Mouse Cardiotrophin-1/CT-1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF438

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects Cardiotrophin-1/CT-1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 40% cross-reactivity with recombinant human CT-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse Cardiotrophin-1/CT−1 Ser2-Ala203 Accession # Q60753
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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 as a 0.2 µm filtered solution in PBS.

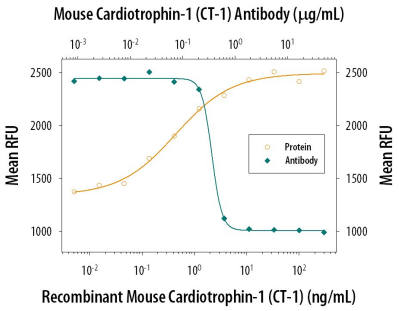
APPLICATIONS

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	0.1 µg/mL	Recombinant Mouse Cardiotrophin−1/CT−1 (Catalog # 438-CT)
Neutralization	Measured by its ability to neutralize Cardiotrophin−1/CT−1-induced proliferation in the TF−1 human erythroleukemic cell line. Kitamura, T. *et al.* (1989) J. Cell Physiol. **140**:323. The Neutralization Dose (ND_{50}) is typically 0.08-0.48 µg/mL in the presence of 10 ng/mL Recombinant Mouse Cardiotrophin−1/CT−1.	

DATA

Neutralization



Cell Proliferation Induced by Cardiotrophin-1/CT-1 and Neutralization by Mouse Cardiotrophin-1/CT-1 Antibody. Recombinant Mouse Cardiotrophin-1/CT-1 (Catalog # 438-CT) stimulates proliferation in the TF-1 human erythroleukemic cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Mouse Cardiotrophin-1/CT-1 (10 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse Cardiotrophin-1/CT-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF438). The ND_{50} is typically 0.08-0.48 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 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.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956

Mouse Cardiotrophin-1/CT-1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF438

BACKGROUND

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 pleiotrophic cytokine with overlapping actions with other IL-6 family members on a variety of cell types. Mouse CT-1 encodes a 203 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 CT-1 share 80% aa sequence identity and exhibit cross-species activity. CT-1 is highly expressed in heart, skeletal muscle, liver, lung and kidney. Lower levels 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 β subunit. A third α receptor subunit has also been implicated in the receptor complex.

References:

1. Pennica, D. *et al*. (1996) Cytokine and Growth Factor Reviews **7:**81.
2. Robledo, O. *et al*. (1997) J. Biol. Chem. **272:**4855.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 **Europe | Middle East | Africa** TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956