Elabscience®

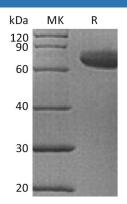
Recombinant Human IL-23(IL23A&IL12B) Protein (His Tag)

Catalog Number: PKSH033619

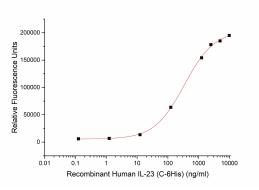
Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description | |
|----------------|------------------------------------------------------------------------------------------|
| Species | Human |
| Source | HEK293 Cells-derived Human IL-23 protein Arg20-Pro189Ile23-Ser328, with an C- |
| | terminal His |
| Calculated MW | 55.2 kDa |
| Observed MW | 60-90 kDa |
| Accession | P29460&Q9NPF7 |
| Bio-activity | Measured by its ability to induce STAT reporter activity in 293F human embryonic |
| | kidney cells. The ED_{50} for this effect is 300-900 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 $< -20^{\circ}$ 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. |
| | Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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. |

<u>Da</u>ta



> 95 % as determined by reducing SDS-PAGE.



Measured by its ability to induce STAT reporter activity in 293F human embryonic kidney cells. The ED₅₀ for this effect is 300-900 ng/ml.

Background

Elabscience®

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 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.