

# **California Bioscience**

# **Product Datasheet**

Product Name	Neurotrophin-3 Human Recombinant
Cata No	CB500159
Source	Escherichia Coli.
Synonyms	Neurotrophic factor, Nerve growth factor-2, NGF-2, HDNF, NT-3.

# Description

NT3 a member of the neurotrophin family, that controls survival and differentiation of mammalian neurons. This 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 when it is expressed in human placenta. NTF3-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.

Neurotrophin-3 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 119 amino acids and having a molecular mass of 13606.29 Dalton.

The NT-3 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

#### **Biological Activity**

The ED50 as determined by the dose-dependant induction of choline acetyl transferase in rat basal

forebrain primary septal culture was found between 20-50 ng/ml.

#### Purity

Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

#### Formulation

Lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

## Stability

Lyophilized NGF2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution NGF-2 should be stored at 4°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.

#### Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Tyr-Ala-Glu-His-Lys.