

## Recombinant Mouse Cardiotrophin-1 (Mouse CT-1)

### Product Information

Product Name	Cat#	Size
Recombinant Mouse Cardiotrophin-1 (Mouse CT-1)	92590ES10	10 µg
	92590ES60	100 µg
	92590ES76	500 µg

### Product Description

Cardiotrophin1 (CT1) 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 a pleiotropic cytokine which is expressed in various tissues including the adult heart, skeletal muscle, ovary, colon, prostate and fetal lung. Studies showed CT-1 which induces cardiac myocyte hypertrophy in vitro can bind to and activate the ILST/gp130 receptor. Rat CT1 encodes a 203 amino acid (a.a.) residue protein that lacks a hydrophobic signal peptide and it shares 94% a.a. and 79% a.a. sequence identity with human and murine CT-1.

### Product Properties

<b>Synonyms</b>	CT-1CT1; CTF1
<b>Accession</b>	Q60753
<b>GeneID</b>	13019
<b>Source</b>	E.coli-derived Mouse CT-1, Met1-Ala203, with an N-terminal Met.
<b>Molecular Weight</b>	Approximately 21.5 kDa.
<b>AA Sequence</b>	MSQREGSLED HQTSSISFL PHLEAKIRQT HNLARLLTKY AEQLLEEYVQ QQGEPFGLPG FSPRLPLAG LSGPAPSHAG LPVSELRQD AAALSVLPAL LDAVRRRQAE LNPRAPRLLR SLEDAARQVR ALGAAVETVL AALGAAARGP GPEPVTVAL FTANSTAGIF SAKVLGFHVC GLYGEWVSRT EGD LGQLVPG GVA
<b>Tag</b>	None
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	> 95% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	The ED <sub>50</sub> as determined by a cell proliferation assay using human TF-1 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>6</sup> IU/mg. Fully biologically active when compared to standard.
<b>Endotoxin</b>	Less than 1 EU/µg of rMuCT-1 as determined by LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris, 300 mM NaCl, pH 8.5. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
<b>Reconstitution</b>	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

### Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

### **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!