

Recombinant Protein Technical Manual

Recombinant Human IL-23(IL23A&IL12B) Protein (His Tag)(Active) RPES1512

Product Data:

Product SKU: RPES1512 **Size:** 10μg

Species: Human Cells

Uniprot: Q9NPF7&P29460

Protein Information:

Molecular Mass: 55.2 kDa

AP Molecular Mass: 60-90 kDa

Tag: C-His

Bio-activity: Measured by its ability to induce STAT reporter activity in 293F human embryonic

kidney cells. The ED50 for this effect is 307.2 ng/ml.

Purity: > 95% as determined by reducing SDS-PAGE.

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at $4-7^{\circ}$ 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 a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

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

Application:

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

Immunogen Information:

Sequence: Arg20-Pro189lle23-Ser328

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 IL2. The p19 subunit has homology to the p35 subunit of IL2, as well as to other single chain cytokines such as IL-6 and IL1. 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 IL2. Both IL2 and IL-23 induce proliferation and IFN-gamma production by human T cells. While IL2 acts on both naive and memory human T cells, the effects of IL-23 is restricted to memory T cells.