

BACKGROUND

Interleukin 10 (IL-10) is an anti-inflammatory cytokine mainly produced by macrophages and Th2 cells. IL-10 functions by inhibiting pro-inflammatory cytokines made by macrophages and regulatory T cells including, IFN- γ , TNF- α , IL-2, and IL-3, IL-4, and GM-CSF. IL-10 is also known to suppress antigen presentation on antigen presenting cells. While human IL-10 can act on murine cells, murine IL-10 cannot act on human cells.

Recombinant human IL-10 is a non-glycosylated protein, containing 161 amino acids and having a molecular mass of 16.6 kDa.

Alternative Names:

B-TCGF, CSIF, TGIF

Amino Acid Sequence:

MSPGQGTQSE NSCTHFPGNL PNMLRDLRDA FSRVKTFQFM
KDQLDNLLLK ESLLDFKGY LGCQALSEMI QFYLEEVMPQ
AENQDPDIKA HVNSLGENLK TLRRLRRCH RFLPCENKSK
AVEQVKNAFN KLQEKGIYKA MSEFDIFINY IEAYMTMKIR N

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human IL-10 is lyophilized from 10 mM Na₂PO₄, pH 7.5.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by the dose-dependant proliferation of mouse MC-9 cells and is typically less than 0.5 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

