

Cardiotrophin-1 (CT-1), Mouse

Cat.no. PK0295

Product size: 10ug 50ug 1mg

Source: HEK 293

Species: Mouse

Biological Activity: The EC50 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 $\geq 0.8 \times 10^6$ units/mg.

Molecular Weight: 22~27 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 95% by SDS-PAGE analyses.

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.

Description: 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. Recombinant mouse Cardiotrophin-1 produced in HEK293 cells is a polypeptide chain containing 202 amino acids.

Amino Acid Sequence:

00001 SQREGSLEDH QTDSSISFLP HLEAKIRQTH NLARLLTKYA
00041 EQLLEEVVQQ QGEPFGLPGF SPPRLPLAGL SGPAPSHAGL
00081 PVSERLRQDA AALSVLPALL DAVRRRQAEL NPRAPRLLRS
00121 LEDAARQVRA LGAAVETVLA ALGAAARGPG PEPVTVATLF
00161 TANSTAGIFS AKVLGFHVCG LYGEWVSRTE GDLGQLVPGG
00201 VA

Synonyms: Cardiotrophin-1, CT-1, Cardiotrophin 1, CT1, CTF1, Cardiotrophin1

Note: For research use only, not for use in diagnostic procedure.