

# Mouse IL-23 (IL23A & IL12B Heterodimer) Protein

Catalog Number: CT028-M08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

IL-23; p19

### 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.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### Bio Activity:

1. Immobilized Human IL23 Receptor hFc (Cat: 13840-H02H) at 2 µg/ml (100 µl/well) can bind Mouse IL-23 His (Cat: CT028-M08H), the EC<sub>50</sub> of Mouse IL-23 His is 50-250 ng/mL.

2. Measured by its ability to induce IL17 secretion by mouse splenocytes. The ED<sub>50</sub> for this effect is 0.05-1 ng/mL.

3. Loaded Recombinant Human IL-23 Receptor Protein, hFc Tag (Cat. No. 13840-H02H) on proA Biosensor, can bind Recombinant Mouse IL-23 Protein, His Tag (Cat. No. CT028-M08H) with an affinity constant of 6.13 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).

4. Loaded Recombinant Rat IL-23 Receptor Protein, hFc Tag (Cat. No. 80395-R02H) on proA Biosensor, can bind Recombinant Mouse IL-23 Protein, His Tag (Cat. No. CT028-M08H) with an affinity constant of 93.6 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).

### Endotoxin:

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

**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.

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°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:

