



Recombinant Protein Technical Manual

**Recombinant Human IL-23(IL23A&IL12B
Heterodimer) Protein (His Tag)(Active)**
RPES2281

Product Data:

Product SKU: RPES2281

Size: 5µg

Species: Human

Expression host: HEK293 Cells

Uniprot: Q9NPF7&NP_002178.2

Protein Information:

Molecular Mass: 56.3 (20.1 + 36.2) kDa

AP Molecular Mass: 22&45 kDa

Tag: C-His

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. The EC50 of human IL23R-Fc 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. The EC50 of Cynomolgus IL23R-Fc is 0.14-0.35 µg/ml. 4. Measured by its ability to induce IL17 secretion by mouse splenocytes. The ED50 for this effect is 4-20 ng/mL.

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

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

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: SGRF;IL-23p19;CLMF p40;IL2 subunit p40;NKSF2;IL-23;IL-23A;IL23P19;P19

Immunogen Information:

Sequence: Met 1-Pro189&Met 1-Ser 28

Background:

Interleukin 23 (IL-23) is a heterodimeric cytokine composed of two disulfide-linked subunits, a p19 subunit that is unique to IL-23, and a p40 subunit that is shared with IL-2. The p19 subunit has homology to the p35 subunit of IL-2, as well as to other single chain cytokines such as IL-6 and IL-1. The p40 subunit is homologous to the extracellular domains of the hematopoietic cytokine receptors. Although p19 is expressed by activated macrophages, dendritic cells, T cells, and endothelial cells, only activated macrophages and dendritic cells express p40 concurrently to produce IL-23. IL-23 has biological activities that are similar to, but distinct from IL-2. Both IL-2 and IL-23 induce proliferation and IFN-gamma production by human T cells. While IL-2 acts on both naive and memory human T cells, the effects of IL-23 is restricted to memory T cells.