

## CT-1

Catalog # PVGS1451

## **Product Information**

Primary Accession Q60753-1
Species Mouse

Sequence Ser2-Ala203

**Purity** > 95% as analyzed by SDS-PAGE

**Endotoxin Level** 

**Biological Activity** The EC<sub>50</sub> value of Mouse Cardiotrophin-1 determined by the dose-dependent

proliferation of TF-1 cells was ≤ 1.25 ng/ml, corresponding to a specific

activity of  $\geq 0.8 \times 10^6$  units/mg.

Expression System HEK 293

**Formulation** Lyophilized after extensive dialysis against PBS.

**Reconstitution** It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in

ddH<sub>2</sub>O or PBS up to 100 □g/ml.

**Storage & Stability** Upon receiving, this product remains stable for up to 6 months at lower than

-70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw

cycles.

## **Additional Information**

Target Background Cardiotrophin-1

Cardiotrophin-1 (CT-1) 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 associated with the pathophysiology of several types of heart disease including hypertension, myocardial infarction, valvular heart disease, and congestive heart failure. The protein exerts its cellular effects by interacting with the glycoprotein 130 (gp130)/leukemia

inhibitory factor receptor beta (LIFR) heterodimer. CT-1 activates

phosphatidylinositol 3-kinase (PI-3 kinase) in cardiac myocytes and enhances transcription factor NF-κB DNA -binding activities. CT-1 is highly expressed in the heart, skeletal muscle, prostate and ovary and to lower levels in lung,

kidney, pancreas, thymus, testis and small intestine.

## **Protein Information**

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.