

DESCRIPTION

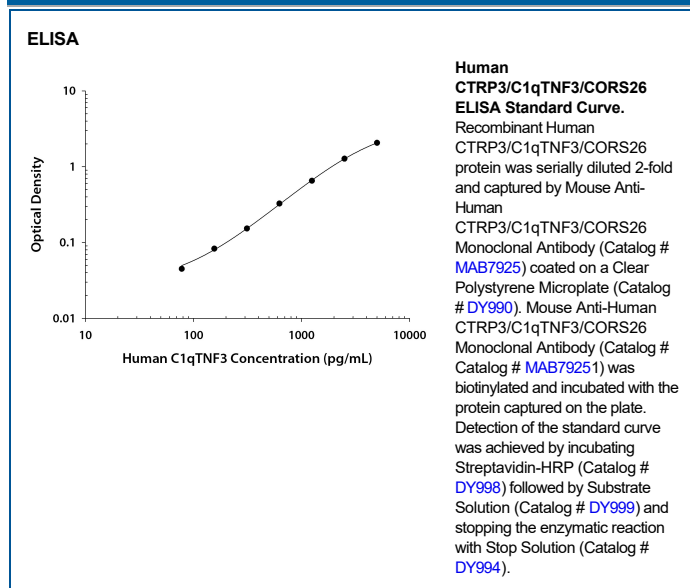
Species Reactivity	Human
Specificity	Detects human CTRP3/C1qTNF3/CORS26 in direct ELISAs.
Source	Monoclonal Mouse IgG ₃ Clone # 860101
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line, NS0-derived human CTRP3/C1qTNF3/CORS26 Gln23-Lys246 Accession # Q9BXJ4-1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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	<p>This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human CTRP3/C1qTNF3/CORS26 Monoclonal Antibody(Catalog # MAB7925).</p> <p><i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human CTRP3/C1qTNF3/CORS26 DuoSet ELISA Kit (Catalog # DY7925-05) for convenient development of a sandwich ELISA.</i></p>
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DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CTRP3 (Complement C1q TNF-related Protein 3/C1qTNF3) also known as CORS-26 (Collagenous Repeat-containing Sequence of 26 kDa protein), Cartonectin 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.

References:

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3. Suzuki S. *et al.* (2007) *FEBS Lett.* **581**: 809.
4. Weigert J. *et al.* (2005) *FEBS Lett.* **579**: 5565.
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6. Peterson J. M. *et al.* (2010) *J Biol Chem*. **285**:39691.
7. Nishimoto, H. *et al.* (2017) *Cell Bio Int.* **41**:197.
8. Otani M. *et al.* (2015) *Mol Cell Biochem*. **409**:271.