

Guinea pig IL-23 alpha&IL-12 beta Heterodimer Protein, His Tag&Tag Free (MALS verified)

Catalog # ILB-G52W3



Synonyms

IL-23 alpha & IL-12 beta

Source

Guinea pig IL-23 alpha&IL-12 beta Heterodimer Protein, His Tag&Tag Free (ILB-G52W3) is expressed from human 293 cells (HEK293). It contains AA Arg 20 - Pro 189 (IL23A) & Met 23 - Arg 332 (IL12B) (Accession # [Q6LA37](#) (IL23A) & [Q924V5](#) (IL12B)).

Predicted N-terminus: Arg 20 - Pro 189 (IL23A) & Met 23 - Arg 332 (IL12B)

Molecular Characterization

IL23A (Val 20 - Ala 189) Q6LA37	Poly-his
IL12B (Met 23 - Ser 332) Q924V5	

The protein has a calculated MW of 20.7 kDa (IL23A) & 35.2 kDa (IL12B). The protein migrates as 27 kDa and 37-40 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a heterodimer.

Endotoxin

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

Purity

>95% as determined by SDS-PAGE.

>90% 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.

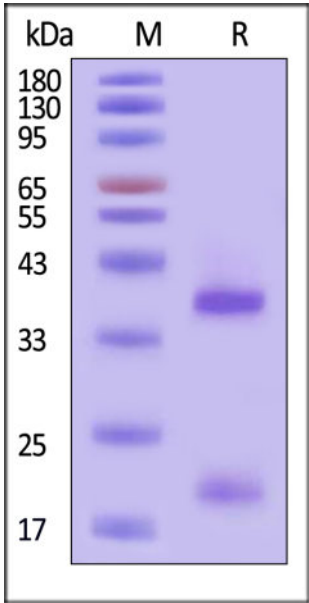
This product is stable after storage at:

- -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

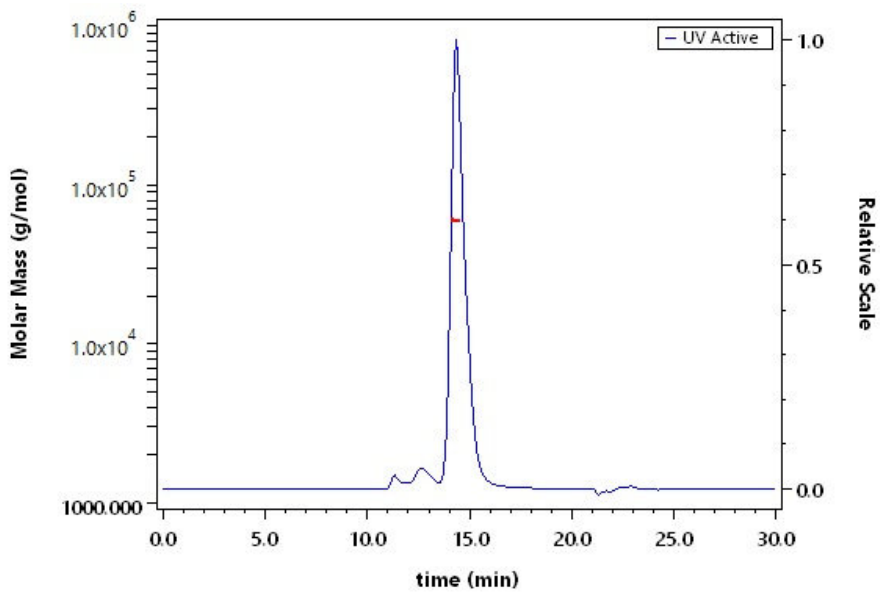
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



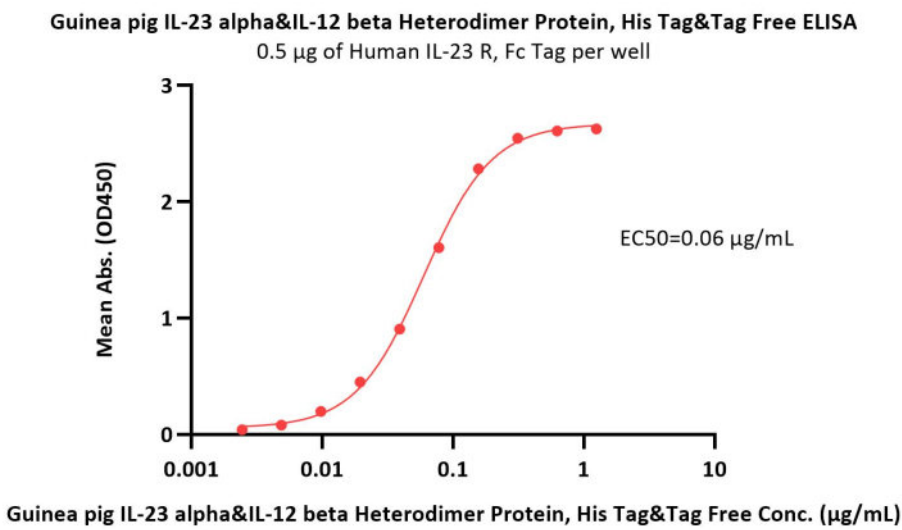
Guinea pig IL-23 alpha&IL-12 beta Heterodimer Protein, His Tag&Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Guinea pig IL-23 alpha&IL-12 beta Heterodimer Protein, His Tag&Tag Free (Cat. No. ILB-G52W3) is more than 90% and the molecular weight of this protein is around 55-75 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Human IL-23 R, Fc Tag (Cat. No. ILR-H5254) at 5 µg/mL (100 µL/well) can bind Guinea pig IL-23 alpha&IL-12 beta Heterodimer Protein, His Tag&Tag Free (Cat. No. ILB-G52W3) with a linear range of 0.002-0.156 µg/mL (QC tested).

Background

Interleukin-23 subunit alpha (IL-23A) can associate with interleukin-12 subunit beta (IL-12B) to form IL-23, a heterodimeric cytokine that functions in innate and adaptive immunity. IL-23 promotes the production of IL-17, and together they contribute to acute responses to infection in peripheral tissues. IL-23 binds to a heterodimeric receptor complex composed of IL12RB1 and IL23R, activates the JAK-STAT signaling cascade, stimulates memory T-cells rather than naive T-cells, and promotes the production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may play a key role in autoimmune inflammatory diseases; it may also promote tumorigenesis in certain inflammatory contexts.



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