

Interleukin-13, rhesus macaque recombinant (rrmIL-13)

Catalog No: 97595 Lot No: XXXXX Source: *E. coli*

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

Background

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.

Description

Interleukin-13 Rhesus Macaque recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 114 amino acids and having a molecular mass of 12.6 kDa. IL 13 Rhesus Macaque is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4 containing 5% trehalose.

Solubility

It is recommended to reconstitute the lyophilized IL-13 in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized IL-13, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-13 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by SDS-PAGE and HPLC analyses.

Amino Acid Sequence

SPSPVPRSTA LKELIEELVN ITQNQKAPLC NGSMVWSINL TAGVYCAALE SLINVSGCSA IEKTQRMLNG FCPHKVSAGQ FSSLRVRDTK IEVAQFVKDL LVHLKKLFRE GRFN

Activity

The ED50 as determined by the dose-dependent proliferation of TF-1 cells was <1.0 ng/ml, corresponding to a specific activity of $>1 \times 1,000,000$ units/mg.





Usage

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