

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

Catalog Number: CT048-H08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

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

Protein Construction:

A DNA sequence encoding the human IL23 complex composed of IL12B (NP_002178.2)(Met1-Ser328) and the mature form of human IL23A (NP_057668.1) (Arg20-Pro189) linked by a polypeptide linker was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

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

Bio Activity:

1. Measured by its ability to induce IL17 secretion by mouse splenocytes. The ED50 for this effect is 0.1-1ng/mL.
2. Immobilized Recombinant Human IL23R / IL23 Receptor Protein (ECD, Fc Tag) (Cat: 13840-H02H) at 2 µg/mL (100 µL/well) can bind Recombinant Human IL-23 (IL12B & IL23A Heterodimer) Protein (His Tag) (Cat: CT048-H08H), the EC50 is 15-60 ng/mL (QC tested).
3. Immobilized Recombinant Human IL-23 (IL12B & IL23A Heterodimer) Protein (His Tag) (Cat: CT048-H08H) at 2 µg/mL (100 µL/well) can bind Recombinant Human IL12RB1 Protein (ECD, Fc Tag) (Cat: 11674-H02H), the EC50 is 25-80 ng/mL (Routinely tested).
4. Immobilized Anti-IL-12 & IL-23 (P40)(Research Grade Ustekin*^{mab} Biosimilar) at 2 µg/mL (100 µL/well) can bind Recombinant Human IL-23 (IL12B & IL23A Heterodimer) Protein (His Tag) (Cat: CT048-H08H), the EC50 is 6-18 ng/mL (Routinely tested).
5. Immobilized Anti-IL-23 Antibody (P19) (Research Grade Risankiz*^{mab} Biosimilar) at 2 µg/mL (100 µL/well) can bind Recombinant Human IL-23 (IL12B & IL23A Heterodimer) Protein (His Tag) (Cat: CT048-H08H), the EC50 is 10-30 ng/mL (Routinely tested).
6. Recombinant Human IL-23 Receptor Protein, hFc Tag (Cat. No. 13840-H02H) captured on Protein A chip can bind Recombinant Human IL-23 Protein, His Tag (Cat. No. CT048-H08H) with an affinity constant of 0.6961 nM as determined in an SPR assay (Biacore T200) (Routinely tested).
7. Loaded Recombinant Human IL-23 Receptor Protein, hFc Tag (Cat. No. 13840-H02H) on proA Biosensor, can bind Recombinant Human IL-23 Protein, His Tag (Cat. No. CT048-H08H) with an affinity constant of 1.25 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).
8. Loaded Anti-IL-23 Antibody (P19) (Research Grade Risankiz*^{mab} Biosimilar) on ProA Biosensor, can bind Recombinant Human IL-23 Protein, His Tag (Cat. No. CT048-H08H) with an affinity constant of 0.075 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).
9. Loaded Anti-IL-12 & IL-23 (P40)(Research Grade Ustekin*^{mab} Biosimilar) on proA Biosensor, can bind Recombinant Human IL-23 Protein, His Tag (Cat. No. CT048-H08H) with an affinity constant of 0.568 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).
10. Recombinant Human IL-23 Receptor Protein, hFc Tag (Cat. No. 13840-H02H) captured on Protein A chip can bind Recombinant Human IL-23 Protein, His Tag (Cat. No. CT048-H08H) with an affinity constant of 0.550 nM as determined in an SPR assay (Biacore 8K) (Routinely tested).

Endotoxin:

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

Predicted N terminal: Ile 23

Molecular Mass:

The recombinant human IL23(IL23A&IL12B) consists of 502 amino acids and predicts a molecular mass of 55.8 kDa. The apparent molecular mass of human IL23 heterodimer is approximately 58.3 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:

