Cynomolgus IL-3 Protein, His Tag

Catalog # IL3-C52H9

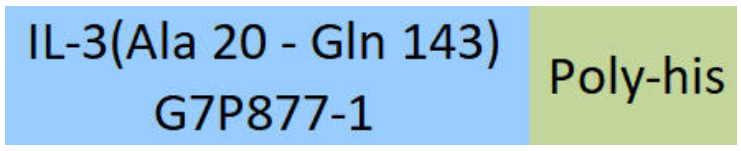
Synonym

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

Source

Cynomolgus IL-3, His Tag(IL3-C52H9) is expressed from human 293 cells (HEK293). It contains AA Ala 20 - Gln 143 (Accession # G7P877-1). Predicted N-terminus: Ala 20

Molecular Characterization



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

The protein has a calculated MW of 15.9 kDa. The protein migrates as 18-27 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm 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

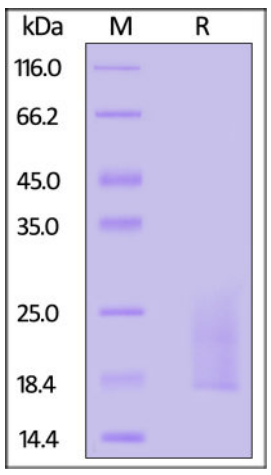
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

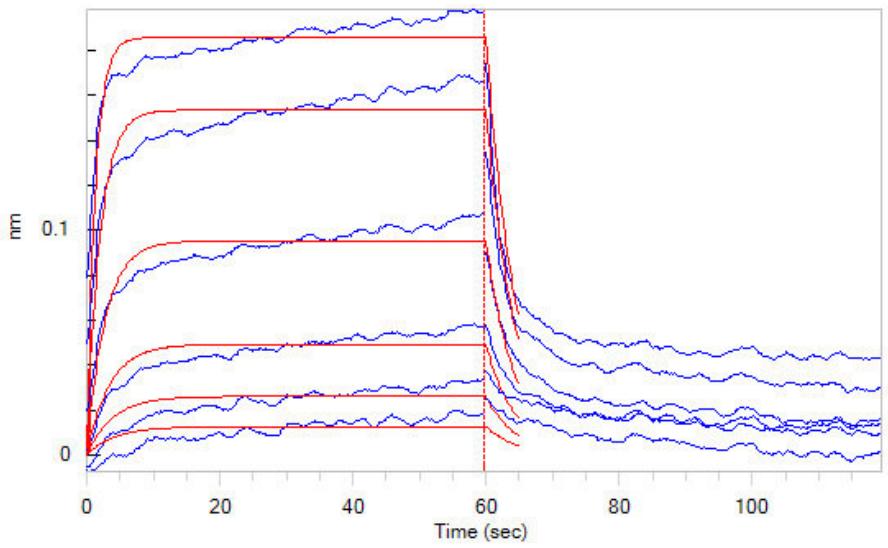
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Cynomolgus IL-3, 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-BLI



Loaded Human IL-3 R alpha, Fc Tag (Cat. No. ILA-H5252) on Protein A Biosensor, can bind Cynomolgus IL-3, His Tag (Cat. No. IL3-C52H9) with an affinity constant of 1.30 μM as determined in BLI assay (ForteBio Octet Red96e) (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 βIL-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.