

## 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 SLINVSIGCSA IEKTQRMLSG FCPHKV/SAGQ FSSLHVRDTK IEVAQFVKDL  
LLHLKCLFRE 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

For research use only.