

Background:

Interleukin-10 (IL-10), also known as cytokine synthesis inhibitory factor (CSIF), is the charter member of the IL-10 family of α -helical cytokines that also includes IL-19, IL-20, IL-22, IL-24, and IL-26/AK155. IL-10 is secreted by many activated hematopoietic cell types as well as hepatic stellate cells, keratinocytes, and placental cytotrophoblasts. Whereas human IL-10 is active on mouse cells, mouse IL-10 does not act on human cells. IL-10 is a 178 amino acid molecule that contains two intrachain disulfide bridges and is expressed as a 36 kDa noncovalently associated homodimer. The IL-10 dimer binds to two IL-10 R α /IL-10R1 chains, resulting in recruitment of two IL-10 R β /IL-10R2 chains and activation of a signaling cascade involving JAK1, TYK2, and STAT3.

Source:

Recombinant Human IL-10 is expressed from Escherichia coli. It contains AA Ser 19 - Asn 178. Predicted molecular mass 21.4 kDa. This protein carries a polyhistidine tag at the N-terminus.

His₆ TEV IL-10 (Ser 19 - Asn 178)

Endotoxin:

Less than 1.0 EU per μ g by the LAL method.

AA Sequence:

SPGQGTQSEN SCTHFPGNLP NMLRDLRDAF SRVKTFQMK DQLDNLLKE SLLEDFKGYL GCQALSEMIQ FYLEEVMPQA
ENQDPDIKAH VNSLGENLKT LRLRLRCHR FLPCENKSKA VEQVKNAFNK LQEKGIYKAM SEFDIFINYI EAYMTMKIRN

Purity:

Purity >90% as determined by SDS-PAGE.

Formulation:

Lyophilized from 0.22 μ m filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization. Contact us for customized product form or formulation.

Reconstitution

Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

Storage

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

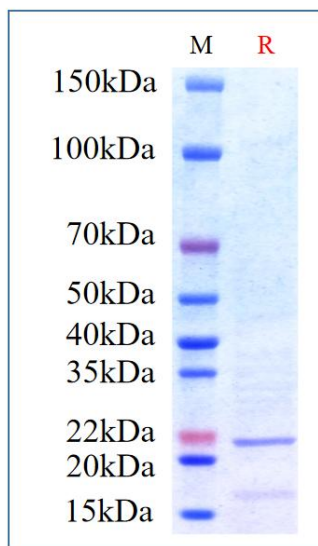
Please avoid repeated freeze-thaw cycles.

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



Human IL-10, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.