

IL 13 Variant Human

Description: Interleukin-13 Variant Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 114 amino acids, with a substitution of Q for R at position 112 compared with the wild type IL-13, having a molecular mass of 12.5 kDa. The IL-13 Variant is purified by proprietary chromatographic techniques.

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

Source: Escherichia Coli.

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

Amino Acid Sequence: SPGPVPPSTA LRELIEELVN ITQNQKAPLC NGSMVWSINL
TAGMYCAALE SLINVGCSA IEKTQRMLSG FCPHKVSAGQ FSSLHVRDTK IEVAQFVKDL
LLHLKKLFRE GQFN.

Purity: Greater than 95% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Formulation:

Lyophilized from a 0.2

Stability:

Lyophilized Interleukin-13 Variant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL13 Variant 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.

Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

Solubility:

It is recommended to reconstitute the lyophilized Interleukin 13 Variant in sterile 18M-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Introduction:

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.

Biological Activity:

The ED₅₀ was determined by the dose dependent proliferation of TF-1 cells and was found to be 1,000,000 units/mg. This analog has also been shown to exhibit increased in vivo activity compared to wild type IL-13.

Catalog #:CYP5-689

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