

Synonyms

IL-5, TRF, IL5, Interleukin-5

Source

Mouse IL-5, His Tag (IL5-M52H3) is expressed from human 293 cells (HEK293). It contains AA Met 21 - Gly 133 (Accession # [P04401-1](#)).

Predicted N-terminus: His

Molecular Characterization

Poly-his

IL-5(Met 21 - Gly 133)
P04401-1

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

The protein has a calculated MW of 15.0 kDa. The protein migrates as 15 kDa,19 kDa and 23-30 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a dimer.

Endotoxin

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

Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

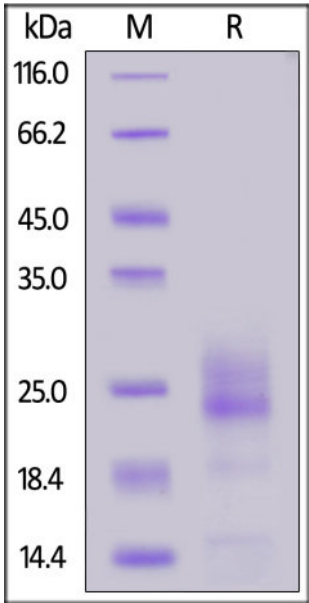
This product is stable after storage at:

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

ACRO Quality Management System

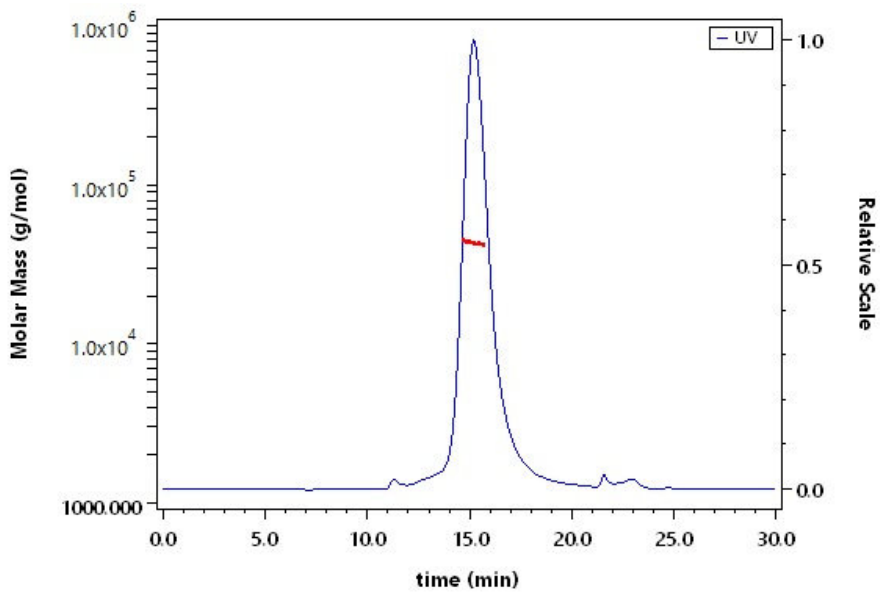
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



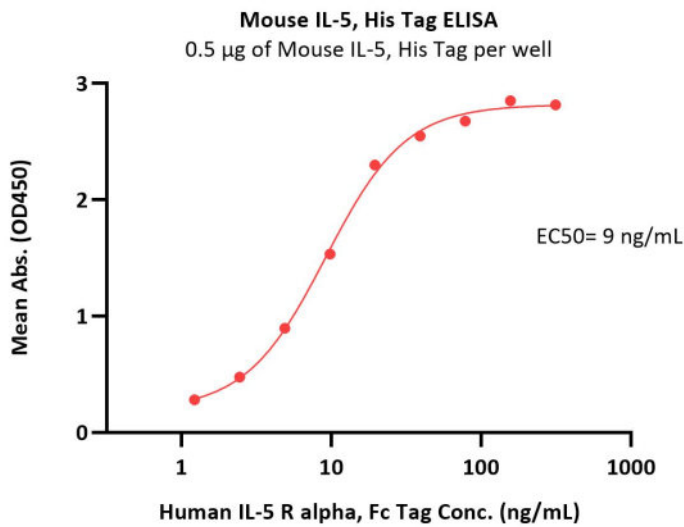
Mouse IL-5, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-MALS



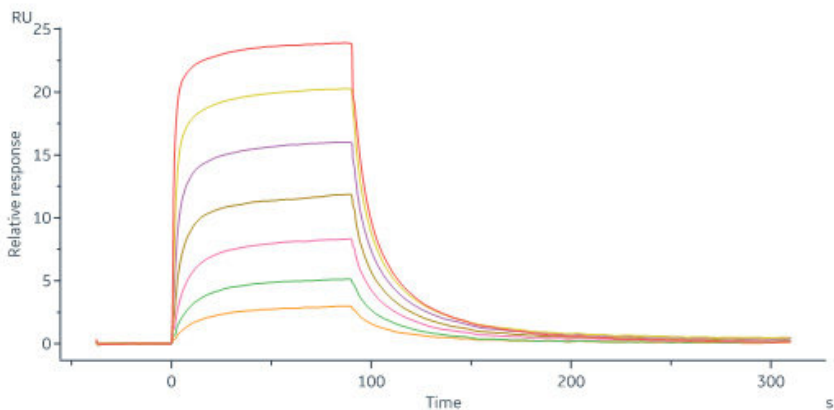
The purity of Mouse IL-5, His Tag (Cat. No. IL5-M52H3) is more than 95% and the molecular weight of this protein is around 37-47 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Mouse IL-5, His Tag (Cat. No. IL5-M52H3) at 5 µg/mL (100 µL/well) can bind Human IL-5 R alpha, Fc Tag (Cat. No. ILA-H5269) with a linear range of 1-39 ng/mL (QC tested).

Bioactivity-SPR



Mouse IL-5 R alpha Protein, His Tag (Cat. No. ILA-M52H7) immobilized on CM5 Chip can bind Mouse IL-5, His Tag (Cat. No. IL5-M52H3) with an affinity constant of 243 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Interleukin 5 (IL5) is an interleukin produced by type-2 T helper cells and mast cells. IL-5 is a 115-amino acid (in human, 133 in the mouse) -long TH2 cytokine that is part of the hematopoietic family. Unlike other members of this cytokine family (namely interleukin 3 and GM-CSF), this glycoprotein in its active form is a homodimer. Interleukin-5 has long been associated with the cause of several allergic diseases including allergic rhinitis and asthma, wherein a large increase in the

number of circulating, airway tissue, and induced sputum eosinophils have been observed. Given the high concordance of eosinophils and, in particular, allergic asthma pathology, it has been widely speculated that eosinophils have an important role in the pathology of this disease. Drugs that target IL-5 are mepolizumab and reslizumab.



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