



Product Datasheet

Product Name	Interleukin-3 Human Recombinant, Yeast
Cata No	CB501322
Source	<i>Saccharomyces cerevisiae</i> .
Synonyms	MCGF (Mast cell growth factor), Multi-CSF, HCGF, P-cell stimulation factor, IL-3, MGC79398, MGC79399.

Description

IL3 is a potent growth promoting cytokine. This cytokine is capable of supporting the proliferation of a broad range of hematopoietic cell types. It is involved in a variety of cell activities such as cell growth, differentiation and apoptosis. This cytokine has been shown to also possess neurotrophic activity, and it may be associated with neurologic disorders.

Interleukin-3 Human Recombinant produced in yeast is a single, glycosylated polypeptide chain containing 133 amino acids and having a molecular mass of 15000 Dalton.

The recombinant human IL-3 migrates as a broad band between 15 and 22 kDa in SDS-PAGE due to post-translation modifications, in particular glycosylation. This compares with the e.coli IL-3 that has a predicted molecular mass of 15.1 kDa. IL-3 has N-linked and possibly O-linked oligosaccharides.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED₅₀ of IL-3 is typically 0.1- 0.4 ng/ml as measured in a cell proliferation assay using the human growth factor dependent TF-1 cell line.

Purity

Greater than 97.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Formulation

Lyophilized from a concentrated (1mg/ml) solution in water containing 20mM Phosphate buffer pH-6.3.

Reconstitution

It is recommended to reconstitute the lyophilized Interleukin-3 in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL3 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).

Please prevent freeze-thaw cycles.

Sequence

APMTQTTPLKTSWVNC SNMIDEIITH
LKQPPLPLLD FNNLNGEDQDILMEN
NLRPNLEAFNRAVKSLQNASAIES
ILKNLLPCLPLATAAPTRHPIHIKDG
DWN EFR RKLTFYKLTLENAQAQQT
LSLAIF.

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