

## Product Information

### **MemDX™ Antibody Discovery - Human IL-23 alpha&IL-12 beta (20-189(IL23A)&23-328(IL12B)) Membrane Protein, Partial, His- Avi- Tag & Tag free, [Biotin]**

Cat. No.: **MP0314F**

This product is for research use only and is not intended for diagnostic use.

This membrane protein is Human IL-23 alpha&IL-12 beta (20-189(IL23A)&23-328(IL12B)). It has been tested in SDS-PAGE, ELISA, BLI, Cell based assay, SPR. We provide this protein to facilitate your membrane protein antibody discovery and development.

#### Product Specifications

##### Host Species

Human

##### Target Protein

IL-23 alpha&IL-12 beta

##### Protein Length

ECD

##### Molecular Weight

Calculated MW of 21.9 kDa (IL23A) & 34.7 kDa (IL12B). The predicted N-terminus is His (IL23A) & Ile 23 (IL12B). The reducing (R) protein migrates as 26 kDa (IL23A) & 40-45 kDa (IL12B) respectively due to glycosylation.

##### Sequence

AA Arg 20 - Pro 189 (IL23A) & Ile 23 - Ser 328 (IL12B) (Accession # Q9NPF7-1 (IL23A) & P29460-1 (IL12B)).

#### Product Description

##### Activity

Yes

##### Application

SDS-PAGE, ELISA, BLI, Cell based assay, SPR

##### Expression Systems

HEK293

##### Tag

IL23A is fused with an Avi tag, followed by His tag at the N-terminus. and subunit IL12B contains no tag.

##### Protein Format

Soluble

**Form**

LYOPH

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

**Endotoxin**

<1.0 EU/μg by the LAL method

**Conjugation**

Biotin

**Purity**

>95% as determined by SDS-PAGE.

**Buffer**

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

**Storage**

Stored at lyophilized form at -20°C or lower. Avoid repeated freeze-thaw cycles.

The antigen can be stable for 12 months in lyophilized form after storage at -20°C to -80°C, 3 months under sterile conditions after reconstitution after storage at -80°C.

**Target****Target Protein**

IL-23 alpha&IL-12 beta

**Full Name**

interleukin 23 subunit alpha&interleukin 12B

**Introduction**

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. & This gene encodes a subunit of interleukin 12, a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. Interleukin 12 is a disulfide-linked heterodimer composed of the 40 kD cytokine receptor like subunit encoded by this gene, and a 35 kD subunit encoded by IL12A. This cytokine is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. This cytokine has been found to be important for sustaining a sufficient number of memory/effector Th1 cells to mediate long-term protection to an intracellular pathogen. Overexpression of this gene was observed in the central nervous system of patients with multiple sclerosis (MS), suggesting a role of this cytokine in the pathogenesis of the disease. The promoter polymorphism of this gene has been reported to be associated with the severity of atopic and non-atopic asthma in children.

**Alternative Names**

IL-23 alpha & IL-12 beta

**Gene ID**

[51561](#); [3593](#)

**UniProt ID**

[Q9NPF7](#); [P29460](#)