# Mouse IL12A & IL12B (IL12A & IL12B Heterodimer) recombinant protein

Catalog Number: 504630



# **General Information**

## **Protein Construction**

A DNA sequence encoding the p35 subunit of mouse IL12, termed as IL12A (P43431) (Met 1-Ala 215) was fused with the Fc region of human IgG1 at the C-terminus, constructed the plasmid 1; A DNA sequence encoding the p40 subunit of mouse IL12, termed as IL12B (P43432) (Met 1-Ser 335) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the heterodimer was purified.

## **Organism**

Mouse

# **Expression Host**

**Human Cells** 

# **QC Testing**

## **Activity**

1. Measured by its binding ability in a functional ELISA. Immobilized mouse IL12RB2-His at 10  $\mu$ g/ml (100  $\mu$ l/well) can bind Mouse IL12A & IL12B Heterodimer Protein (Cat:CT024-M0208H). The EC<sub>50</sub> of Mouse IL12A & IL12B Heterodimer Protein (Cat:CT024-M0208H) is 50.2-117.2 ng/ml. 2. Measured in a cell proliferation assay using Anti-CD3-stimulated PBMC. The ED<sub>50</sub> for this effect is typically 0.2-1 ng/mL.

#### **Purity**

> 85 % as determined by SDS-PAGE

#### **Endotoxin**

< 1.0 EU per  $\mu g$  of the 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**

Arg 23 & Met 23

#### **Molecular Mass**

The recombinant mouse IL12 heterodimer of IL12A/IL12B, IL12A is Fc chimera, comprises 758 (434 +324) amino acids and has a calculated molecular mass of 85.9 (48.7 + 37.2) kDa. The apparent molecular mass of rh IL12 heterodimer is approximately 55 & 45 kDa respectively in SDS-PAGE under reducing conditions.

#### **Formulation**

Lyophilized from sterile PBS, pH 7.4

- 1. 5 % trehalose and mannitol are added as protectants before lyophilization.
- 2. Please contact us for any concerns or special requirements.

## **Usage Guide**

### Storage

Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

### Reconstitution

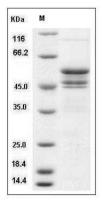
Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

## **SDS-PAGE**

# Mouse IL12A & IL12B (IL12A & IL12B Heterodimer) recombinant protein



Catalog Number: 504630



Mouse IL-12 (IL12A & IL12B Heterodimer) Protein SDS-PAGE