

Flogen[®] Recombinant Rat Cardiotrophin1 (rRtCT1)

Catalog Number:	PGR0641-030
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 21.4 kDa, a single non-glycosylated polypeptide chain containing 203 amino acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	MSQREGSLED HQTDLSSFSFL PHLEAKIRQT HNLARLLTKY ADQLLEEYVQ QQGEPFGLPG FSPRLPLAG LSGPAPSHAG LPVSELRQD AAALSALPAL LDAVRRRQAE LNPRAPRLLR SLEDAARQVR ALGAAVETVL AALGAAARGP VPEPVATSAL FTSNSAAGVF SAKVLGLHVC GLYGEWVSRT EGD LGQLVPG GVA
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological 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 × 10 ⁶ IU/mg.
Appearance:	Sterile Filtered White lyophilized (freeze dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 1 EU/µg of rRtCT-1 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ 20°C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 28°C, but should be kept at 20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 28°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at 20°C to 70°C. Avoid repeated freeze/thaw cycles.
Usage:	This material is for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Rat Cardiotrophin1

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.