

For Research Use Only

UCP1 Polyclonal antibody

Catalog Number: 23673-1-AP **82 Publications**



Basic Information

Catalog Number: 23673-1-AP	GenBank Accession Number: BC098168	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 500 µg/ml by Nanodrop;	GeneID (NCBI): 7350	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: P25874	
Isotype: IgG	Full Name: uncoupling protein 1 (mitochondrial, proton carrier)	
Immunogen Catalog Number: AG20388	Calculated MW: 307 aa, 33 kDa	
	Observed MW: 33 kDa	

Applications

Tested Applications: WB, IHC, ELISA	Positive Controls:
Cited Applications: WB, IF, IHC	WB : mouse brown adipose tissue, mouse skeletal muscle tissue
Species Specificity: human, mouse, rat	IHC : mouse brown adipose tissue, rat brain tissue
Cited Species: 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

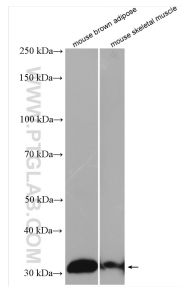
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

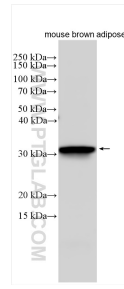
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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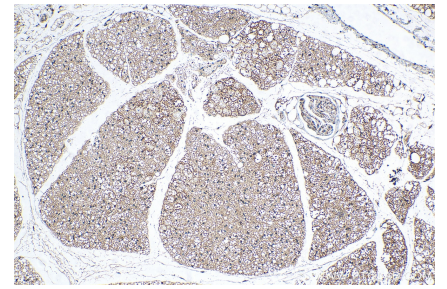
Selected Validation Data



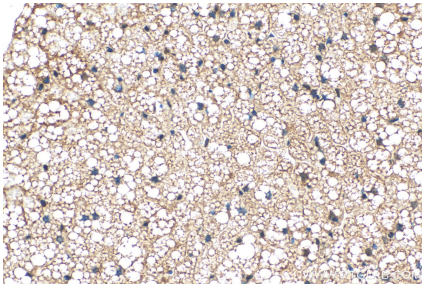
Various lysates were subjected to SDS PAGE followed by western blot with 23673-1-AP (UCP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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).