Mouse Cardiotrophin-1/CT-1 Alexa Fluor® 488-conjugated Antibody

Monoclonal Rat IgG_1 Clone # 91907

Catalog Number: FAB438G

100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Cardiotrophin-1 in ELISAs and Western blots. In ELISAs, this antibody shows approximately 20% cross-reactivity with recombinant human (rh) Cardiotrophin-1 and no cross-reactivity with rmIL-11, rmIL-6, rrCNTF, rmLIF, or rmOSM.
Source	Monoclonal Rat IgG_1 Clone # 91907
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant mouse Cardiotrophin-1 Ser2-Ala203 Accession # Q60753
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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 Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

PRODUCT SPECIFIC NOTICES

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