

# Human IL-23 (IL23A & IL12B Heterodimer) Protein (His Tag)

Catalog Number: CT012-H08H



Sino Biological  
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## General Information

### Gene Name Synonym:

IL-23; IL-23A; IL23; IL23P19; P19; SGRF

### Protein Construction:

A DNA sequence encoding the IL23A (NP\_057668.1) (Met1-Pro189) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 1; A DNA sequence encoding the p40 subunit of human IL12, termed as IL12B (NP\_002178.2) (Met1-Ser328) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the IL23 heterodimer was purified.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 90 % as determined by SDS-PAGE

### Bio Activity:

1. Measured by its ability to bind biotinylated recombinant human IL12RB1 in a functional ELISA. 2. Measured by its binding ability in a functional ELISA. Immobilized human IL23A-His+IL12B-His at 10 µg/ml (100 µl/well) can bind human IL23R-Fc (Cat:13840-H02H). The EC<sub>50</sub> of human IL23R-Fc (Cat:13840-H02H) is 0.28-0.66 µg/ml. 3. Measured by its binding ability in a functional ELISA. Immobilized human IL23A-His+IL12B-His at 10 µg/ml (100 µl/well) can bind Cynomolgus IL23R-Fc (Cat:90123-C02H). The EC<sub>50</sub> of Cynomolgus IL23R-Fc (Cat:90123-C02H) is 0.14-0.35 µg/ml. 4. Measured by its ability to induce IL17 secretion by mouse splenocytes. The ED<sub>50</sub> for this effect is 4-20 ng/mL.

### Endotoxin:

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

**Predicted N terminal:** Arg 20 & Ile 23

### Molecular Mass:

The recombinant IL23 heterodimer of human IL23A/IL12B comprises 498 (181+317) amino acids and has a calculated molecular mass of 56.3 (20.1+36.2) kDa. The apparent molecular mass of rhIL23 heterodimer is approximately 22.6 & 42.8 kDa respectively in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, 10% Glycerol, pH7.4.

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:

