

## Recombinant Human IL-23 p19 protein(His Tag)

Catalog No. PKSH034108

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

<b>Synonyms</b>	IL-23;IL-23A;SGRF
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Arg 20-Pro 189
<b>Accession</b>	Q9NPF7
<b>Calculated Molecular Weight</b>	19.5 kDa
<b>Observed molecular weight</b>	17 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Measured by its ability to induce IL-17 secretion in mouse splenocytes. The ED <sub>50</sub> for this effect is < 0.5 ng/mL.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.1 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS,pH 8.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Background

Associates with IL12B to form the pro-inflammatory cytokine IL-23 that plays different roles in innate and adaptive immunity. Released by antigen-presenting cells such as dendritic cells or macrophages, binds to a heterodimeric receptor complex composed of IL12RB1 and IL23R to activate JAK2 and TYK2 which then phosphorylate the receptor to form a docking site leading to the phosphorylation of STAT3 and STAT4. This process leads to activation of several pathways including p38 MAPK or NF-kappa-B and promotes the production of pro-inflammatory cytokines such as interleukin-17A/IL17A. In turn, participates in the early and effective intracellular bacterial clearance. Promotes the expansion and survival of T-helper 17 cells, a CD4-positive helper T-cell subset that produces IL-17, as well as other IL-17-producing cells.

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