

Interleukin-10 (IL-10), Human



Cat. No. SR112-1000G
Cat. No. SR112-0100G

Size: 1 mg
Size: 100 µg

Description

Interleukin-10 is a multifunctional cytokine produced by a variety of cell types including T helper cells activated B cells and activated macrophages. Interleukin-10 regulates immune-mediated inflammation and modulates the function of cells such as lymphocytes, monocytes, natural killer cells and dendritic cells.

Expression System

Escherichia coli

Sequence

MSAPFSFLSNVKYNFMRRIKYEFILNDALNQSIRANDQYL TAAALHNLDEAVKFDG
GAYKSSKDDAKITVILRISKTQLYVTAQDEDQPVLLKEMPEIPKTTITGSETNLLFFW
ETHGTKNYFTSVAHPNLFIAATKQDYWVCLAGGPPSITDFQILENQA with polyhistidine
tag at the C-terminus.

Species Human

Tag polyhistidine tag at the C-terminus

Endotoxin Level

<0.01 EU per 1 µg of the protein by the LAL method.

Activity

Measure by its ability to induce MC/9-2 cells proliferation.

The ED₅₀ for this effect is <1 ng/mL.

The specific activity of recombinant human IL-10 is approximately >1x10⁶ IU/ mg.

Purity >98% as determined by SDS-PAGE. Ni-NTA chromatography

Formulation

The protein was lyophilized from a solution containing 1X PBS, pH 8.0.

Reconstitution

Unopened ampoules can be stored at -20°C or -80°C.

Need not spin the ampoule. Open the cap carefully, then dissolve the lyophilized protein with sterile water for a 100 µg/mL concentration or according to the product's Certificate of Analysis (CoA). Rinse the inner side of the ampoule gently and stand for at least 20 minutes at room temperature. (Important Note: Do Not Vortex!) Use the reconstituted solution immediately or store it by distributing it to aliquots

and store at -20 °C. (Avoid repeated freeze-thaw cycles) We recommend diluting the solution to working concentration by using buffers or medium containing a carrier*. (Do not dilute the working solution with water, which may cause protein degradation.)

*Carriers: 0.1% BSA or 5% HSA or 10% FBS.

Storage

Lyophilized protein should be stored at -20°C.

This product is stable for one year upon receipt, when handled and stored as instructed.

Upon reconstitution, protein aliquots should be stored at -20°C or -80°C.

Avoid repeated freeze/thaw cycles.

Note

Please use within one month after protein reconstitution.

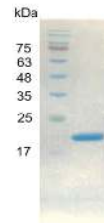
Specification

The recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include:

- > Testing and traceability of raw material
- > Records of the maintenance and equipment calibration
- > Personnel training records
- > Batch-to-batch consistency
- > Documentation of QA control and process changes
- > Manufactured and tested under an ISO 13485:2016 certified quality management system
- > Stability monitors of product shelf-life

Reference

1. Saraiva M, O'Garra A. (2010) Nat Rev Immunol. 10,3: 170-81.
2. Ouyang W, O'Garra A. (2019) Immunity. 50,4: 871-891.
3. Gabryšová, L. et al. (2014) Curr Top Microbiol Immunol. 380: 157-90.
4. Moore, KW. et al. (2001) Annu Rev Immunol.19: 683-765.



SDS-PAGE analysis of recombinant human IL-10

Related Ordering Information

Cat. No.	Description	Size
CC103-0500	DMEM, High Glucose	500 ml
CC109-0500	RPMI 1640	500 ml
CC113-0500	DMEM/F-12	500 ml
PC203-0600	60mm Tissue Culture Dish, with Gripping Ring	600 ea
PC273-0100	75T Flask, Plug Seal Cap	100 ea

Caution

- During operation, always wear a lab coat, disposable gloves, and protective equipment.
- Research Use Only. Not intended for any animal or human therapeutic or diagnostic uses.