

Recombinant Human IL-23 alpha & Mouse IL-12 beta Heterodimer (C-6His)

Catalog No. PKSH033859

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

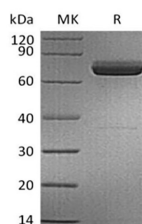
Description

Synonyms	SGRF;IL-23p19;CLMF p40;IL-12 subunit p40;NKSF2
Species	Human & Mouse
Expression Host	HEK293 Cells
Sequence	Arg20-Pro189&Met23-Ser335
Accession	Q9NPF7&P43432
Calculated Molecular Weight	56.9 kDa
Observed molecular weight	65-80 kDa
Tag	C-His
Bioactivity	Measured by its ability to induce STAT reporter activity in 293F human embryonic kidney cells. The ED ₅₀ for this effect is 357.68 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. 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.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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-12. The p19 subunit has homology to the p35 subunit of IL-12, as well

For Research Use Only

as to other single chain cytokines such as IL-6 and IL-11. 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-12. Both IL-12 and IL-23 induce proliferation and IFN-gamma production by human T cells. While IL-12 acts on both naive and memory human T cells, the effects of IL-23 is restricted to memory T cells.

For Research Use Only