

Datasheet Cat. No. P1407

Recombinant Murine Neuropoietin

Information

Gene ID	244218
Accession #	P83714
Alternate Names	Ctf2
Source	Escherichia coli.
M.Wt	Approximately 19.7 kDa, a single non-glycosylated polypeptide chain containin 182 amino acids.
AA Sequence	APISPSEPIG QAYSLALYMQ KNTSALLQTY LQHQGSPFSD PGFSAPELQL STLPSAAVSF KTWHAMEDAE RLSRAQGAFL ALTQHLQLVG DDQSYLNPG PILLAQLGAA RLRAQGLLGN MAAIMTALGL PIPPEEDTLG FVPFGASAFE RKCRGYIVTR EYGHWTDRAV RDLALLKAKY SA
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM Tris-HCl, pH8.0, 500 mM NaCl, with 0.5 mM DTT.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring th contents to the bottom. Reconstitute in sterile distilled water or aqueous buffe containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Fully biologically active when compared to standard. The ED as determined b a cell proliferation assay using human TF-1 cells is less than 200 ng/ml, corresponding to a specific activity of > 5000 IU/mg.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5µg	100µg	500µg
Recombinant Murine Neuropoietin	5µg	100µg	500µg

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

l	Quality Control			
	Purity	> 98 % by SDS-PAGE and HPLC analyses.	Performance and	
	Endotoxin	Less than 1 EU/ $_{\mu}$ g of rMuNeuropoietin as det	an 1 EU/ μ g of rMuNeuropoietin as determined by LAL method.	

Description

Neuropoietin (NP; also known as cardiotrophin-2) is a 19.7 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 182 aa mature segment. The secreted molecule is characterized by the presence of four alpha-helices, typical of hematopoietic superfamily molecules. Mature murine neuropoietin shares 88%, 90% and 95% aa identity to chimpanzee, canine and rat neuropoietin, respectively.

Reference

