For Research Use Only

UCP2 Monoclonal antibody

Catalog Number:66700-1-Ig 1 Publications

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Basic Information

Catalog Number:
66700-1-Ig

Size:
150ul , Concentration: 2000 µg/ml by Nanodrop and 827 µg/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG3

Immunogen Catalog Number:
AG19361

GenBank Accession Number:
BC011737

GeneID (NCBI):
7351

UNIPROT ID:
P55851

Full Name:
uncoupling protein 2 (mitochondrial, proton carrier)

Calculated MW:
33 kDa

Observed MW:
28 kDa

Purification Method:
Protein A purification

CloneNo.:
2B4B1

Recommended Dilutions:
WB 1:1000-1:4000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB

Species Specificity:
Human

Cited Species:
human

Positive Controls:

WB : Jurkat cells, human adipose tissue, human skeletal muscle tissue

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 contract, 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Kexin Sun	38626646	Phytomedicine	WB

Storage

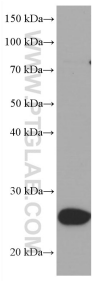
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

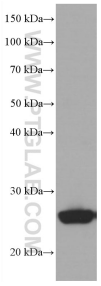
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

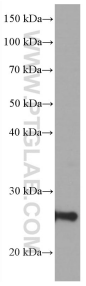
Selected Validation Data



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.