**DESCRIPTION**

**Source**
E. coli-derived
Ala23-Ala204, with and without an N-terminal Met
Accession # P83714

**N-terminal Sequence Analysis**
Met & Ala23

**Predicted Molecular Mass**
20 kDa

**SPECIFICATIONS**

**Activity**
Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. Kitamura, T. et al. (1989) J. Cell Physiol. **140**:323. The ED_{50} for this effect is 50-200 ng/mL.

**Endotoxin Level**
<1.0 EU per 1 μg of the protein by the LAL method.

**Purity**
>97%, by SDS-PAGE under reducing conditions and visualized by silver stain.

**Formulation**
Lyophilized from a 0.2 μm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution**
Reconstitute at 100 μg/mL in sterile PBS.

**Shipping**
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage**
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Neuropoietin (NP; also known as cardiotrophin-2) is a 22 kDa member of the IL-6 family of cytokines. Considered to be the product of a gene duplication event involving cardiotrophin-1 (CT-1), it helps to define a subfamily within the IL-6 family that includes CT-1, CLC and CTNF. Mouse neuropoietin is synthesized as a 204 amino acid (aa) precursor that contains a 22 aa signal sequence and a 192 aa mature segment. The secreted molecule is characterized by the presence of four α-helices, typical of hematopoietic superfamily molecules. Mature mouse neuropoietin shares 88%, 90% and 95% aa identity to chimpanzee, canine and rat neuropoietin, respectively. The human gene is suggested to have evolved towards a pseudogene, a point of interest in that neuropoietin is reported to signal through the CNTF complex (i.e., gp130, CNTF Rα and LIF R). NP will mediate motor neuron survival, and appears to be selectively expressed in the embryo by tissues involved with nervous system development (1).

**References:**

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**Recombinant Mouse Neuropoietin/NP**
Catalog Number: 2709-NP/CF

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