# Rabbit IL12B / IL-12B Protein (His Tag)

Catalog Number: 65008-T08H



## **General Information**

### Gene Name Synonym:

IL12B

### **Protein Construction:**

A DNA sequence encoding the rabbit IL12B ( $XP\_002710393.1$ ) (Met1-Asn324) was expressed with a polyhistidine tag at the C-terminus.

Source: Rabbit

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 90 % as determined by SDS-PAGE

**Endotoxin:** 

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

Predicted N terminal: lle 23

#### **Molecular Mass:**

The recombinant rabbit IL12B consists 313 amino acids and predicts a molecular mass of 36.1 kDa.

### Formulation:

Lyophilized from sterile 50 mM Tris, 100 mM NaCl, pH 8.0.

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**

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

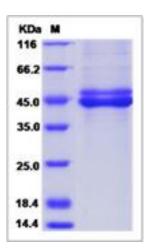
Store it under sterile conditions at  $-20^{\circ}$ C to  $-80^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

#### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

### SDS-PAGE:



# **Protein Description**

Subunit beta of interleukin 12 (also known as natural killer cell stimulatory factor 2, or cytotoxic lymphocyte maturation factor 2, p4) (IL12B) is a subunit of human interleukin 12. IL12B/IL-12B is a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. Interleukin 12 is a disulfide-linked heterodimer composed of the 4 kD cytokine receptor like subunit encoded by this gene, and a 35 kD subunit encoded by IL12A. IL12B/IL-12B is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. This cytokine has been found to be important for sustaining a sufficient number of memory/effector Th1 cells to mediate long-term protection to an intracellular pathogen. Overexpression of this gene was observed in the central nervous system of patients with multiple sclerosis (MS), suggesting a role of this cytokine in the pathogenesis of the disease. The promoter polymorphism of this gene has been reported to be associated with the severity of atopic and nonatopic asthma in children. IL12B/IL-12B associates with IL23A to form the IL-23 interleukin, an heterodimeric cytokine which functions in innate and adaptive immunity.

### References

1.Taoufik Y, et al. (1997) Human immunodeficiency virus gp120 inhibits interleukin-12 secretion by human monocytes: an indirect interleukin-10-mediated effect. Blood. 89 (8): 2842-8.

2.Fantuzzi L, et al. (1996) Induction of interleukin-12 (IL-12) by recombinant glycoprotein gp120 of human immunodeficiency virus type 1 in human monocytes/macrophages: requirement of gamma interferon for IL-12 secretion. J Virol. 70 (6): 4121-4.

3.Aragane Y, et al. (1995) IL-12 is expressed and released by human keratinocytes and epidermoid carcinoma cell lines. J Immunol. 153 (12): 5366-72.