

# Canine IL-13 Protein, Ultra Low Endotoxin



Cat. No. IL1-DM213-UL

## Description

<b>Source</b>	Recombinant Canine IL-13 Protein is expressed from HEK293 with hFc (IgG1) tag at the C-terminus. It contains Ser19-Arg131.
<b>Accession</b>	Q9N0W9
<b>Molecular Weight</b>	The protein has a predicted MW of 38.38 kDa. Due to glycosylation, the protein migrates to 55-65 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

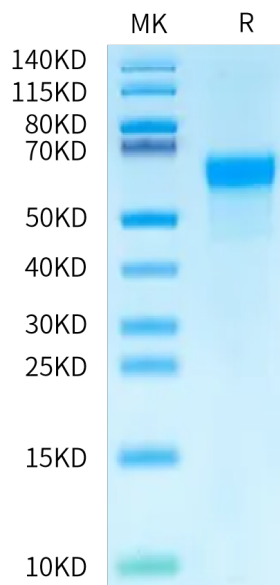
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Interleukin-13 (IL-13) is a monomeric 17 kDa immunoregulatory cytokine that plays a key role in the pathogenesis of allergy, cancer, and tissue fibrosis. It is secreted by several helper T cell subsets, NK cells, mast cells, eosinophils, basophils, and visceral smooth muscle cells. Inhibits inflammatory cytokine production. Synergizes with IL2 in regulating interferon-gamma synthesis. May be critical in regulating inflammatory and immune responses. Positively regulates IL31RA expression in macrophages (By similarity).

## Assay Data

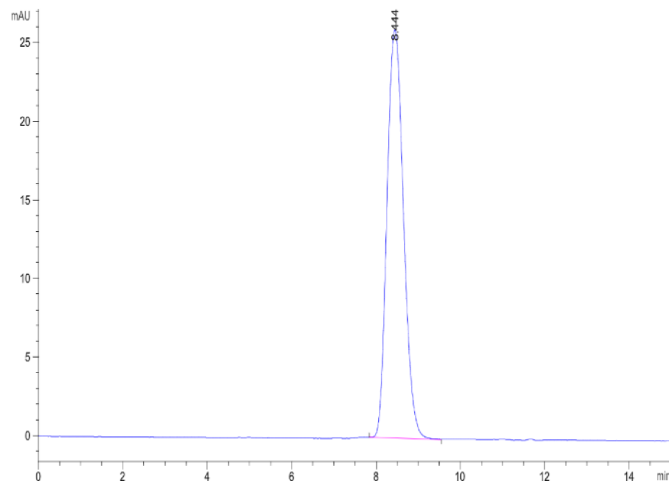
### Bis-Tris PAGE



Canine IL-13 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

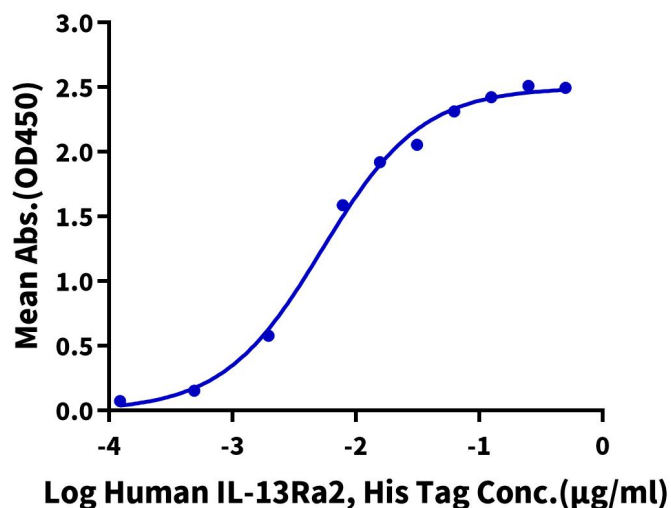


The purity of Canine IL-13 is greater than 95% as determined by SEC-HPLC.

ELISA Data

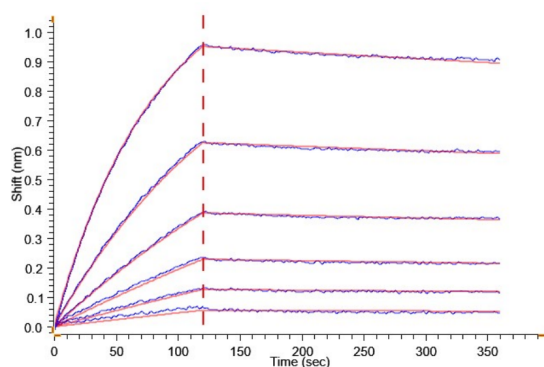
**Canine IL-13, hFc Tag ELISA**

0.1µg Canine IL-13, hFc Tag Per Well



Immobilized Canine IL-13, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human IL-13Ra2, His Tag with the EC50 of 5.3ng/ml determined by ELISA (QC Test).

BLI Data



Loaded Canine IL-13, hFc Tag on ProA-Biosensor can bind Human IL-13Ra2, His Tag with an affinity constant of 2.07 nM as determined in BLI assay .