



20150122ML

# Anti-Human Cardiotrophin-1 (#16B9)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>101-M242</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with human recombinant protein of Cardiotrophin-1.

## Target Background

<b>Synonyms (Target):</b>	CTF1; CT1; CT-1
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Cardiotrophin1 (CT1) is a member of the cytokine family which also includes IL6, IL11, 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. CT1 has since been shown to be a pleiotrophic cytokine with overlapping actions with other IL6 family members on a variety of cell types. Human CT1 encodes a 201 amino acid (aa) residue protein that lacks a hydrophobic signal peptide. The mechanism of CT 1 release from cells is currently not understood. Human and mouse CT1 share 80% aa sequence identity and exhibit crossspecies activity. CT1 is highly expressed in heart, skeletal muscle, liver, lung and kidney. Lower levels of CT1 expression is also seen in testis and brain. CT 1 initiates downstream signaling pathways through the heterodimerization of gp130 and the LIF receptor  $\beta$  subunit. A third  $\alpha$  receptor subunit has been implicated in the receptor complex.

## Database References Target

<b>Protein RefSeq:</b>	NP_001321
<b>Uniprot ID:</b>	Q16619
<b>mRNA RefSeq:</b>	NM_001330

## Product Specifications

<b>Host</b>	Mouse
<b>Reactivity against</b>	Human
<b>Clonality</b>	Monoclonal Antibody
<b>Clone</b>	(#16B9)
<b>Isotype</b>	IgG1
<b>Purification</b>	Protein G chromatography
<b>Antigen</b>	recombinant human Cardiotrophin-1
<b>Formulation</b>	lyophilized
<b>Reconstitution buffer</b>	PBS (sterile)

**Reconstitution:** Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

**Stability:** Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

**Remarks:** This antibody was selected for its ability to detect human Cardiotrophin-1 protein.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

The antibody can be used within the following applications:

WB, N

### Recommended usage:

Western Blot: 1:500 - 1:1000

Neutralization: Yes

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**