G-CSF/CSF-3/MGI-1G, Human, Recombinant

Cat. No. : PCK040

General Information

Synonyms	CSF-3;MGI-1G;GM-CSF beta;pluripoietin
Species	Human
Expression host	E.coli
Sequence	TPLGPASSLPQSFLLKCLEQVRKIQGDGAALQEKLCATYKLCHPEELVLLGHSLGIPWAPLSSC PSQALQLAGCLSQLHSGLFLYQGLLQALEGISPELGPTLDTLQLDVADFATTIWQQMEELGMA PALQPTQGAMPAFASAFQRRAGGVLVASHLQSFLEVSYRVLRHLAQP with polyhistidine tag at the N-terminus.
Accession	P09919.1
Tag	His-tag at the N-terminus
Mol mass	19.48 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce proliferation in NFS-60 cells. The ED50 for this effect is < 50 pg/mL. The specific activity of recombinant human G-CSF is > 2 × 10^7 IU/mg.

Product feature

Purity	> 98% as determined by SDS-PAGE. Ni-NTA chromatography
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

G-CSF is a hematopoietic growth factor. It can activate the progress that committed progenitor cells develop to neutrophils and enhance the functional activities of the mature end-cell. It is secreted in response to specific stimulation by a variety of cells, including bone marrow stroma, macrophages, endothelial cells and fibroblasts. In clinical treatment, G-CSF is used to facilitate hematopoietic recovery after bone marrow transplantation.