

# Human IL-23, C-His Tag Protein

HA210909



<b>Product name:</b>	Human IL-23, C-His Tag
<b>Species reactivity:</b>	Human
<b>Bio-Activity:</b>	Testing in progress.
<b>Protein construction description:</b>	A DNA sequence encoding the human IL-23 P40 protein (P29460) (Ile 23-Ser 328) and human IL-23 P19 protein (Q9NPF7) (Arg 20- Pro 189) linked by a GSGSSRGGSGSGSGGGGSKL linker was expressed with a His tag at the C-terminus.

**Background:** This gene encodes a subunit of the heterodimeric cytokine interleukin 23 (IL23). IL23 is composed of this protein and the p40 subunit of interleukin 12 (IL12B). The receptor of IL23 is formed by the beta 1 subunit of IL12 (IL12RB1) and an IL23 specific subunit, IL23R. Both IL23 and IL12 can activate the transcription activator STAT4, and stimulate the production of interferon-gamma (IFNG). In contrast to IL12, which acts mainly on naive CD4(+) T cells, IL23 preferentially acts on memory CD4(+) T cells. 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.

<b>Purity:</b>	>95% as determined by SDS-PAGE.
<b>Endotoxin:</b>	Less than 1.0 EU per µg by the LAL method.
<b>Fragment region:</b>	IL23 P40 (23-328)-GSGSSRGGSGSGSGGGGSKL-IL23 P19 (20-189)
<b>Source:</b>	HEK293
<b>Accession:</b>	P29460/Q9NPF7
<b>Predicted molecular mass:</b>	56.4 kD
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
<b>Reconstitution:</b>	Reconstitute at 250 µg/ml in sterile water.
<b>Storage:</b>	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.

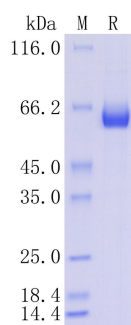
Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物  
HUABIO  
www.huabio.cn



**Fig1:** Protein on SDS-PAGE under reducing (R) condition.

---

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

---