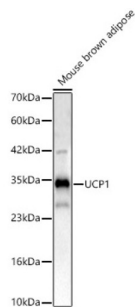
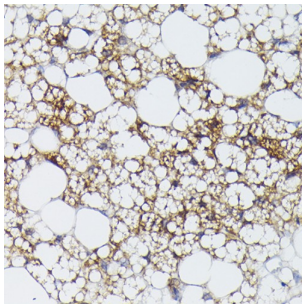


Mitochondrial Brown Fat Uncoupling Protein 1 (UCP1) Antibody

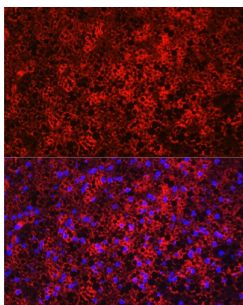
Catalogue No.: abx004494



Western blot analysis of lysates from Mouse brown adipose, using UCP1 Antibody at 1/2000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1/10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Exposure time: 180s.



Immunohistochemistry analysis of paraffin-embedded Rat brown adipose using UCP1 Antibody at dilution of 1/50 (40x lens). High pressure antigen retrieval performed in 0.01 M Citrate buffer (pH 6.0) prior to IHC staining.



Immunofluorescence analysis of paraffin-embedded rat brown adipose using UCP1 Antibody at dilution of 1/100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1/500 dilution. Blue: DAPI for nuclear staining.

UCP1 Antibody is a Rabbit Polyclonal antibody against UCP1. Mitochondrial uncoupling proteins (UCP) are members of the family of mitochondrial anion carrier proteins (MACP). UCPs separate oxidative phosphorylation from ATP synthesis with energy dissipated as heat, also referred to as the mitochondrial proton leak. UCPs facilitate the transfer of anions from the inner to the outer mitochondrial membrane and the return transfer of protons from the outer to the inner mitochondrial membrane. They also reduce the mitochondrial membrane potential in mammalian cells. Tissue specificity occurs for the different UCPs and the exact methods of how UCPs transfer H⁺/OH⁻ are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed only in brown adipose tissue, a specialized tissue which functions to produce heat.

Target: Mitochondrial Brown Fat Uncoupling Protein 1 (UCP1)

Clonality: Polyclonal

Reactivity: Mouse, Rat

Tested Applications: ELISA, WB, IHC, IF/ICC

Datasheet

Version: 4.0.0
Revision date: 28 Oct 2025



Host:	Rabbit
Recommended dilutions:	ELISA: 1 µg/ml, WB: 1/1000 - 1/5000, IHC-P: 1/50 - 1/200, IF/ICC: 1/50 - 1/200. Not tested in IHC-F. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	Synthetic peptide corresponding to UCP1. The exact sequence is proprietary.
Isotype:	IgG
Form:	Liquid
Purification:	Purified by affinity chromatography.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	P25874 (UniProt , ExPASy)
Gene Symbol:	UCP1
GeneID:	7350
NCBI Accession:	NP_068605.1
KEGG:	hsa:7350
String:	9606.ENSP00000262999
Molecular Weight:	Calculated MW: 33 kDa Observed MW: 33 kDa
Buffer:	PBS, pH 7.3, containing 0.05% Proclin-300, 50% glycerol.
Concentration:	> 0.2 mg/ml
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.