

## IL-23 Protein, Human, Recombinant (His), Biotinylated

## General Information

Synonyms:	IL23P19;IL23;P19;IL-23A;IL-23;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. The purified protein was biotinylated in vitro. Predicted N terminal: Ile 23
Species:	Human
Expression Host:	HEK293 Cells
Accession:	NP_002178.2&NP_057668.1
Molecular Weight:	55.8 kDa (predicted)

## QC Testing

Biological Activity:	<p>1. Immobilized Recombinant Human IL-23 (IL12B &amp; IL23A Heterodimer) Protein (His Tag), Biotinylated (Cat#TMPY-05247) at 2 µg/mL (100 µL/well) on Streptavidin precoated (2 µg/mL, 100 µL/well) can bind Recombinant Human IL23R/IL23 Receptor Protein (Fc Tag) (Cat#TMPY-03281), the EC50 is 10-30 ng/mL (QC tested).</p> <p>2. Immobilized Recombinant Human IL-23 (IL12B &amp; IL23A Heterodimer) Protein (His Tag), Biotinylated (Cat#TMPY-05247) at 2 µg/mL (100 µL/well) can bind Recombinant Human IL12RB1 Protein (Fc Tag) (Cat#TMPY-07074), the EC50 is 200-600 ng/mL (Routinely tested).</p> <p>3. Immobilized Anti-IL-12 &amp; IL-23 (P40)(Ustekinumab Biosimilar) at 2 µg/mL (100 µL/well) can bind Recombinant Human IL-23 (IL12B &amp; IL23A Heterodimer) Protein (His Tag) (Cat#TMPY-05247), the EC50 is 3-10 ng/mL (Routinely tested).</p> <p>4. Immobilized Anti-IL-23 Antibody (P19) (Risankizumab Biosimilar) at 2 µg/mL (100 µL/well) can bind Recombinant Human IL-23 (IL12B &amp; IL23A Heterodimer) Protein (His Tag) (Cat#TMPY-05247), the EC50 is 3-10 ng/mL (Routinely tested).</p> <p>5. Loaded Biotinylated Recombinant Human IL-23 Protein, His Tag (Cat#TMPY-05247) on SA Biosensor, can bind Recombinant Human IL-23 Receptor Protein, hFc Tag (Cat#TMPY-03281) with an affinity constant of 55.5 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).</p> <p>6. Loaded Anti-IL-12 &amp; IL-23 (P40)(Ustekinumab Biosimilar) on proA Biosensor, can bind Recombinant Human IL-23 Protein, His Tag, Amine-Labeled Biotinylated (Cat#TMPY-05247) with an affinity constant of 1.13 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).</p> <p>7. Loaded Anti-IL-23 Antibody (P19) (Risankizumab Biosimilar) on proA Biosensor, can bind Recombinant Human IL-23 Protein, His Tag, Amine-Labeled Biotinylated (Cat#TMPY-05247) with an affinity constant of 2.13 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).</p> <p>8. Recombinant Human IL-23 Receptor Protein, hFc Tag (Cat#TMPY-03281) captured on Protein A chip can bind Amine-Labeled Biotinylated Recombinant Human IL-23 Protein, His Tag (Cat#TMPY-05247) with an affinity constant of 1.260 nM as determined in an SPR assay (Biacore 8K) (Routinely tested).</p>
Purity:	> 90 % as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

### Preparation and Storage

#### Reconstitution:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

#### Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

#### Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

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