

DESCRIPTION

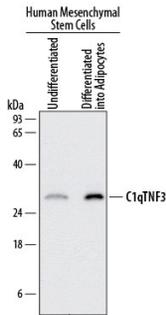
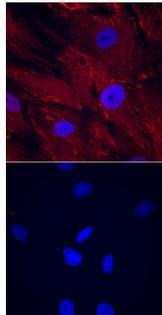
Species Reactivity	Human
Specificity	Detects human CTRP3/C1qTNF3/CORS26 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant mouse CTRP3/C1qTNF3/CORS26 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CTRP3/C1qTNF3/CORS26 Asp24-Lys246 Accession # Q9BXJ4
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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human CTRP3/C1qTNF3/CORS26 by Western Blot. Western blot shows lysates of human mesenchymal stem cells either undifferentiated or differentiated into adipocytes. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human CTRP3/C1qTNF3/CORS26 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7925) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CTRP3/C1qTNF3/CORS26 at approximately 28 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>CTRP3/C1qTNF3/CORS26 in Human Mesenchymal Stem Cells. CTRP3/C1qTNF3/CORS26 was detected in immersion fixed human mesenchymal stem cells differentiated (upper panel) or not (lower panel) into adipocytes using Sheep Anti-Human CTRP3/C1qTNF3/CORS26 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7925) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

C1qTNF3 (Complement C1q TNF-related protein 3/CTRP3; also CORS26 and cartonectin) is a 30-32 kDa, secreted member of the C1q and TNF-related protein (CTRP) superfamily of molecules. It is expressed by a wide variety of cells, including smooth muscle cells, fibroblasts, adipocytes, monocytes and proliferating chondrocytes. C1qTNF3 is an anti-inflammatory agent that apparently blocks LPS activation of mononuclear cells. It also has marked proliferative activity on diverse cell types such as vascular smooth muscle, chondrocytes, and endothelium. Finally, C1qTNF3 is known to act on hepatocytes and suppress hepatocyte gluconeogenesis. Mature human C1qTNF3 is 224 amino acids (aa) in length (aa 23-246). It possesses an N-terminal collagen-like domain (aa 51-113) followed by a C-terminal globular region (aa 113-246). C1qTNF3 is monomeric when intracellular, but forms a 90 kDa homotrimer plus higher-order oligomer when secreted. There are at least two potential isoform variants. One is 40-42 kDa, glycosylated, and contains a 73 aa insertion after Glu28, while a second shows concurrent deletions of aa 46-69 and 82-105. The longer 40 kDa isoform is reported to form heterotrimers and oligomers with the standard 30 kDa isoform. This has the effect of protecting the standard isoform from proteolysis. Over aa 24-246, human C1qTNF3 shares 99% aa sequence identity with mouse C1qTNF3.