

Synonym

IL3,MCGF,MGC79398,MGC79399,MULTI-CSF,Interleukin-3

Source

Mouse IL-3 Protein, His Tag(IL3-M52H8) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Cys 166 (Accession # P01586-1). Predicted N-terminus: Ala 27

Molecular Characterization

IL-3(Ala 27 - Cys 166) P01586-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 17.6 kDa. The protein migrates as 25-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

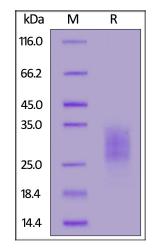
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

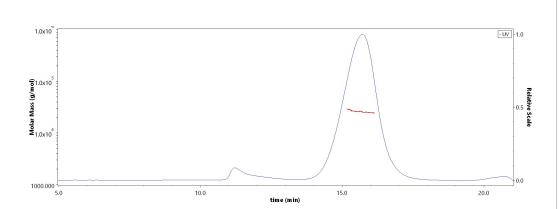
SDS-PAGE



Mouse IL-3 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-SPR

SEC-MALS



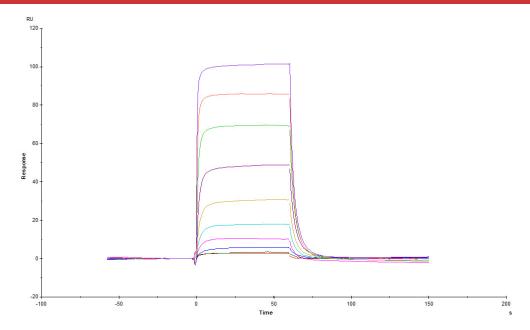
The purity of Mouse IL-3 Protein, His Tag (Cat. No. IL3-M52H8) is more than 85% and the molecular weight of this protein is around 20-32 kDa verified by SEC-MALS.

<u>Report</u>

Mouse IL-3 Protein, His Tag (MALS & SPR verified)

Catalog # IL3-M52H8





Immobilized Mouse IL-3 R alpha, His Tag (Cat. No. ILA-M52H4) on CM5 Chip can bind Mouse IL-3 Protein, His Tag (Cat. No. IL3-M52H8) with an affinity constant of 0.929 μ M as determined in a SPR assay (Biacore T200) (QC tested).

Background

Interleukin 3 is also known as IL-3, is a protein that in humans is encoded by the IL3 gene. Interleukin-3 (IL-3) is an interleukin, a type of biological signal (cytokine) that can improve the body's natural response to disease as part of the immune system. It acts by binding to the interleukin-3 receptor. The IL-3 receptor is a heterodimer of the IL-3 specific α -chain and the common β -chain, βc , which is also used by GM-CSF and IL-5. [3] Binding of IL-3 can also involve substitution of the βc by a β IL-3-chain that appears to be specific for IL-3. Binding of IL-3 to its cognate receptor(s) induces activation of Jak2, phosphorylation of multiple Stats, and the PI3K/Akt pathway. IL-3 may play an important role in the development of airway inflammation associated with asthma. The human IL-3 gene encodes a protein 152 amino acids long, and the naturally occurring IL-3 is glycosylated. The human IL-3 gene is located on chromosome 5, only 9 kilobases from the GM-CSF gene, and its function is quite similar to GM-CSF.

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

