CELL APPLICATIONS, INC.

RECOMBINANT PROTEINS

Human Interleukin-13

SIZE	CAT. NO.
10 ug	RP1085-10
100 ug	RP1085-100
1000 ug	RP1085-1000

BACKGROUND

Interleukin-13 (IL-13) is an important cytokine secreted from Th2 cells. The functions attributed to IL-13 overlap significantly with those of IL-4 (induces IgE secretion from B cells and inhibits expression of inflammatory cytokines such as IL-1β, TNF-α, IL-8 and IL-6), but differs from IL-4 in that IL-13 seems to link inflammatory response of immune cells to the pathophysiological changes in the surrounding non-immune cells. The receptor subunits of IL-13 consist of IL-4Rα, IL-13Rα1 and IL-13Rα2. Human and mouse IL-13 are cross-reactive.

Recombinant human IL-13 is a non-glycosylated protein, containing 114 amino acids and having a molecular mass of 12.5 kDa.

Alternative Names:
NC30

Amino Acid Sequence:
SPGPVPPSTA LRELIEELVN ITQNQKAPLC NGSMVWSINL
TAGMYCAALE SLINVSGCSA IEKTQRMLSG FCPHKVSAGQ
FSSLHVRDTK IEVAQFVKDL LLHLKKLFRE GRFN

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
Recombinant human IL-13 is lyophilized from 10 mM Sodium Citrate, pH 3.0.

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 dependent proliferation of TF-1 cells and is typically less than 1 ng/mL.