

# Canine IL-6R / CD126 Protein (ECD, His Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 70117-D08H

## General Information

### Gene Name Synonym:

IL6R

### Protein Construction:

A DNA sequence encoding the canine IL6R (XP\_855105.1) (Met1-Pro365) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Canine

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** ≥ 95 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.

### Bio Activity:

**1. Measured by its binding ability in a functional ELISA.**  
**2. Immobilized canine IL6R-His (Cat: 70117-D08H) at 10 µg/mL (100 µL/well) can bind human IL6 (Cat: 10395-HNAE), the EC<sub>50</sub> of human IL6 is 5-50 ng/mL.**

### Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method.

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Leu 20

### Molecular Mass:

The recombinant canine IL6R consists 357 amino acids and predicts a molecular mass of 39.8 kDa.

### Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

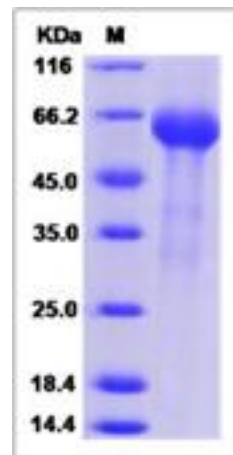
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Interleukin 6 receptor (IL-6R) also known as CD126 (Cluster of Differentiation 126) is a type I cytokine receptor. The low concentration of a soluble form of IL-6 receptor (sIL-6R) acts as an agonist of IL-6 activity. In the IL-6R/CD126/IL6R system, both a membrane-bound IL-6R and a sIL-6R protein are able to mediate IL-6 signals into the cells through the interaction of gp130. The resulting IL-6/sIL-6R protein complex is also capable of binding to gp130 and inducing intracellular signalling. Through this so-called 'trans-signalling' mechanism, IL-6 is able to stimulate cells that lack an endogenous mIL-6R. High levels of IL-6 and sIL-6R have been reported in several chronic inflammatory and autoimmune diseases as well as in cancer.

## References

Barill S, et al. (2000) The role of interleukin-6 and interleukin-6/interleukin-6 receptor-alpha complex in the pathogenesis of multiple myeloma. Eur Cytokine Netw. 11(4): 546-51.  
Kang KW, et al. (2007) Novel role of IL-6/sIL-6R signaling in the expression of inducible nitric oxide synthase (iNOS) in murine B16, metastatic melanoma clone F10.9, cells. Free Radic Biol Med. 42(2): 215-27.

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