

Product Information

Neurotrophin-3 human, recombinant expressed in Sf21 insect cells

Catalog Number **N1905**
Storage Temperature -20°C

Synonyms: NT-3, HDNF, NGF-2

Product Description

Neurotrophin-3 is a neurotrophic factor required for the development of the vertebrate nervous system. It promotes the survival and outgrowth of neural crest-derived sensory and sympathetic neurons.¹ The amino acid sequence of neurotrophin-3 in human, mouse, and rat is identical and therefore, provides complete species cross-reactivity.¹ Neurotrophin-3 (NT-3) is also known as hippocampus derived neurotrophic factor (HDNF) and nerve growth factor-2 (NGF-2). mRNA of NT-3 has been found in adult skin, spleen, thymus, liver, muscle, and lung.²

This product is lyophilized from a $0.2\ \mu\text{m}$ filtered solution of phosphate buffered saline (PBS) containing $50\ \mu\text{g}$ of bovine serum albumin (BSA) per $1\ \mu\text{g}$ of cytokine.

Purity: $>97\%$ (SDS-PAGE)

The biological activity is measured in a cell proliferation assay using a TrkB-transfected cell line BaF-TrkB-BD. The EC_{50} is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

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

Reconstitute the contents of the vial using $0.2\ \mu\text{m}$ filtered PBS containing 0.1% bovine serum albumin to a concentration of $\geq 5\ \mu\text{g/ml}$.

Storage/Stability

Store the product at -20°C .

The reconstituted product may be stored $2-8^{\circ}\text{C}$ for no more than one month. For prolonged storage, freeze in working aliquots at -20°C . Avoid repeated freezing and thawing.

References

1. Callard, R., et al., The Cytokine Facts Book, (Academic Press, London: 1994) p. 199.
2. Maisonpierre, P.C., et al., Science, **247**, 1446 (1990).

SC,JWM,DAA,MAM 04/09-1

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.