

Neudesin Neurotrophic Factor, human recombinant (rhuNENF)

Catalog No: 99941 Lot No: XXXXX Source: *E. coli*

Synonyms: Neudesin, Cell immortalization-related protein 2, Neuron-derived neurotrophic factor, Secreted protein of

unknown function, SPUF protein, NENF, CIR2, SPUF, SCIRP10

Background

Neudesin neurotrophic factor (NENF) is a member of the cytochrome b5 family, MAPR subfamily. NENF contains a cytochrome b5 heme-binding domain. NENF exhibits neurotrophic activity and activates phosphorylation of MAPK1/ERK2, MAPK3/ERK1 and AKT1/AKT in primary cultured neurons. It does not have mitogenic activity in primary cultured astrocytes. NENF may play a part in neuronal differentiation and may have a transient influence on neural cell proliferation in neural precursor cells. NENF's neurotrophic activity is increased by binding to heme. NENF is up-regulated in immortal cells and induced by the breast cancer expressing progesterone receptor.

Description

NENF Human Recombinant, produced in *E. coli*, is a single, non-glycosylated polypeptide chain (32-172 aa) containing 151 amino acids including a 10 aa N-terminal His tag.

Physical Appearance

Filtered, white lyophilized (freeze-dried) powder.

Formulation

NENF was filtered (0.4 μ m) and lyophilized from 0.5 mg/ml in 0.05 M phosphate buffer (pH 7.4) and 0.075 M NaCl.

Solubility

It is recommended to add 200 μ l deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. NENF is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Stability

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time. It does not show any change after two weeks at 4°C.

Amino Acid Sequence

MKHHHHHHAS GQTPRPAERG PPVRLFTEEE LARYGGEEED QPIYLAVKGV VFDVTSGKEF YGRGAPYNAL TGKDSTRGVA KMSLDPADLT HDTTGLTAKE LEALDEVFTK VYKAKYPIVG YTARRILNED GSPNLDFKPE DQPHFDIKDE F

Usage

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