

## UCP1 antibody

Catalog No: #38698



Package Size: #38698-1 50ul #38698-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

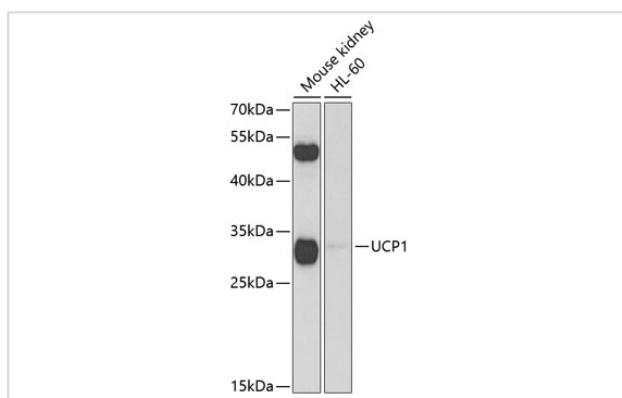
## Description

Product Name	UCP1 antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Mouse, Rat
Specificity	The antibody detects endogenous level of total UCP1 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human UCP1.
Target Name	UCP1
Other Names	UCP; SLC25A7;
Accession No.	Swiss-Prot#: P25874NCBI Gene ID: 7350
SDS-PAGE MW	33kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

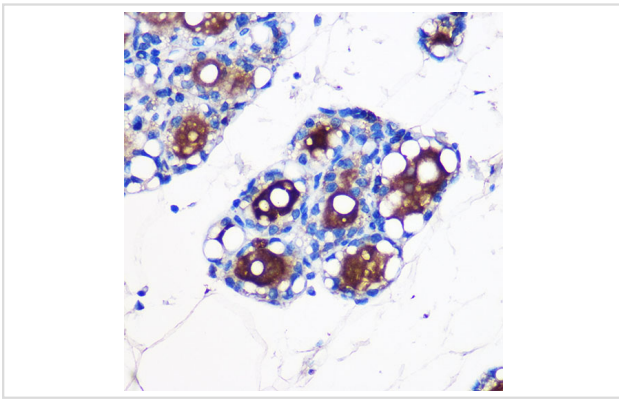
## Application Details

Western blotting: □ 1:500 - 1:2000

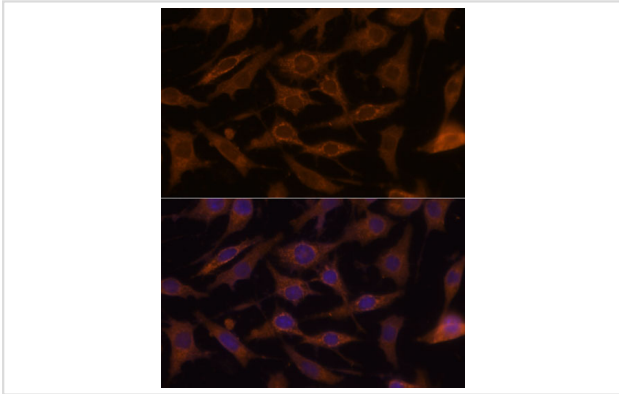
## Images



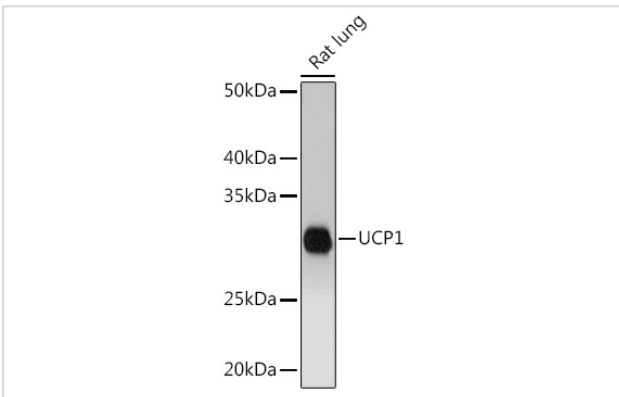
Western blot analysis of extracts of various cell lines, using UCP1 antibody at 1:1000 dilution.



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



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



Western blot analysis of extracts of Rat lung, using UCP1 antibody at 1:1000 dilution.

## 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  $H^+/OH^-$  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.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.