

Recombinant Human IL-23 p19 protein(His Tag)

Catalog Number: PKSH034108

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

Description

Species	Human
Source	E.coli-derived Human IL-23 p19 protein Arg 20-Pro 189, with an N-terminal His
Calculated MW	19.5 kDa
Observed MW	17 kDa
Accession	Q9NPF7
Bio-activity	Measured by its ability to induce IL-17 secretion in mouse splenocytes. The ED ₅₀ for this effect is <0.5 ng/mL.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 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 sterile PBS, pH 8.0. 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.

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.