



Recombinant Protein Technical Manual  
Recombinant Human Cardiotrophin/CTF1 Protein  
(His Tag)  
RPES4529

#### Product Data:

**Product SKU:** RPES4529

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** Q16619

#### Protein Information:

**Molecular Mass:** 22.6 kDa

**AP Molecular Mass:** 25 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Cardiotrophin; CT; CTF1;

## Immunogen Information:

**Sequence:** Met 1-Ala201

## Background:

Cardiotrophin, also known as CT and CTF1, is a member of the IL-6 superfamily. It is a secreted cytokine that is expressed in heart, skeletal muscle, prostate and ovary, and to lower levels in lung, kidney, pancreas, thymus, testis and small intestine. The protein exerts its cellular effects by interacting with the glycoprotein 130 (gp130)/leukemia inhibitory factor receptor beta (LIFR) heterodimer. In addition, CT activates phosphatidylinositol 3-kinase (PI-3 kinase) in cardiac myocytes and enhances transcription factor NF- $\kappa$ B DNA-binding activities.