

rat CNTF Protein
Rat Ciliary Neurotrophic Factor, Recombinant, E. coli
Catalog # PG10009

Specification

rat CNTF Protein - Product Information

rat CNTF Protein - Additional Information

Storage
-20°C

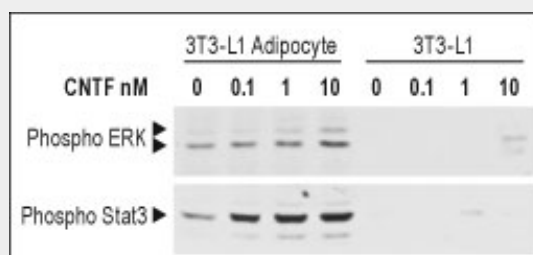
Precautions
rat CNTF Protein is for research use only and not for use in diagnostic or therapeutic procedures.

rat CNTF Protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

rat CNTF Protein - Images



rat_CNTF - Abgent rat CNTF differentially promotes the activation of STAT3 and ERK in adipocyte and preadipocyte 3T3 L1 cells. Cells were stimulated with increasing concentrations of rat CNTF (#PG10009) for 10 min. The cells were subjected to western blot analysis and the activation of ERK and Stat3 were determined using anti-phospho-ERK and anti-phospho-Stat3.

rat CNTF Protein - Background

CNTF is a polypeptide trophic factor, member of the alpha-helical cytokine superfamily¹. It was initially purified from the chick eye on the basis of its ability to promote survival of E8 chick ciliary

ganglion neurons in culture². CNTF is synthesized by glia both in the CNS and PNS³ and it has been demonstrated that CNTF is ubiquitously distributed in neurons and glia throughout the rodent brain⁴. CNTF effects are mediated by a tripartite receptor complex consisting of two signal-transducing subunits (leukemia inhibitory factor receptor, gp130) and a CNTF-specific ligand-binding-subunit (CNTFR)⁵. CNTF can support the survival of many different cell populations within the PNS and the CNS⁶. *in vitro*, CNTF promotes proliferation and neuronal specifications in hippocampal neurons. *in vivo*, CNTF supports the viability of non-primate motor neurons⁷, induces sprouting of cholinergic motor neurons⁸ and delays neural degeneration in genetic models of motor neuron disease⁹. In addition, it is involved in the development stage of astrocytes and oligodendocytes¹⁰.

rat CNTF Protein - References

1 . Mufson, E.J.et al.(1999)*Prog. Neurobiol.* 57,451.2 . Adler, R.et al.(1979)*Science*204,1434.3 . Murphy, M.et al.(1997)*Prog. Neurobiol.* 52,355.4 . Henderson, J.T. et al.(1994)*Mol. Brain Res.* 22,151.5 . Stahl, N.et al. (1993) *J. Biol. Chem.*268, 7628.6 . Richardson, P.M.(1994)*Pharmacol. Ther.* 63,187.7 . Ip, N.Y. et al.(1991)*J. Physiol.* 85,123.8 . Gurney, M.E.et al.(1992)*J. Neurosci.* 12,3241.9 . Sendtner, M.et al.(1992)*Nature*358,502.10 . Mayer, M.et al.(1994)*Development*120,143.