Datasheet for 600-401-AQ1

# CTRP4 Antibody

## Overview

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| **Description:** | Anti-CTRP4 (RABBIT) Antibody - 600-401-AQ1 |
| **Item No.:** | 600-401-AQ1 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, IF, IHC, WB |
| **Reactivity:** | Human, Mouse, Rat |
| **Host Species:** | Rabbit |

## Product Details

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| **Background:** | Adipose tissue of an organism plays a major role in regulating physiologic and pathologic processes such as metabolism and immunity by producing and secreting a variety of bioactive molecules termed adipokines. One highly conserved family of adipokines is adiponectin/ACRP30 and its structural and functional paralogs, the C1q/tumor necrosis factor-alpha-related proteins (CTRPs) 1-7. Unlike adiponectin, which is expressed exclusively by differentiated adipocytes, the CTRPs are expressed in a wide variety of tissues. These proteins are thought to act mainly on liver and muscle tissue to control glucose and lipid metabolism. An analysis of the crystal structure of adiponectin revealed a structural and evolutionary link between TNF and C1q-containing proteins, suggesting that these proteins arose from a common ancestral innate immunity gene. Multiple isoforms of mouse CTRP4 have been reported. |
| **Synonyms:** | CTRP4 Antibody, CTRP4, ZACRP4, CTRP4, Complement C1q tumor necrosis factor-related protein 4 |
| **Host Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | C1QTNF4 |
| **Reactivity:** | Human, Mouse, Rat |
| **Immunogen Type:** | Conjugated Peptide |

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| **Immunogen:** | Anti-CTRP4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the internal region of human CTRP4. |
| **Purity/Specificity:** | Anti-CTRP4 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. These proteins are often highly modified post-translationally and migrate in SDS-PAGE at positions other than their predicted size. |
| **Relevant Links:** | • UniProtKB - Q9BXJ3<br>• GeneID - 114900<br>• NCBI - AAH35628 |

## Application Details

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| **Tested Applications:** | ELISA, IF, IHC, WB |
| **Application Note:** | Anti-CTRP4 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 35 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 - 1:40,000 |
| **IF:** | 20 µg/mL |
| **IHC:** | 10 µg/mL |
| **WB:** | 1-4 µg/mL |

## Formulation

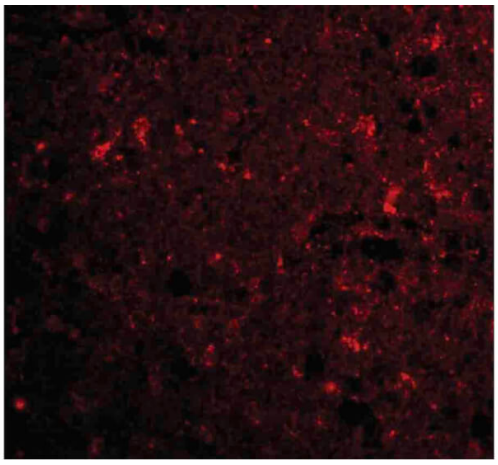
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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1 mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.02% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

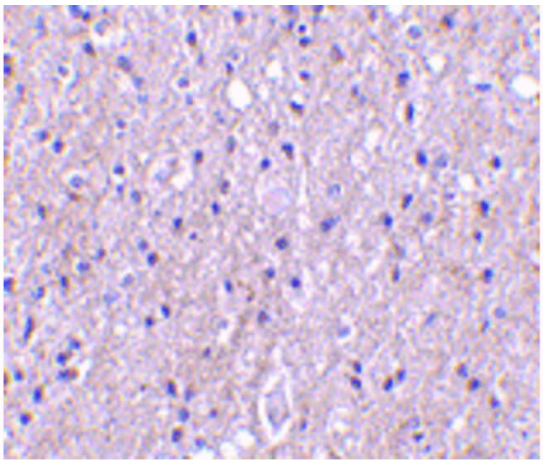
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| **Shipping Condition:** | Dry Ice |

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| **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. |

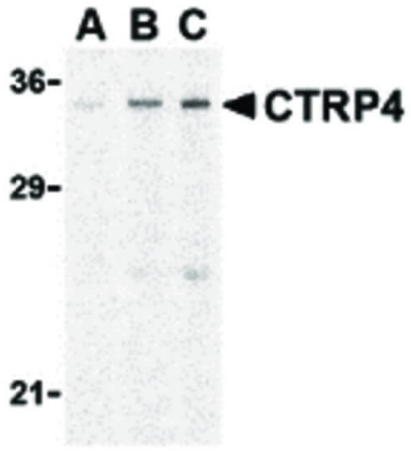
## Images



**Immunofluorescence Microscopy**
Immunofluorescence Microscopy of CTRP4 antibody. Tissue: human brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: CTRP4 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CTRP4 is secreted. Staining: CTRP4 as red fluorescent signal.



**Immunohistochemistry**
Immunohistochemistry ofCTRP4 antibody. Tissue: human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: CTRP4 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CTRP4 is secreted. Staining: CTRP4 is stained with hematoxylin purple nuclear counterstain.




**Western Blot**

Western Blot of CTRP4 antibody in rat brain cell lysate. Lane A: CTRP4 antibody at 1 µg/mL. Lane B: CTRP4 antibody at 2 µg/mL. Lane C: CTRP4 antibody at 4 µg/mL. Load: 35 µg per lane. Primary antibody: CTRP4 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.
Predicted/Observed size: 35 kDa, 34 kDa for CTRP4. Other band(s): CTRP4 splice variants and isoforms.

## 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.