

IL-13/NC30, Human, Recombinant

Cat. No. : PCK362

General Information

Synonyms	NC30
Species	Human
Expression host	E.coli
Sequence	MGPVPPSTALRELIEELVNITQNQKAPLCNGSMVWSINLTAGMYCAALESLINVSGCSAIEKTQ RMLSGFCPHKVSAGQFSSLHVRDTKIEVAQFVKDLLLHLKKLFREGRFN with polyhistidine tag at the C-terminus
Accession	P35225.2
Tag	His-tag at the C-terminus
Mol mass	13.28 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce TF-1 cells proliferation. The ED50 for this effect is < 0.8 ng/mL. The specific activity of recombinant human IL-13 is approximately > 1 × 10 ⁶ IU/ mg.

Product feature

Purity	> 95% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

Interleukin 13 (IL-13) is a protein that in humans is encoded by the IL13 gene. IL-13 was first cloned in 1993 and is located on chromosome 5q31 with a length of 1.4kb. It has a mass of 13 kDa and folds into 4 alpha helical bundles. The secondary structural features of IL-13 are similar to that of Interleukin 4 (IL-4); however it only has 25% sequence homology to IL-4 and is capable of IL-4 independent signaling. IL-13 is a cytokine secreted by T helper type 2 (Th2) cells, CD4 cells, Natural killer T cell, Mast cell, Basophil cells, Eosinophil cells and Nuocyte cells. Interleukin-13 is a central regulator in IgE synthesis, goblet cell hyperplasia, mucus hypersecretion, airway hyperresponsiveness, fibrosis and chitinase up-regulation. It is a mediator of allergic inflammation and different diseases including asthma.

SDS-PAGE

