Leader in Biomolecular Solutions for Life Science

Recombinant Mouse IL-3 Protein

Catalog No.: RP01386 Recombinant



Sequence Information

Species Gene ID Swiss Prot
Mouse 16187 P01586

Tags C-His

Synonyms

BPA;Csfmu;HCGF;IL-3;MCGF;PSF;IL3

Product Information

Source Purification HEK293 cells > 90% by SDS-PAGE.

Endotoxin <0.1EU/μg

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

€

www.abclonal.com

Background

IL3 (interleukin 3), also known as IL-3, is a potent growth-promoting cytokine that belongs to the IL-3 family. IL3/IL-3 also belongs to the group of interleukins. Interleukins are produced by a wide variety of body cells. The function of the immune system depends in a large part on interleukins, and rare deficiencies of a number of them have been described, all featuring autoimmune diseases or immune deficiency. The majority of interleukins are synthesized by helper CD4+ T lymphocytes, as well as through monocytes, macrophages, and endothelial cells. They promote the development and differentiation of T, B, and hematopoietic cells. IL3/IL-3 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. IL3/IL-3 has been shown to also possess neurotrophic activity, and it may be associated with neurologic disorders.

Basic Information

Description

Recombinant Mouse IL-3 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Cys166) of mouse IL3 (Accession #NP_034686.2.) fused with a 6×His tag at the C-terminus.

Bio-Activity

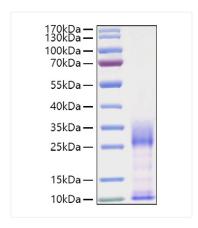
Measured in a cell proliferation assay using BaF3 mouse pro-B cells. The ED₅₀ for this effect is 1.5-6 pg/mL, corresponding to a specific activity of 1.67×10 ⁸ ~ 6.67×10 ⁸ units/mg.

Storage

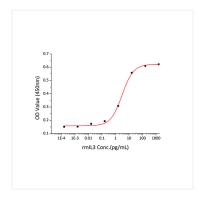
Store the lyophilized protein at -20°C to -80°C for long term.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Mouse IL-3 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 10-35kDa.



Recombinant Mouse IL3 promotes the proliferation of BaF3 mouse pro-B cells. The ED $_{50}$ for this effect is 1.5-6 pg/mL, corresponding to a specific activity of 1.67 \times 10 8 ~6.67× 10 8 units/mg.