

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CTRP3/C1qTNF3/CORS26 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 860115
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived human CTRP3/C1qTNF3/CORS26 Gln23-Lys246 Accession # Q9BXJ4-1
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

ELISA Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

CTRP3 (Complement C1q TNF-related Protein 3/C1qTNF3) also known as CORS-26 (Collagenous Repeat-containing Sequence of 26 kDa protein), Cartnnectin and Cartducin, is a 30-32 kDa, secreted member of the C1q and TNF-related (CTRP) superfamily of molecules (1). The mature protein is 224 aa in length. It contains an N-terminal collagen-like domain followed by a C-terminal globular region. Human CTRP3 shares 99% aa sequence identity with the mouse CTRP3 (2). Like other CTRP members, CTRP3 has a trimeric structure and can assemble into hexameric or higher order molecular forms (3). It is expressed by a variety of cells, including adipocytes, cartilage, fibroblasts, monocytes and proliferating chondrocytes (4). The inflammatory effects of LPS, TLR-4 and fatty acids have been shown to be inhibited by CTRP3 in adipocytes and monocytes (5). In mouse models, CTRP3 has been shown to lower glucose levels and decrease gluconeogenic gene expression (6). Inhibition of 3T3-L1 pre-adipocyte differentiation to adipocytes is associated with CTRP3 treatment, demonstrating potential anti-obesity effects (7). Treatment with CTRP3 results in the proliferation of skeletal muscle C2C12 cells and inhibition of C2C12 myotube differentiation, mediated by the ERK pathway (8). Due to the variety of functions in metabolism and inflammation, CTRP3 is a potential new target of type 2 diabetes treatment.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.