

ARG63944 anti-UCP1 antibody

Package: 100 µg, 50 µg
Store at: -20°C

Summary

| | |
|---------------------|---|
| Product Description | Goat Polyclonal antibody recognizes UCP1 |
| Tested Reactivity | Rat |
| Predict Reactivity | Hu, Ms, Dog |
| Tested Application | WB |
| Host | Goat |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | UCP1 |
| Species | Human |
| Immunogen | C-EQLKRELSKSRQ |
| Conjugation | Un-conjugated |
| Alternate Names | UCP; SLC25A7; Thermogenin; Mitochondrial brown fat uncoupling protein 1; Solute carrier family 25 member 7; UCP 1 |

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|---------------|
| | WB | 0.5 - 1 µg/ml |
| Application Note | WB: Recommend incubate at RT for 1h. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |

Properties

| | |
|---------------------|--|
| Form | Liquid |
| Purification | Purified from goat serum by antigen affinity chromatography. |
| Buffer | Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA. |
| Preservative | 0.02% Sodium azide |
| Stabilizer | 0.5% BSA |
| Concentration | 0.5 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformatics

Database links

[GeneID: 24860 Rat](#)

[Swiss-port # P04633 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⁺/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. [provided by RefSeq, Jul 2008]

Highlight

Related products:

[UCP1 antibodies: Anti-Goat IgG secondary antibodies:](#)

Related news:

[Has "Obesity gene" been found?](#)

Research Area

Cancer antibody; Metabolism antibody; Signaling Transduction antibody

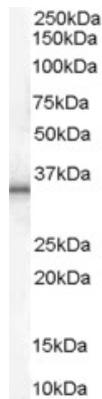
Calculated Mw

33 kDa

PTM

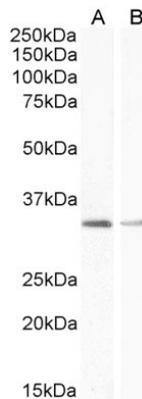
May undergo sulfenylation upon cold exposure. May increase the sensitivity of UCP1 thermogenic function to the activation by noradrenaline probably through structural effects.
May undergo ubiquitin-mediated proteasomal degradation.

Images



ARG63944 anti-UCP1 antibody WB image

Western Blot: Human Adipose lysate (35 µg protein in RIPA buffer) stained with ARG63944 anti-UCP1 antibody at 1 µg/ml dilution.



ARG63944 anti-UCP1 antibody WB image

Western blot: 35 µg of Rat adipose (A) and Rat skeletal muscle (B) lysates (in RIPA buffer) stained with ARG63944 anti-UCP1 antibody at 1 µg/ml (A) and 0.5 µg/ml (B) dilutions and incubated at RT for 1 hour.