



Recombinant Human Cardiotrophin-1

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-006
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	1489
Synonyms:	CTF1; CT1; CT-1

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 NT-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. Biologically active human CT-1 is synthesized as a 201 amino acid polypeptide lacking a hydrophobic N-terminal secretion signal sequence. Recombinant Human Cardiotrophin-1 is a 21.5 kDa protein consisting of 201 amino acid residues.

Sequence

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SRREGSLEDP QTDSSVSLLP HLEAKIRQTH SLAHLTKYA  
EQLLQEYVQL QGDPFGLPSF SPRLPVAGL SAPAPSHAGL  
PVHERLRDLA AALAALPPLL DAVCRRQAEI NPRAPRLRR  
LEDAARQARA LGAAVEALLA ALGAANRGR AEPPAATASA  
ASATGVFPAK VLGLRVCGLY REWLSRTEGD LGQLLPGGSA
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Database References

Protein RefSeq:	NP_001321
Uniprot ID:	Q16619
mRNA RefSeq:	NM_001330

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	200
MW:	21.1 kDa

Biological Activity: The ED50 as determined by the dose-dependent proliferation of TF-1 cells was ≤ 1.0 ng/ml, corresponding to a specific activity of $\geq 1 \times 10^6$ units/mg.



AVOID REPEATED FREEZE AND THAW CYCLES!