

32-1448: IL 13 Variant Recombinant Protein

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

Description

Source : Escherichia Coli. 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. 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.

Product Info

Amount :	10 µg
Purification :	Greater than 95% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	Lyophilized from a 0.2µm filtered concentrated solution in 1xPBS, pH 7.2, containing 5% trehalose.
Storage condition :	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.
Amino Acid :	SPGPVPPSTA LRELIEELVN ITQNQKAPLC NGSMVWSINL TAGMYCAALE SLINVSGCSA IEKTQRMLSG FCPHKVSAGQ FSSLHVRDTK IEVAQFVKDL LLHLKKLFRE GQFN.

Application Note

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

