

Recombinant Rat Cardiotrophin-1 (Rat CT-1)

Product Information

Product Name	Cat#	Size
Recombinant Rat Cardiotrophin-1 (Rat CT-1)	92596ES10	10µg
	92596ES60	100 µg
	92596ES76	500 µg

Product Description

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.

Product Properties

Synonyms	Rat CT-1
Accession	Q06318
GeneID	29201
Source	E.coli-derived Rat CT-1, with an N-terminal Met.
Molecular Weight	Approximately 21.4 kDa
AA Sequence	MSQREGSLED HQTDSFSFL PHLEAKIRQT HNLARLLTKY ADQLLEEYVQ QQGEPFGLPG FSPPRPLLAG LSGPAPSHAG LPVSELRQD AAALSALPAL LDAVRRRQAE LNPRAPRLLR SLEDAARQVR ALGAAVETVL AALGAAARGP VPEPVATSAL FTSNSAAGVF SAKVLGLHVC GLYGEWVSRT EGDLGQLVPG GVA
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ 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.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 30 % Acetonitrile, 0.1 % TFA. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in 4mM HCl to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.