

For Research Use Only

UCP1 Polyclonal antibody

Catalog Number: 23673-1-AP

Featured Product

118 Publications



Basic Information

Catalog Number:

23673-1-AP

Size:

150ul, Concentration: 1000 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

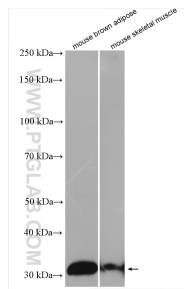
For technical support and original validation data for this product please contact:

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

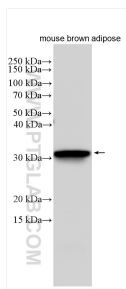
E: proteintech@ptglab.com
W: ptglab.com

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

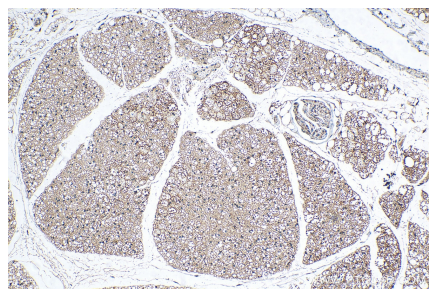
Selected Validation Data



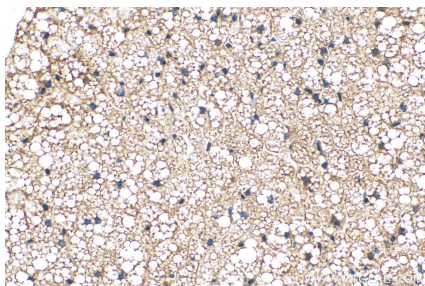
Various lysates were subjected to SDS PAGE followed by western blot with 23673-1-AP (UCP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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).