

# Mouse IL23 (IL23A & IL12B Heterodimer) recombinant protein



Catalog Number: 504794

## General Information

### Protein Construction

A DNA sequence encoding the mouse IL23A (Q9EQ14) (Met1-Ala196) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 1; A DNA sequence encoding mouse IL12B (P43432) (Met1-Ser335) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the mouse IL23 heterodimer was purified.

### Organism

Mouse

### Expression Host

Human Cells

## QC Testing

### Activity

Measured by its binding ability in a functional ELISA.

1. Measured by its ability to bind recombinant rat IL23R-Fc (Cat:504727) in a functional ELISA.
2. Immobilized mouse IL12Bh (m)+mIL23Ah at 10 µg/ml (100 µl/well) can bind human IL23R-Fc (Cat:504738). The EC<sub>50</sub> of human IL23R-Fc (Cat:504738) is 0.14-0.35 µg/ml.
3. Immobilized mouse IL12Bh (m)+mIL23Ah at 10 µg/ml (100 µl/well) can bind Cynomolgus IL23R-Fc (Cat:502630). The EC<sub>50</sub> of Cynomolgus IL23R-Fc (Cat:502630) is 0.05-0.11 µg/ml.
4. Immobilized mouse IL12Bh (m)+mIL23Ah at 10 µg/ml (100 µl/well) can bind biotinylated human IL12RB1-His (Cat:501974). The EC<sub>50</sub> of biotinylated human IL12RB1-His (Cat:501974) is 21.3-49.8 ng/mL.
5. Measured by its ability to induce IL17 secretion by mouse splenocytes. The ED<sub>50</sub> for this effect is 1-5 ng/mL.

### Purity

(33.1+31.5+32.9) % as determined by SDS-PAGE

### Endotoxin

< 1.0 EU per µg 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

Val 22 & Met 23

### Molecular Mass

The recombinant mouse IL23 (mouse IL23A&IL12B Heterodimer) comprises 510 (186+324) amino acids and has a calculated molecular mass of 58.3 (21.1+ 37.2) KDa. The apparent molecular mass of the recombinant protein is approximately 47,45 and 26 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.

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## SDS-PAGE

Mouse IL-23 (IL23A & IL12B Heterodimer)  
Protein SDS-PAGE

