

**Datasheet for 600-401-FT9****UCP1 Antibody****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Anti-UCP1 (RABBIT) Antibody - 600-401-FT9 |
| <b>Item No.:</b>     | 600-401-FT9                               |
| <b>Size:</b>         | 100 µg                                    |
| <b>Applications:</b> | ELISA, IHC, WB                            |
| <b>Reactivity:</b>   | Human, Mouse, Rat                         |
| <b>Host Species:</b> | Rabbit                                    |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | The mitochondrial brown fat uncoupling protein 1 (UCP1) is a member of the family of mitochondrial anion carrier proteins (MACP) (1). 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 (1). UCP1 is expressed only in brown adipose tissue, a specialized tissue which functions to produce heat (1). |
| <b>Synonyms:</b>     | UCP1 Antibody, UCP, SLC25A7, UCP, Mitochondrial brown fat uncoupling protein 1, Solute carrier family 25 member 7, UCP 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

**Target Details**

|                        |                                                                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>      | UCP1                                                                                                                                                                          |
| <b>Reactivity:</b>     | Human, Mouse, Rat                                                                                                                                                             |
| <b>Immunogen Type:</b> | Conjugated Peptide                                                                                                                                                            |
| <b>Immunogen:</b>      | Anti-UCP1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid peptide near the C-terminus of human UCP1 (GenBank accession. |

**Purity/Specificity:** Anti-UCP1 antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. UCP1 antibody is human, mouse and rat reactive.

**Relevant Links:**

- [UniProtKB - P25874](#)
- [GeneID - 7350](#)
- [NCBI - NP\\_068605.1](#)

## Application Details

**Tested Applications:** ELISA, IHC, WB

**Application Note:** Anti-UCP1 Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 33 kDa in Western Blots of specific cell lysates and tissues.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**ELISA:** 1:10,000 - 1:20,000

**IHC:** 2.5 µg/mL

**WB:** 1-2 µg/mL

## Formulation

**Physical State:** Liquid (sterile filtered)

**Concentration:** 1 mg/mL by UV absorbance at 280 nm

**Buffer:** 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

**Preservative:** 0.02% (w/v) Sodium Azide

**Stabilizer:** None

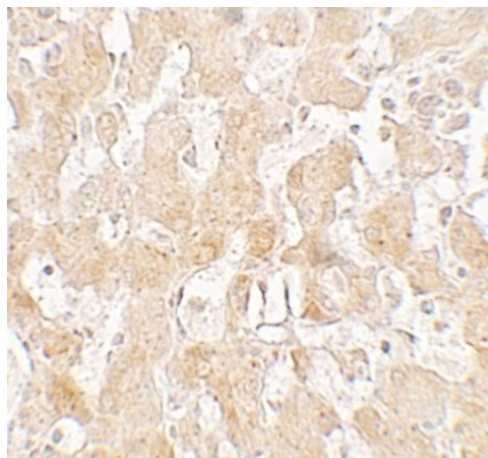
## Shipping & Handling

**Shipping Condition:** Dry Ice

**Storage Condition:** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Expiration:** Expiration date is one (1) year from date of receipt.

## Images

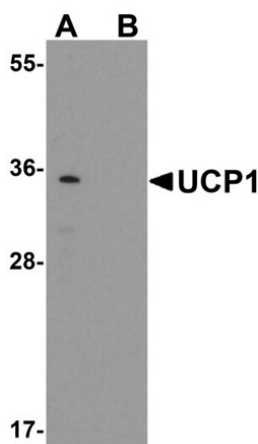


### Immunohistochemistry

Immunohistochemistry of UCP1.

Tissue: human liver tissue.

Primary Antibody: UCP1 antibody at 2.5 µg/mL.



### Western Blot

Western blot of UCP1.

Tissue: human brain tissue lysate.

Primary Antibody: UCP1 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.