

Overview

Synonyms	CTF1, CT-1
Description	<p>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). CT-1 is associated with the pathophysiology of several types of heart disease including hypertension, myocardial infarction, valvular heart disease, and congestive heart failure. The protein exerts its cellular effects by interacting with the glycoprotein 130 (gp130)/leukemia inhibitory factor receptor beta (LIFR) heterodimer. CT-1 activates phosphatidylinositol 3-kinase (PI-3 kinase) in cardiac myocytes and enhances transcription factor NF-κB DNA -binding activities. CT-1 is highly expressed in the heart, skeletal muscle, prostate and ovary and to lower levels in lung, kidney, pancreas, thymus, testis and small intestine.</p> <p>Recombinant mouse Cardiotrophin-1 produced in HEK293 cells is a polypeptide chain containing 202 amino acids. A fully biologically active molecule, rmCT-1 has a molecular mass of 22-27 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.</p>
Accession No	Q60753.1
Species	Mouse
Source	HEK 293
Biological Activity	The EC ₅₀ value of Mouse Cardiotrophin-1 determined by the dose-dependent proliferation of TF-1 cells was 1.25 ng/ml, corresponding to a specific activity of 0.8 x 10 ⁶ units/mg.
Sequence	<p>SQREGSLEDH QTSSISFLP HLEAKIRQTH NLARLLTKYA EQLLEEYVQQ QGEPFGLPGF SPRLPLAGL SGPAPSHAGL PVSERLRQDA AALSVLPAAL DAVRRRQAEL NPRAPRLRS LEDAARQVRA LGAAVETVLA ALGAAARGPG PEPVTVATLF TANSTAGIFS AKVLGFHVCG LYGEWVSRTE GDLGQLVPPG VA</p>

Properties

Measured Molecular Weight	22~27 kDa, observed by reducing SDS-PAGE.
Purity	> 95% as analyzed by SDS-PAGE.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH ₂ O or PBS at 100 µg/ml.
Endotoxin Level	< 0.2 EU/µg, determined by LAL method.
Storage	Lyophilized recombinant Mouse Cardiotrophin-1 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse Cardiotrophin-1 should be stable up to 1 week at 4°C or up to 3 months at -20°C.
Note	For research use only

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