

### **Synonym**

IL13,ALRH,BHR1,MGC116786,MGC116788,MGC116789,P600,Interleukin-13

#### Source

Canine IL-13, His Tag(IL3-C52H4) is expressed from human 293 cells (HEK293). It contains AA Ser 19 - Arg 131 (Accession # NP\_001003384.1). Predicted N-terminus: Ser 19

### **Molecular Characterization**

IL-13(Ser 19 - Arg 131) NP\_001003384.1

Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 14.3 kDa. The protein migrates as 30-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### **Storage**

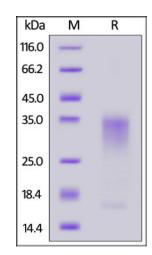
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### **SDS-PAGE**



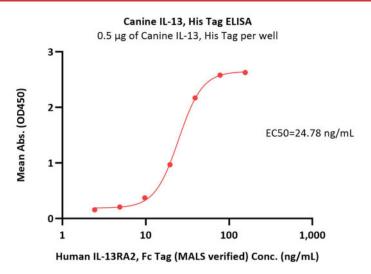
Canine IL-13, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

# **Bioactivity-ELISA**

## Canine IL-13 Protein, His Tag

Catalog # IL3-C52H4





Immobilized Canine IL-13, His Tag (Cat. No. IL3-C52H4) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human IL-13RA2, Fc Tag (MALS verified) (Cat. No. IL2-H5256) with a linear range of 5-39 ng/mL (QC tested).

## **Background**

Interleukin 13 (IL13) is also known as ALRH, BHR1and P600, is a single-chain glycosylated polypeptide, and is a cytokine critical in regulating inflammatory and immune responses. IL13 is secreted by many cell types, but especially by T helper type 2 (Th2) cells. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4Rα) and at least one of two known IL-13-specific binding chains. The functions of IL-13 overlap considerably with those of IL-4, especially with regard to changes induced on hematopoietic cells, but these effects are probably less important given the more potent role of IL-4. IL-13 induces matrix metalloproteinases (MMPs) as part of a mechanism that protects against excessive allergic inflammation that predisposes to asphyxiation. IL-13 induces many features of allergic lung disease, including airway hyperresponsiveness, goblet cell metaplasia and mucus hypersecretion, which all contribute to airway obstruction.

## **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.