

Datasheet

Neurotrophin-3

Human Recombinant

Product	Description	Catalogue-No.	Size
NT-3	Neurotrophin-3, human recombinant	CB-1125032	10 µg

Product description

Synonyms: Neurotrophic factor, NGF-2, HDNF

NT-3 a member of the neurotrophin family, that controls survival and differentiation of mammalian neurons. The protein is closely related to both nerve growth factor and brain-derived neurotrophic factor. It may be involved in the maintenance of the adult nervous system, and may affect development of neurons in the embryo. NT-3 deficient mice generated by gene targeting display severe movement defects of the limbs. The mature peptide of this protein is identical in all mammals examined including human, pig, rat and mouse. NT-3 human recombinant produced in E. coli is a non-glycosylated and non-covalently linked homodimer, containing 2x119 amino acid chains, having a total Mw of 27.2 kDa. The NT-3 is purified by proprietary chromatographic techniques.

Solubility and storage conditions

It is recommended to reconstitute the lyophilized NT-3 in sterile, distilled water not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Lyophilized NT-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution NT-3 should be stored at 2-8° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Composition

Sterile filtered white lyophilized (freeze-dried) powder lyophilized from a concentrated (1 mg/ml) solution in water containing no additives.

Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 2.165 as the extinction coefficient for a 0.1% (1mg/ml) solution. 2. Analysis by RP-HPLC, using a standard solution of NT-3 as a reference standard.

Amino acid sequence: YAEHKSHRGE YSVCDSESLW VTDKSSAIDI RGHQVTVLGE IKTGNSPVKQ YFYETRCKEA RPVKNGCRGI DDKHWNSQCK TSQTYVRALT SENNKLVGWR WIRIDTSCVC ALSRKIGRT

Purity: > 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE

Biological activity: The ED50 as determined by the dose-dependent induction of choline acetyl transferase in rat basal forebrain primary septal culture was found between 20-50 ng/ml, corresponding to a specific activity of 20,000-50,000 IU/mg.

Suitability

FOR RESEARCH USE ONLY!

Not approved for human or animal diagnostic or therapeutic procedures.

Technical Support

For technical support or questions or please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email info@pan-biotech.com