

Recombinant Rat Ctf1 protein

Cat. No. Ctf1-1174R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Ctf1 protein was expressed in Escherichia coli.
Species	Rat
Source	E.coli
ProteinLength	203
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.
Form	Lyophilized from a 0.2µm filtered concentrated solution in 30 % Acetonitrile, 0.1 % TFA.
Bio-activity	Fully biologically active when compared to standard. The ED50 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 $> 2.0 \times 10^6$ IU/mg.
Molecular Mass	Approximately 21.4 kDa, a single non-glycosylated polypeptide chain containing 203

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	amino acids.
AA Sequence	MSQREGSLEDHQTDSSFSFLPHLEAKIRQTHNLARLLTKYADQLLEEYVQQQGEPF GLPGFSPPRRLPLAGLSGPAPSHAGLPVSELRQDAAALSALPALLDAVRRRQAELN PRAPRLLRSLEDAARQVRALGAAVETVLAALGAAARGPVPEPVATSALFTSNSAAGV FSAKVLGLHVCGLYGEWVSRTEGDLGQLVPGGVA
Endotoxin	Less than 1 EU/μg of rRtCT-1 as determined by LAL method.
Purity	>95% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 4mM HCl to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	Ctf1
Official Symbol	Ctf1
Synonyms	CTF1; cardiotrophin 1; cardiotrophin-1; CT-1;
Gene ID	29201

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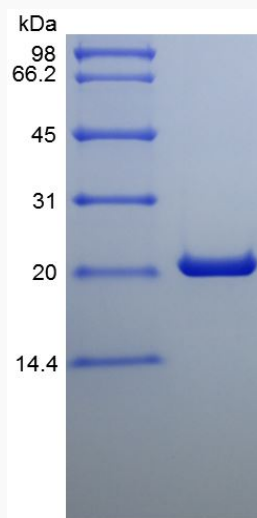
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mRNA Refseq NM_017129

Protein Refseq NP_058825

UniProt ID Q63086

SDS-PAGE of Ctf1-
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