



Product Information

Anti-Human Ciliary Neurotrophic Factor (CNTF)

Produced in Goat, IgG Fraction of Antiserum

Product Number **C3960**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

Product Description

Anti-Human Ciliary Neurotrophic Factor (CNTF) was developed in goats using recombinant, human CNTF expressed in *E. coli* as the immunogen. The product is purified using protein G affinity chromatography.

Ciliary Neurotrophic Factor (CNTF) is produced in *E. coli* by a DNA sequence encoding the human CNTF protein.¹ The human CNTF gene encodes a 200-residue protein and appears to be a single-copy gene.² The human CNTF coding domain consists of a single intron and the gene is located on chromosome 11.² The amino acid sequence of human CNTF has 85% homology to rat and rabbit CNTF.² CNTF was initially identified as a trophic factor for embryonic chick ciliary parasympathetic neurons. CNTF also is a survival factor for developing ciliary ganglionic neurons.²

Reagent

Goat Anti-Human CNTF is 0.2 μm -filtered and lyophilized from phosphate buffered saline, pH 7.4, to which no preservatives have been added.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 1 ml of 0.2 μm -filtered PBS to produce a 1.0 mg/ml stock solution of Anti-Human CNTF. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage/Stability

Prior to reconstitution, store at $-20\text{ }^{\circ}\text{C}$. Reconstituted product may be stored at $2-8\text{ }^{\circ}\text{C}$ for up to one month. For prolonged storage, freeze in working aliquots at $-20\text{ }^{\circ}\text{C}$. Avoid repeated freezing and thawing.

Procedure

Anti-Human CNTF is tested for its ability to neutralize recombinant human CNTF activity using human TF-1 cells. The ND_{50} of the antibody is defined as the concentration of antibody resulting in a one-half maximal inhibition of bioactivity of rhCNTF, which is present at a concentration just high enough to elicit a maximum response.

Product Profile

Endotoxin: <10 ng/mg antibody
Indirect ELISA: $\sim 0.5-1.0\text{ }\mu\text{g/ml}$ detects $\sim 1\text{ ng/well}$ of rhCNTF
Indirect
Immunoblotting: $\sim 1-2\text{ }\mu\text{g/ml}$ antibody detects 2 ng rhCNTF/lane under non-reducing conditions and 5 ng rhCNTF/lane under reducing conditions

References

1. McDonald, J., *et al.*, BBA, **1090**, 70 (1991).
2. Manthorpe, M., *et al.*, in: *Neurotrophic Factors*, Loughlin, S., *et al.*, (Eds.), Academic Press, California (1993).

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