

# Rabbit anti-human UCP1 Polyclonal Antibody

Catalog Number: R16060P

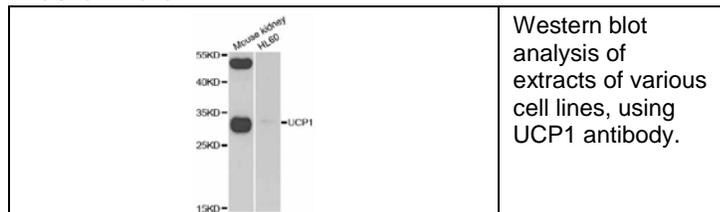
| General Information   |   |
|---|---|
| <b>Immunogen</b>  | Recombinant protein of human UCP1                 |
| <b>IgG type</b>   | IgG   |
| <b>Clonality</b>  | Polyclonal  |
| <b>Specificity</b>  | human UCP1  |
| <b>Applications &amp; dilution</b>  | WB 1:500 - 1:2000<br>IHC 1:50 - 1:200             |
| <b>Formulation</b>  | PBS with 0.02% sodium azide, 50% glycerol, pH7.3. |
| <b>Purity</b>   | ≥95% purity by SDS-PAGE                           |
| <b>Storage</b>  | Store at -20°C. Avoid freeze / thaw cycles.       |
| <b>Abbreviation:</b><br>ELISA: Enzyme-linked immunosorbent assay; ITA: immunoturbidimetric assay; IP: immunoprecipitation; IHC: immunohistochemistry; IF: immunofluorescence. WB: western blot; FC: flowcytometry |   |

## Preparation

Polyclonal antibody is produced by immunizing rabbit with recombinant protein of human UCP1 and purified using protein A resin.

## Applications

### Western blot



## 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.

**For research use only**

## Storage

This antibody is shipped at 4 °C. This product is stable for 12 months from date of receipt when stored at -20 °C to -70 °C. Avoid freeze/thaw cycles.

## Hazard/Biohazard

This antibody contains 0.02% sodium azide as preservative. Please handle and dispose the product properly. No known biohazard is associated with this product.