# abcam

# Product datasheet

# Recombinant human IL-4 protein ab155733

# 4 Images

**Description** 

Product name Recombinant human IL-4 protein

Biological activity Measured by its binding ability in a functional ELISA. Immobilized ab155733 at 5 μg/mL (100

 $\mu L/well$ ) can bind Human IL-4 R alpha, Fc Tag with a linear range of 1-20 ng/mL .

**Purity** > 90 % SDS-PAGE.

ab155733 was lyophilised from 0.22  $\mu m$  filtered solution.

Endotoxin level < 0.100 Eu/µg
Expression system HEK 293 cells

Accession P05112

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

Sequence HKCDITLQEIIKTLNSLTEQKTLCTELTVTDIFAASKNTTEKE

**TFCRAAT** 

VLRQFYSHHEKDTRCLGATAQQFHRHKQLIRFLKRLDRNL WGLAGLNSCP VKEANQSTLENFLERLKTIMREKYSKCSS

Predicted molecular weight 15 kDa

Amino acids 25 to 153

#### **Specifications**

Our Abpromise guarantee covers the use of ab155733 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** ELISA

**Functional Studies** 

SDS-PAGE

Form Lyophilized

### **Preparation and Storage**

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#### Stability and Storage

Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.4

Constituents: 0.39% MES, 5% Trehalose, 1.17% Sodium chloride, PBS

Lyophilized from 0.22 µm filtered solution.

5-10% trehalose is commonly used for freeze drying, and after reconstitution, the trehalose is mostly about 3-5%

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### Reconstitution

Reconstitute with sterile deionized water to a concentration of 100 µg/ml.

#### **General Info**

#### **Function**

Participates in at least several B-cell activation processes as well as of other cell types. It is a costimulator of DNA-synthesis. It induces the expression of class II MHC molecules on resting B-cells. It enhances both secretion and cell surface expression of IgE and IgG1. It also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes.

#### Involvement in disease

Genetic variations in IL4 may be a cause of susceptibility to ischemic stroke (ISCHSTR) [MIM:601367]; also known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple genetic and environmental risk factors.

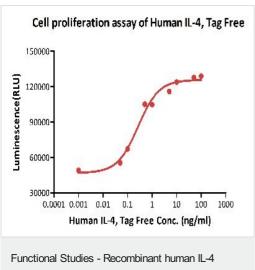
#### Sequence similarities

Belongs to the IL-4/IL-13 family.

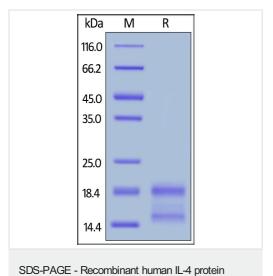
#### **Cellular localization**

Secreted.

# **Images**

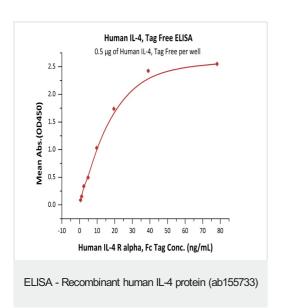


ab155733 stimulates the proliferation of TF-1 human erythroleukemic cells. The ED50 for this effect is 0.27-0.49 ng/mL

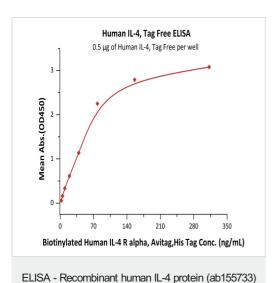


(ab155733)

Human IL-4 (Tag Free) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.



Immobilized Human IL-4 (ab155733) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human IL-4 R alpha, Fc Tag with a linear range of 1-20  $\eta$ g/mL.



Ab155733 at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human IL-4 R alpha (ab246188) with a linear range of 2-78 ng/mL.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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