

**California Bioscience** 

83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone : +1.6268339877 Email : info@cali-bio.com

# **Product Datasheet**

| Product Name | Interleukin-13 Human Recombinant                                |
|--------------|---|
| Cata No      | CB500348  |
| Source       | Escherichia Coli.   |
| Synonyms     | NC30, ALRH, BHR1, P600, IL-13, MGC116786, MGC116788, MGC116789. |

## Description

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.

Interleukin-13 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 112 amino acids and having a molecular mass of 12 kDa.

The IL-13 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

## **Biological Activity**

The ED50 was determined by the dose dependent prolifiration of TF-1 cells and was found to be <

1ng/ml, corresponding to a specific activity of >1 x  $10^{6}$ .

#### Purity

Greater than 95% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

## Formulation

The protein (1mg/ml) was lyophilized with 1X PBS pH-7.2.

#### Stability

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

## Sequence

GPVPPSTALRELIEELVNITQNQKAPLCNGSMVWS INLTAGMYCAALESLINVS GCSAIEKTQRMLSGFCPHKVSAGQFSSLHVRDTK IEVAQFVKDLLLHLKKLFRE GRFN.