Neuropoietin, murine recombinant

CATALOG #: 7180-10 10 µg
7180-50 50 µg

ALTERNATE NAMES: NPO, NP

SOURCE: E. Coli

PURITY: ≥ 98% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 19.8 kDa

ENDOTOXIN LEVEL: < 0.1 ng/µg of protein (<1EU/µg).

FORM: Lyophilized

FORMULATION: Sterile filtered through a 0.2 micron filter. Lyophilized from 2.5 mM Tris, pH 10.2 and 0.5 mM DTT

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

RECONSTITUTION:
Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:
Neuropoietin is a newly identified member of the IL-6 cytokine family. Members of this family, including IL-6, IL-11, oncostatin M, leukemia inhibitory factor (LIF), cardiotrophin-1 (CT-1), cardiotrophin-like cytokine, and CNTF, display a four-helix bundle structure, and signal through gp130-containing receptor complexes. Neuropoietin, which is predominantly expressed in neuroepithelia during embryonic life, acts through a receptor complex comprising CNTF receptor-α component, gp130, and LIF receptor. Like CNTF, it promotes the survival of embryonic motor neurons and could increase the proliferation of neural precursor cells in the presence of EGF and FGF-2. Interestingly, the human Neuropoietin gene has evolved toward a pseudogene, suggesting that the alternative signaling via CNTF is an effective compensatory pathway. Recombinant murine Neuropoietin is a 19.8 kDa protein containing 183 amino acid residues.

AMINO ACID SEQUENCE:
MAPISPSEPI GQAYSLALYM QKNTSALLQT YLQHQGSPFS DPGFSAPELQ
LSTLPSAAVS FKTWHAMEDA ERLSRAQGAF LALTQHLQLV GDDQSYLNPG
SPILLAQLGA ARLRAQGLLG NMAAIMTALG LPIPPEEDTL GFVPFGASAF
ERKCRGYIVT REYGHWTDRA VRDLALLKAK YSA

BIOLOGICAL ACTIVITY:
Determined by the dose dependent stimulation of the proliferation of human TF-1 cells. The expected ED_{50} is 0.5-0.8 µg/ml.

RELATED PRODUCTS:

- IL-6, human recombinant **(Cat # 4143-20, -50, -1000)**
- IL-6, murine recombinant **(Cat # 4144-10, -50, -1000)**
- IL-6, rat recombinant **(Cat # 4145-10, -100, -1000)**
- IL-6 Antibody **(Cat # 5143-200)**
- IL-6 Antibody **(Cat # 5144-200)**
- IL-6 Antibody **(Cat # 5145-200)**

FOR RESEARCH USE ONLY! Not to be used in humans.

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