse, rat	<b>IHC:</b> mouse brown adipose tissue, rat brain tissue
<b>Cited Species:</b> human, goat, rat, mouse, hamster	

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

## 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 pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

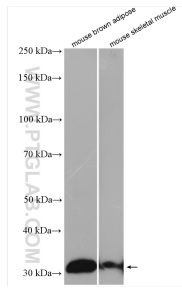
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

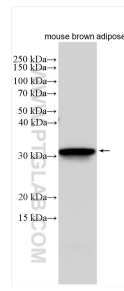
W: [ptgcn.com](http://ptgcn.com)

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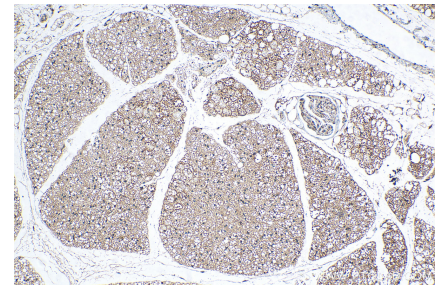
## Selected Validation Data



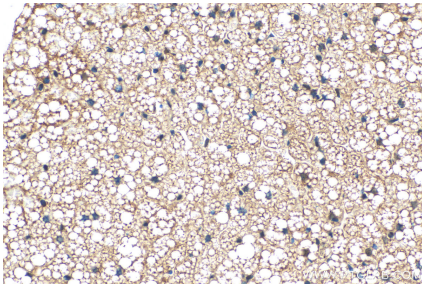
Various lysates were subjected to SDS PAGE followed by western blot with 23673-1-AP (UCP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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).