Cardiotrophin-1 Murine E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Murine
Other names: CT-1

Cat. No.:

RBG20059002	(2 µg)
RBG20059010	(10 µg)
RBG20059100	(100 µg)

Description

CT-1 is a member of the IL-6 family of cytokines which also includes LIF, CNTF, OSM (Oncostatin M), IL-11, IL-6 and possibly NNT-1/BSF-3. CT-1 is a pleiotropic cytokine which is expressed in various tissues including the adult heart, skeletal muscle, ovary, colon, prostate and fetal lung, and signals through the LIF receptor and the gp130 receptor subunit. CT-1 has the ability to induce cardiac myocyte hypertrophy, and enhances the survival of cardiomyocyte and different neuronal populations. Recombinant Murine Cardiotrophin-1 is a 21.3 kDa protein consisting of 202 amino acid residues.

Introduction to the Molecule

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Research topic

Bone and cartilage metabolism, Cardiovascular disease, Coronary artery disease, Neural tissue markers

Amino Acid Sequence

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SQREGSLEDH QTDSSISFLP HLEAKIRQTH NLARLLTKYA EQLLEEYVQQ QGEPFGLPGF SPPRLPLAGL SGPAPSHAGL
PVSERLRQDA AALSVLPALL DAVRRRQAEL NPRAPRLLRS LEDAARQVRA LGAAVETVLA ALGAAARGPG PEPVTVATLF
TANSTAGIFS AKVLGFHVCG LYGEWVSRTE GDLGQLVPGG VA
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} as determined by the dose-dependent proliferation of TF-1 cells was 1.0 ng/ml, corresponding to a specific activity of 1×10^6 units/mg.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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