# DATASHEET

| Name | G-CSF CHO, REC.HU | | |
|---|---|---|---|
| Product | Granulocyte-Colony Stimulating Factor, CHO derived, Rec. Human | Article-No. | 40110 |
| Formulation | White powder - lyophilised from a concentrated (1mg/ml) solution containing 10mM Hydrochloric Acid pH=6.5, 0.4mg tween 20, 100mg Mannitol, 160mg L-Arginine, 40mg Phenylalanin and 4mg Methionine | Storage | Freezer at -20°C<br>Prevent freeze-thaw cycles |

**Synonyms:**
CSF-3, MGI-1G, GM-CSF beta, Pluripoietin, Filgrastim, Lenograstim, G-CSF, MGC45931, GCSF.

**Introduction:**
Granulocyte Colony Stimulating Factor is a growth factor and/or cytokine produced by the endothelium, macrophages and a number of other immune cells. GCSF stimulates the bone marrow to produce granulocytes and also to stimulate the survival, proliferation, differentiation and function of neutrophil granulocyte progenator cells and mature neutrophils.

**Description:**
Granulocyte Colony Stimulating Factor Human Recombinant produced in Chinese Hamster ovary cells is a single, glycosylated, polypeptide chain containing 174 amino acids and having a molecular mass of 20 KD. rHuG-CSF CHO is purified by proprietary chromatographic techniques.

**Source:** Chinese Hamster Ovary Cells (CHO).

**Purity:** > 98.0% (per RP-HPLC & SDS-PAGE)

**Solubility:**
It is recommended to reconstitute the lyophilised rHuG-CSF CHO in sterile 18MΩ-cm $H_2O$ not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:**
Lyophilised rHuG-CSF CHO, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuG-CSF CHO should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

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**Amino acid sequence:**
The sequence of the first five N-terminal amino acids was determined and was found to be Thr-Pro-Leu-Gly-Pro.

**Biological Activity:**
The $ED_{50}$, calculated by the dose-dependent proliferation of murine NFS-60 indicator cells (measured by $^{3}H$-thymidine uptake) is <0.1ng/ml, corresponding to a Specific Activity of $1.27 \times 10^{8}$ IU/mg.

**Protein content:**
Protein quantification was carried out by two independent methods:
1. UV spectroscopy at 280 nm using the absorbency value of 0.815 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of Granulocyte Colony Stimulating Factor as a reference standard.

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**Usage:**
Our products are intended for lab research only. Not for human, animal or diagnostic use.

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