

**IL-23 Antibody**  
Catalog # ASC10416**Specification**

---

**IL-23 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">Q9NPF7</a>
Other Accession	<a href="#">AAH66268</a> , <a href="#">42542809</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 21 kDa

Application Notes	<b>Observed: 23 kDa KDa</b> IL-23 antibody can be used for the detection of IL-23 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 20 µg/mL.
-------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**IL-23 Antibody - Additional Information**Gene ID **51561****Other Names**

IL-23 Antibody: P19, SGRF, IL-23, IL-23A, IL23P19, UNQ2498/PRO5798, Interleukin-23 subunit alpha, Interleukin-23 subunit p19, IL-23 subunit alpha, interleukin 23, alpha subunit p19

**Target/Specificity**

IL23A;

**Reconstitution & Storage**

Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

IL-23 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**IL-23 Antibody - Protein Information****Name** IL23A**Synonyms** SGRF**Function**

Associates with IL12B to form the pro-inflammatory cytokine IL-23 that plays different roles in innate and adaptive immunity (PubMed:&lt;a href="http://www.uniprot.org/citations/11114383" target="\_blank"&gt;11114383&lt;/a&gt;). 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 (PubMed:<a href="http://www.uniprot.org/citations/29287995" target="\_blank">29287995</a>, PubMed:<a href="http://www.uniprot.org/citations/32474165" target="\_blank">32474165</a>, PubMed:<a href="http://www.uniprot.org/citations/33606986" target="\_blank">33606986</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/12023369" target="\_blank">12023369</a>). In turn, participates in the early and effective intracellular bacterial clearance (PubMed:<a href="http://www.uniprot.org/citations/32474165" target="\_blank">32474165</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/17676044" target="\_blank">17676044</a>).

#### Cellular Location

Secreted. Note=Secreted upon association with IL12B

#### Tissue Location

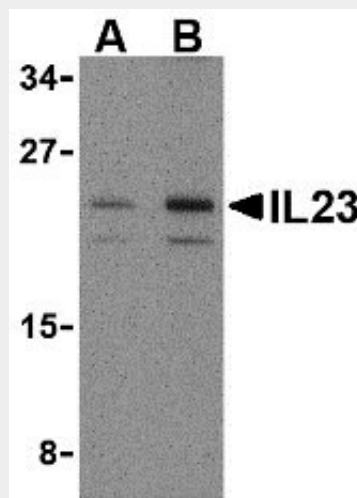
Secreted by activated dendritic and phagocytic cells and keratinocytes. Also expressed by dermal Langerhans cells (at protein level).

### IL-23 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

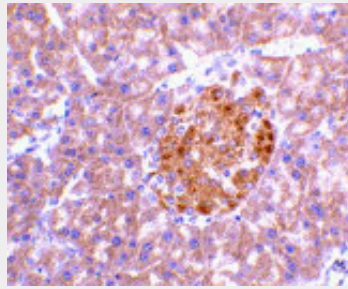
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### IL-23 Antibody - Images

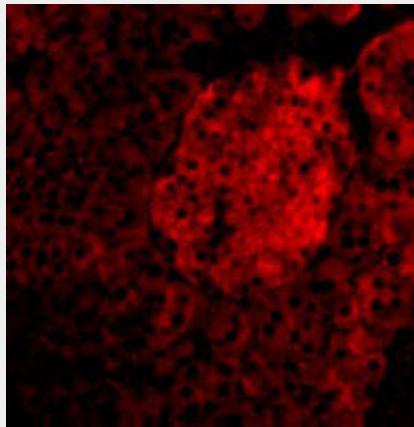


Western blot analysis of IL-23 in mouse pancreas tissue lysate with IL-23 antibody at (A) 1 and (B)

2 µg/mL.



Immunohistochemistry of IL-23 in mouse pancreas tissue with IL-23 antibody at 2 µg/mL.



Immunofluorescence of IL-23 in Mouse Pancreas tissue with IL-23 antibody at 20 µg/mL.

### **IL-23 Antibody - Background**

**IL-23 Antibody:** Like interleukin-27 (IL-27), IL-23 is a recently discovered member of the IL-6/IL-12 family of proinflammatory and immunoregulatory cytokines. It exists as a heterodimer composed of the IL-12p40 subunit and a novel p19 subunit. IL-23 is secreted by activated dendritic cells, macrophages, and monocytes. Its biological activities include enhancing the proliferation of memory T cells and the production of IFN- $\gamma$ , IL-12, and TNF- $\alpha$  from activated T cells, and can stimulate macrophages to produce TNF- $\alpha$  and nitric oxide. It has also been shown to possess potent anti-tumor and anti-metastatic activity in mouse models of cancer, suggesting a potential role for IL-23 in therapeutic treatment of cancer.

### **IL-23 Antibody - References**

Hunter CA. New IL-12-family members: IL-23 and IL-27, cytokines with divergent functions. *Nat. Rev. Immunol.* 2005; 5:521-31.

Oppmann B, Lesley R, Blom B, et al. Novel p19 protein engages IL-12p40 to form a cytokine, IL-23, with biological activities similar as well as distinct from IL-12. *Immunity* 2000; 13:715-25.

Sheibanie AF, Tadmori I, Jing H, et al. Prostaglandin ED induces IL-23 production in bone marrow-derived dendritic cells. *FASEB J.* 2004; 18:1318-20.

Pirhonen J, Matikainen S, Julkunen I. Regulation of virus-induced IL-12 and IL-23 expression in human macrophages. *J. Immunol.* 2002; 169:5673-8.