

# Human Cardiotrophin-1 / CTF1 Protein (Fc Tag)

Catalog Number: 16013-H01H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

CT-1; CT1

### Protein Construction:

A DNA sequence encoding the human CTF1(NP\_001321.1)(Ser2-Ala201) was expressed with the fused Fc region of human IgG1 at the N-terminus.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 80 % as determined by SDS-PAGE

### Bio Activity:

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is typically 01-0.8 µg/mL.

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

**Predicted N terminal:** Glu

### Molecular Mass:

The recombinant human CTF1/Fc is a disulfide-linked homodimer. The reduced monomer comprises 460 amino acids and has a predicted molecular mass of 49.5 kDa. The apparent molecular mass of the protein is approximately 54 and 37 kDa in SDS-PAGE under reducing conditions due to glycosylation.

### Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

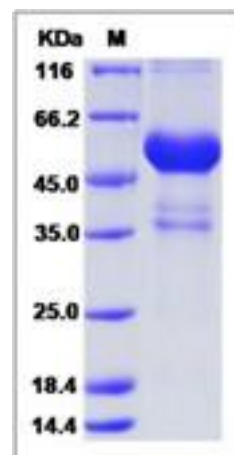
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

CTF1 is the first HOX11 protein partner identified that plays an important role in hematopoietic precursor cell immortalization. CTF1 was found to protect a gene from silencing when its DNA-binding sites were interposed between the gene and the telomeric extremity, while it did not affect a gene adjacent to the telomere. Protein fusions containing the CTF1 histone-binding domain displayed similar activities, while mutants impaired in their ability to interact with the histone did not. Cardiotrophin-1 (CTF1) has been reported to act as a trophic factor for a few neurons, such as sensory, cholinergic, dopaminergic, motor and cortical neurons. Studies have indicated that CTF1 delays degenerative disease progression in motor neuron disease.