

Rev03
Update: Dec,14,2021

DATASHEET

CT-1, Mouse

Cat. No.: Z03287

Product Introduction

Species	Mouse
Protein Construction	CT-1 (Ser2-Ala203) Accession # Q60753-1
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	The EC ₅₀ 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 ≥ 0.8 × 10 ⁶ units/mg.
Expression System	HEK 293
Apparent Molecular Weight	22~27 kDa, on SDS-PAGE under reducing conditions.
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 ₂ O or PBS up to 100 μg/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.

Background

Target Background : 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.

Synonyms : CTF1; CT-1

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.