

# **Synonym**

IL13RA2,CD213A2,CT19,IL-13R,IL13BP

# Source

Canine IL-13 R alpha 2, His Tag (IL2-C52H6) is expressed from human 293 cells (HEK293). It contains AA Ser 22 - Thr 338 (Accession # Q95LF0-1). Predicted N-terminus: Ser 22

### **Molecular Characterization**

IL-13RA2(Ser 22 - Thr 338) Q95LF0-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 40.3 kDa. The protein migrates as 45-55 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.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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**

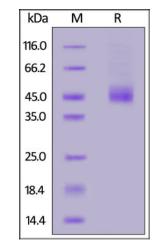
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

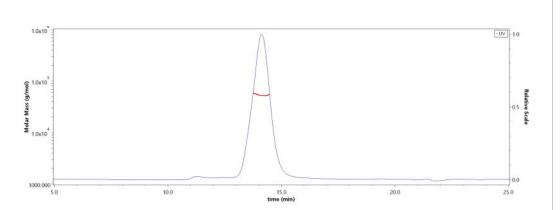
### **SDS-PAGE**



Canine IL-13 R alpha 2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

# **Bioactivity-ELISA**

# **SEC-MALS**



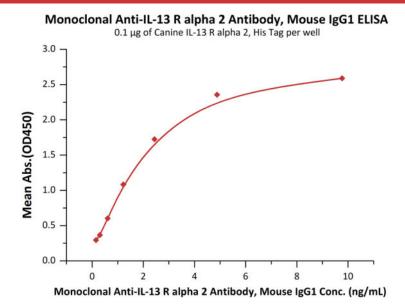
The purity of Canine IL-13 R alpha 2, His Tag (Cat. No. IL2-C52H6) is more than 90% and the molecular weight of this protein is around 50-60 kDa verified by SEC-MALS.

Report

# Canine IL-13 R alpha 2 Protein, His Tag (MALS verified)







Immobilized Canine IL-13 R alpha 2, His Tag (Cat. No. IL2-C52H6) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-IL-13 R alpha 2 Antibody, Mouse IgG1 with a linear range of 0.2-2 ng/mL (QC tested).

# **Background**

Interleukin-13 receptor subunit alpha-2 is also known as IL13R $\alpha$ 2, IL13R $\alpha$ 2 cluster of differentiation 213A2, CD213A2, CT19, IL-13R, IL13BP, and is a membrane bound protein that in humans is encoded by the IL13RA2 gene. IL13R $\alpha$ 2 is closely related to IL13R $\alpha$ 1, a subunit of the interleukin-13 receptor complex. This protein binds IL13 with high affinity, but lacks any significant cytoplasmic domain, and does not appear to function as a signal mediator. It is, however able to regulate the effects of both IL13 and IL4, despite the fact it is unable to bind directly to the latter. It is also reported to play a role in the internalization of IL13. IL13R $\alpha$ 2 is a component of the cell surface receptors, however, the majority exists in intracellular pools and in soluble form, and thus plays an opposite role as a potent IL13 antagonist compared with IL13R $\alpha$ 1. It also functions as an inhibitor of IL4-dependent pathway probably through the physical interaction between the short intracellular domain of and cytoplasmic domain of IL13R $\alpha$ 2 and the IL4R $\alpha$  chain. In spite of the failed STAT signaling function, IL13R $\alpha$ 2 dose induce TGF-beta production and fibrosis. Additionally, IL13R $\alpha$ 2has been reported to be abundantly and specifically overexpressed in glioblastoma multiforme.

# **Clinical and Translational Updates**

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