

**Recombinant Human Cardiotrophin-1**  
**Catalog # PBG10053****Specification**

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**Recombinant Human Cardiotrophin-1 - Product Information****Recombinant Human Cardiotrophin-1 - Additional Information****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. Biologically active human CT-1 is synthesized as a 201 amino acid polypeptide lacking a hydrophobic N-terminal secretion signal sequence. Recombinant Human CT-1 is a 21.1 kDa protein consisting of 200 amino acid residues.

**Biological Activity**

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

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is  $<0.1$  ng/  $\mu$ g of protein ( $<1$  EU/  $\mu$ g).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Recombinant Human Cardiotrophin-1 is for research use only and not for use in diagnostic or therapeutic procedures.

**Recombinant Human Cardiotrophin-1 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **Recombinant Human Cardiotrophin-1 - Images**