# IL-23, His-Tag Recombinant

Catalog: 102096
Lot: 240105

## Product Information

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| **Description:** | Recombinant human IL-23 (interleukin 23), encompassing amino acids 20-189. The construct includes a C-terminal His-tag. This protein was affinity purified. |
| **Background:** | IL-23 (interleukin 23) is a cytokine involved in inflammation. It is composed of two subunits, IL-12-B (or IL-12p40) and IL-23A (or IL-23p19) and binds to the IL-23 receptor. It supports Th17 T cell maintenance, expansion and cytokine release, NK cell IFNγ (interferon γ) secretion and increased ADCC (antibody-dependent cellular cytotoxicity) and $CD4^+$ T cell proliferation. Il-23 is produced and secreted by activated dendritic cells, macrophages, B cells and γδ T cells. Excessive production of this cytokine can lead to autoimmune disorders, such as psoriasis, and even cancer. Ustekinumab (sold under the brand name STELARA®) and guselkumab (sold under the brand name Tremfya®) are two commercial monoclonal antibodies targeting IL-23, designed for the treatment of Crohn's disease, ulcerative colitis, plaque and arthritic psoriasis. The success of these two drugs indicates the relevance of this cytokine in human health and disease, making it a valuable therapeutic target. |
| **Species:** | Human |
| **Construct:** | IL-23 (20-189-His) |
| **Expression System:** | CHO |
| **Purity:** | >95%, as determined by SDS-PAGE and HPLC |
| **Format:** | Recombinant IL-23A was lyophilized from 0.2 µm filtered PBS solution pH 7.4 |
| **Endotoxin Level:** | Endotoxin content was assayed using a LAL gel clot method. Endotoxin level was found to be less than 0.1 ng/µg (1 EU/µg). |
| **MW:** | Due to glycosylation migrates as an approximately 28 kDa protein on SDS-PAGE |
| **Uniprot:** | Q9NPF7 |
| **Stability:** | The lyophilized protein is stable for at least 2 years from date of receipt at -20°C. |
| **Storage:** | -20°C |
| **Reconstitution:** | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers. |
| **Applications:** | Useful for cell culture-based assays. |