

For Research Use Only

# UCP2 Monoclonal antibody

Catalog Number: 66700-1-Ig



## Basic Information

<b>Catalog Number:</b> 66700-1-Ig	<b>GenBank Accession Number:</b> BC011737	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 2000 µg/ml by Nanodrop and 827 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 7351	<b>CloneNo.:</b> 2B4B1
<b>Source:</b> Mouse	<b>Full Name:</b> uncoupling protein 2 (mitochondrial, proton carrier)	<b>Recommended Dilutions:</b> WB 1:1000-1:4000
<b>Isotype:</b> IgG3	<b>Calculated MW:</b> 33 kDa	
<b>Immunogen Catalog Number:</b> AG19361	<b>Observed MW:</b> 28 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : Jurkat cells, human adipose tissue, human skeletal muscle tissue
<b>Species Specificity:</b> Human	

## Background Information

UCP2 (uncoupling protein 2) is a member of the mitochondrial carrier protein super family located in the mitochondrial inner membrane. The UCPs differ greatly in tissue distribution: UCP1 is expressed only in brown adipose; UCP3 preferentially in skeletal muscle, brown adipose and heart; UCP4 and UCP5 mainly in the nervous system (18167556). In contrast, UCP2 has a broad distribution and is implicated in a wide range of pathophysiological processes, including diabetes and cancer. This antibody detect a band around 28-33 kDa corresponding to UCP2 protein in mouse liver, skeletal muscle and pancreas. Some upper and lower bands also were observed due to the dimer formation and degradation of the UCP2 protein (20103532). This antibody was raised against the full-length UCP2 protein and may cross-react with UCP3. It is notable that UCP2 is known to have a very short half-life less than 1 hour (17240372). It is strongly recommended that fresh-made lysate be used for western blot assays.

## Storage

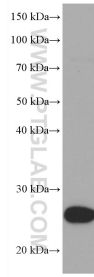
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

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

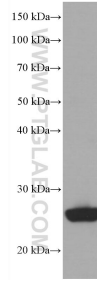
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

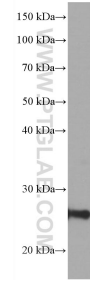
## Selected Validation Data



Jurkat cells were subjected to SDS PAGE followed by western blot with 66700-1-Ig (UCP2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



human adipose tissue were subjected to SDS PAGE followed by western blot with 66700-1-Ig (UCP2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



human skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 66700-1-Ig (UCP2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.