

# UCP1 Rabbit pAb

Catalog No.: A5857

39 Publications

## Basic Information

### Observed MW

33kDa

### Calculated MW

33kDa

### Category

Primary antibody

### Applications

WB, IF-P, IHC-P, ELISA

### Cross-Reactivity

Mouse, Rat

## Background

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<sup>+</sup>/OH<sup>-</sup> 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.

## Recommended Dilutions

**WB** 1:1000 - 1:5000**IF-P** 1:50 - 1:200**IHC-P** 1:50 - 1:200

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID

7350

### Swiss Prot

P25874

### Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### Synonyms

UCP; SLC25A7; UCP1

## Contact

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## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

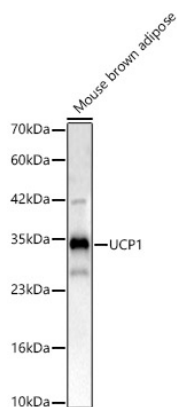
Affinity purification

### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 50% glycerol, pH7.3.

## Validation Data



Western blot analysis of lysates from Mouse brown adipose, using UCP1 Rabbit pAb (A5857) at 1:2000 dilution.

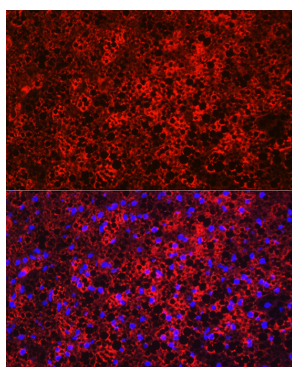
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

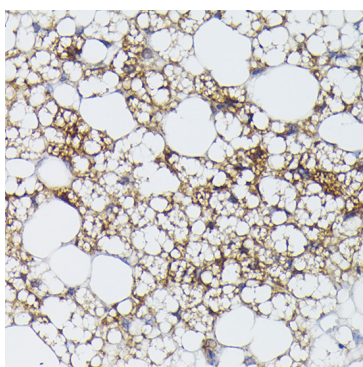
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 180s.



Immunofluorescence analysis of paraffin-embedded rat brown adipose using UCP1 Rabbit pAb (A5857) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of paraffin-embedded Rat brown adipose using UCP1 Rabbit pAb (A5857) at dilution of 1:50 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.