

## Recombinant Murine Interleukin-13 (rm IL-13)

**Synonyms:** NC300, ALRH, BHR1, P600.

**Introduction:** IL-13 is an immunoregulatory cytokine produced primarily by activated Th2 cells. IL-13 is involved in several stages of B-cell maturation and differentiation. It regulates CD23 and MHC class II expression up and promotes IgE isotype switching of B cells. IL-13 regulates macrophage activity down by inhibiting thereby the production of pro-inflammatory cytokines and chemokines. IL-13 is found to be critical to the pathogenesis of allergen-induced asthma but operates through mechanisms independent of IgE and eosinophils. This gene, IL-3, IL-4, IL-5 and GM-CSF form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL-4.

**Description:** Recombinant murine IL-13 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 110 amino acids and having a molecular mass of 12 kDa. The rm IL-13 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*

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

**Formulation:** Lyophilized from a 0.22µm filtered solution in PBS, pH 7.0.  
The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rm IL-13 in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rm IL-13 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm IL-13 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95% as determined by SDS-PAGE

**Endotoxicity:** The endotoxin level is less than 1 EU / µg determined by LAL method.

**Amino Acid Sequence:** MPVPRSVSLP LTLKELIEEL SNITQDQTPL CNGSMVWSVD LAAGGFCVAL  
DSLNTNISNCN AIYRTQRILH GLCNRKAPTT VSSLPDTKIE VAHFITKLLS YTKQLFRHGP F

**Biological Activity:** The biological activity was determined by dose-dependent stimulation of TF-1 proliferation. The ED<sub>50</sub> was found to be < 4 ng/ml corresponding to a specific activity of 2.4 x 10<sup>5</sup> units/mg.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	12340132
<i>medium</i>	10 µg	Cat.N°	12340133
<i>large</i>	50 µg	Cat.N°	12340135
<i>x-large</i>	250 µg	Cat.N°	12340137
<i>xx-large</i>	1000 µg	Cat.N°	12340138

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