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hNT-4 Protein
Human Neurotrophin-4, Recombinant,E. coli
Catalog # PG10032

Specification

hNT-4 Protein - Product Information

hNT-4 Protein - Additional Information

Storage
-20°C

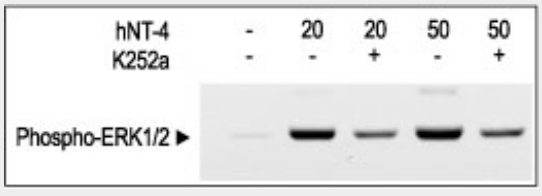
Precautions
hNT-4 Protein is for research use only and not for use in diagnostic or therapeutic procedures.

hNT-4 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 Cytomety
- Cell Culture

hNT-4 Protein - Images



human_NT-4 - Abgent human NT-4 induces activation of ERK1 2 MAPK in TrkB transfected HEK-293 cells.Cells were serum starved for 2 h, preincubated with or without 200 nM K252a as indicated and then stimulated with variousconcentrations of human NT-4 (#PG10032). Cell proteins were resolved by SDS-PAGE and probed with anti-phospho-ERK1/2.

hNT-4 Protein - Background

The neurotrophins ("neuro" means nerve and "trophe" means nutrient) are a family of soluble, basic growth factors which regulate neuronal development, maintenance, survival and death in the CNS and the PNS.1 Neurotrophin-4 (NT-4) is expressed in neurons of the superior cervical, stellate and celiac ganglion,2T-cells3 and is synthesized by keratinocytes.4 The structural hallmark of all

the neurotrophins is the characteristic arrangement of the disulfide bridges known as the cysteine knot, which has been found in other growth factors such as PDGF.5 The rat and human forms of NT-4 are 96% homologous. NT-4 has been shown to promote dendritic outgrowth and calcium currents in cultured mesencephalic dopamine neurons,6 to promote growth and remodeling of adult motor neuron innervation,7 to be anterograde survival factors for postsynaptic cells8 and to protect against apoptotic neuronal death.9 The biological effects of NT-4 are mediated by two receptors: TrkB which is specific for NT-4 and BDNF, and p75 which binds all the neurotrophins.10

hNT-4 Protein - References

1 . Roux, P.et al.(2002)Prog. Neurobiol. 67,203.2 . Moalem, G. et al.(2000)J. Autoimmun. 15,331.3 . Marconi, A.et al.(2003)J. Invest. Dermatol. 121,1515.4 . McDonald, N.Q.et al.(1991)Nature354,411.5 . DeFazio, R. A.et al. (2000)Neuroscience99,297.6 . Belluardo, N.et al.(2001)Mol. Cell Neurosci. 18,56.7 . Spalding, K.L.et al.(2002)Mol. Cell Neurosci. 19,485.8 . Lobner, D. and Ali, C.(2002)Brain Res. 954,42.9 . Teng, K.K. and Hempstead, B.L. (2004) Cell Mol. Life Sci. 61,35.