

rHuIL-13

Recombinant Human Interleukin-13

Product	Cat#	Package size
Recombinant Human Interleukin-13	C6261.0002	2µg
Recombinant Human Interleukin-13	C6261.0010	10µg
Recombinant Human Interleukin-13	C6261.1000	1mg

Synonyms: NC30, ALRH, BHR1, P600, IL-13, MGC116786, MGC116788, MGC116789.

Product description

IL13 is an immunoregulatory cytokine produced primarily by activated Th2 cells. IL-13 is involved in several stages of B-cell maturation and differentiation. It up-regulates CD23 and MHC class II expression, and promotes IgE isotype switching of B cells. This cytokine down-regulates macrophage activity, thereby inhibits the production of pro-inflammatory cytokines and chemokines. This cytokine is found to be critical to the pathogenesis of allergen-induced asthma but operates through mechanisms independent of IgE and eosinophils. This gene, IL3, IL5, IL4, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL4.

Recombinant human Interleukin-15 produced in *E.Coli* is a single, non-glycosylated polypeptide of 112 amino acids and a molecular mass of 12 Dalton.

Source: *Escherichia coli*

Biological activity

The ED50 was determined by the dose dependent proliferation of TF-1 cells and was found to be <1ng/mL, corresponding to a specific activity of >1 x 10E6units/mg.

Purity: Greater than 95% by SDS-PAGE and HPLC analysis.

Amino acid sequence

GPVPPSTALRELIEELVNITQNKAPLCNGSMVWSINLTAGMYCAALESINVSGCSAIEKTQRMLSGFCPHKVSAGQFSSLHVRDTKIEVAQFVKDLLLHLKLFREGRFN.

Formulation: The protein (1mg/mL) was lyophilized with 1xPBS pH7.2 and 5% trehalose.

Stability

Lyophilized recombinant Human IL-13 although stable at room temperature for 3 weeks, should be stored desiccated below -20° C. Upon reconstitution of recombinant Human IL-13 should be stored at +2° C to +8° C between 2-7 days and for future use below -20° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

Reconstitution

It is recommended to reconstitute the lyophilized recombinant Human IL-13 in sterile deionised water not less than 100µg/mL, which can then be further diluted to other aqueous solutions.

Protein Content

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.57 as the extinction coefficient for a 0.1% (1mg/mL) solution.
2. Analysis by RP-HPLC, using a standard solution of IL-13 as a Reference Standard.

Usage

This product is for research/laboratory usage only. It may not be used as drug, agricultural or pesticidal product, food additive or household chemical.