Recombinant Protein Technical Manual

Recombinant Mouse β-NGF/NGFB Protein (aa 122-241)(Active)

RPES3871

Product Data:

Product SKU: RPES3871

Size: 10µg

Species: Mouse

Expression host: E. coli

Uniprot: P01139

Protein Information:

Molecular Mass: 13.5 kDa

AP Molecular Mass: 14 kDa

Tag:

Bio-activity: Measured in a cell proliferation assay using TF-1 human erythroleukemic cells The ED50 for this effect is 0.3.5 ng/ml.

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM Tris,150mM NaCl,pH8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application: Cell Culture

Synonyms: Beta-nerve growth factor; Beta-NGF; Ngf

Immunogen Information:

Sequence: Ser122-Gly241

Background:

NGF is the first member discovered in the Neurotrophin family, which includes brain-derived neurotrophic factor (BDNF), neurotrophin-3 (NT-3), and neurotrophin-4 (NT-4). These proteins belong to the cysteine-knot family of growth factors that assume stable dimeric structures. Mouse beta -NGF is a homodimer of two 120 amino acid polypeptides. It shares approximately 90% homology at the amino acid level with human beta -NGF and 95.8% with rat beta -NGF. NGF signaling has been shown to play an important role in neuroprotection and repair. β-NGF acts as a growth and differentiation factor for B lymphocytes, and enhances B-cell survival. It is a potent neurotrophic factor that signals through its receptor β-NGFR, and plays a crucial role in the development and preservation of the sensory and sympathetic nervous systems.