

# UCP1 Rabbit Polyclonal Antibody



CAB5857

## Product Information

### Size:

20uL, 50uL, 100uL, 200uL

### Observed MW:

33kDa

### Calculated MW:

33kDa

### Applications:

WB IHC IF

### Reactivity:

Human, Mouse, Rat

## Antibody Information

### Recommended dilutions:

WB 1:500 - 1:2000 IHC 1:50  
- 1:200 IF 1:50 - 1:200

### Source:

Rabbit

### Isotype:

IgG

### Purification:

Affinity purification

## Protein 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.

## Immunogen information

### Gene ID:

7350

### Uniprot

P25874

### Synonyms:

UCP1; SLC25A7; UCP

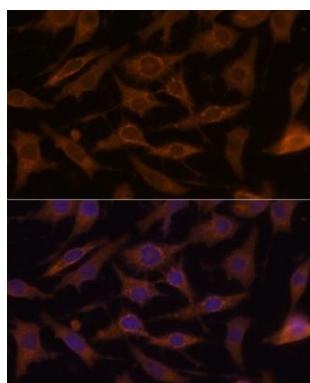
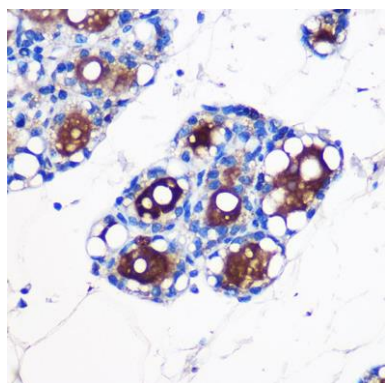
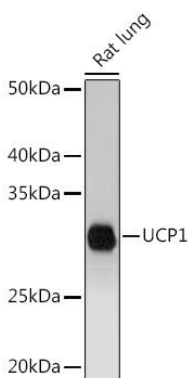
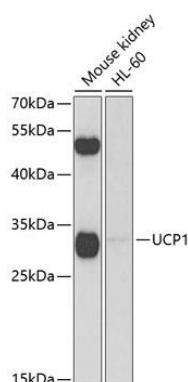
### Immunogen:

Recombinant fusion protein containing a sequence corresponding to amino acids 1-307 of human UCP1 (NP\_068605.1).

### Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

## Product Images



Western blot analysis of extracts of various cell lines, using UCP1 antibody (CAB5857) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 90s.

Western blot analysis of extracts of Rat lung, using UCP1 antibody (CAB5857) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 3min.

Immunohistochemistry of paraffin-embedded Rat fat using UCP1 antibody (CAB5857) at dilution of 1:100 (40x lens).

Immunofluorescence analysis of L929 cells using UCP1 antibody (CAB5857) at dilution of 1:100. Blue: DAPI for nuclear staining.