



Cardiotrophin 1 (CT-1)

Catalog number

C1385-13

Supplier

United States Biological

Cardiotrophin-1 (CT-1) is a member of the cytokine family, which also includes IL-6, IL-11, leukemia inhibitory factor (LIF), oncostatin M (OSM), and ciliary neurotrophic factor (CNTF). It was originally isolated based on its ability to induce cardiac myocyte hypertrophy in vitro. CT-1 has since been shown to be a pleiotropic cytokine with overlapping actions with other IL-6 family members on a variety of cell types. Human CT-1 encodes a 201 amino acid (aa) residue protein that lacks a hydrophobic signal peptide. CT-1 is highly expressed in heart, skeletal muscle, liver, lung and kidney. Lower level of CT-1 expression is also seen in testis and brain. CT-1 initiates downstream signaling pathways through the heterodimerization of gp130 and the LIF receptor b subunit. A third a receptor subunit has recently been implicated in the receptor complex.

Applications

Suitable for use in ELISA and Western Blot. Other applications not tested.

Recommended Dilution

ELISA: 0.05-0.2ug/ml

Western Blot: 0.1-1.0ug/ml

Optimal dilutions to be determined by the researcher.

Hybridoma

Spleen cells are fused with SP2/0-Ag14 mouse myeloma cells.

Storage and Stability

Lyophilized powder may be stored at -20°C. Stable for 12 months at -20°C. Reconstitute by adding sterile 40-50% glycerol, ddH₂O. Reconstituted product is stable for 12 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

Immunogen

CT-1 full length recombinant protein with His tag.

Formulation

Supplied as a lyophilized powder from PBS, pH 7.4, 0.02% sodium azide.

Purity

Purified by Protein A affinity chromatography.

Specificity

Recognizes human CT-1.

Product Type



Mab

Source

human

Isotype

IgG1

Grade

Affinity Purified

Applications

E WB

Crossreactivity

Hu

Storage

-20°C