

Product datasheet for **DP2007**

Cardiotrophin 1 (CTF1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	ELISA. Western Blot.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Recombinant Human Cardiotrophin-1. The immunization antigen (22.5 kDa) is a protein containing 212 AA of recombinant Human Cardiotrophin-1. N-Terminal Histag, 12 extra AA (highlighted).
Specificity:	This antibody recognizes Human Cardiotrophin-1. Other species not tested.
Formulation:	0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. AZIDE FREE State: Aff - Purified State: Lyophilized purified IgG fraction Preservative: None
Reconstitution Method:	Restore with 0.1 ml of deionized water. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography on a column with immobilized recombinant Human Cardiotrophin-1
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	cardiotrophin 1



[View online »](#)

Database Link: [Entrez Gene 1489 Human](#)
[Q16619](#)

Background: Cardiotrophin-1 (CT-1) is a 201 amino acid member of the interleukin-6 superfamily. It was identified by its ability to induce hypertrophic response in cardiac myocytes. CT-1 mRNA levels were found both in cardiac myocytes and in cardiac nonmyocytes. CT-1 was also detected in abundance in normal adult human lung and was expressed in both fetal and adult airway smooth muscle cells. CT-1 activates gp130 dependent signaling and stimulates the Janus kinase/signal transducers and activators of transcription (JAK/STAT) pathway to transduce hypertrophic and cytoprotective signals in cardiac myocytes. CT-1 has also a neurotrophic function. CT-1 deficiency causes increased motoneuron cell death in spinal cord and brainstem nuclei of mice during a period between embryonic day 14 and the first postnatal week. Moreover, CT-1 is a hepatocyte survival factor that efficiently reduces hepatocellular damage in animal models of acute liver injury. CT-1 expression is augmented after hypoxic stimulation and it can protect cardiac cells when added either prior to simulated ischaemia or at the time of reoxygenation following simulated ischaemia. CT-1 can induce expression of the protective heat shock proteins (hsps) in cardiac cells. Cardiotrophin-1 increased ventricular expression of ANP, brain natriuretic peptide (BNP) and angiotensinogen mRNA. CT-1 levels were significantly elevated in patients with heart failure, patients with dilatative cardiomyopathy, moderate/severe mitral regurgitation, stable and unstable angina and after acute myocardial infarction.
Total 212 AA. MW: 22.5 kDa (calculated). N-Terminal His-tag, 12 extra AA (highlighted).

Synonyms: CT-1, CTF1