10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IL-23 Antibody
Catalog # ASC10416

Specification

IL-23 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q9NPF7
Other Accession	AAH66268, 42542809
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 21 kDa** **Observed: 23 kDa KDa**
Application Notes	**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:11114383). 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:32474165, PubMed:29287995, PubMed:33606986). 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:12023369). In turn, participates in the early and effective intracellular bacterial clearance (PubMed:32474165). 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:17676044).

Cellular Location
Secreted. Note=Secreted upon association with IL12B

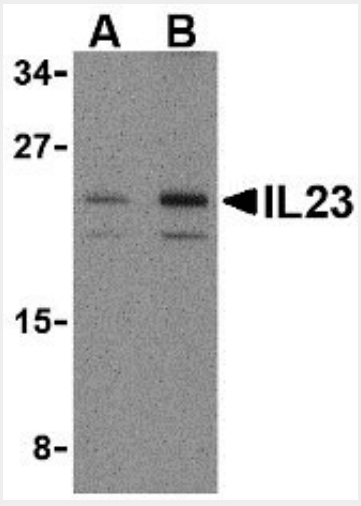
Tissue Location
Secreted by activated dendritic and phagocytic cells and keratinocytes. Also expressed by dermal Langerhans cells (at protein level).

IL-23 Antibody - Protocols

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

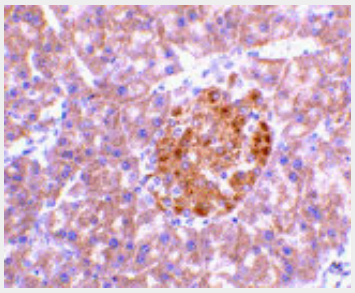
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL-23 Antibody - Images

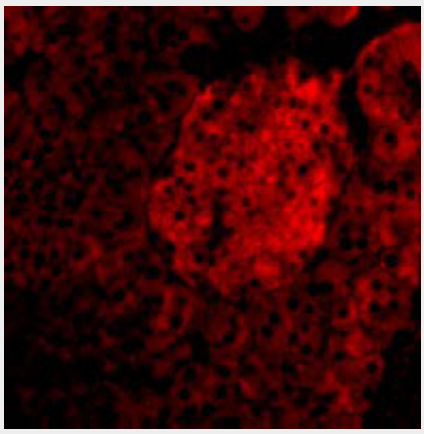


Western blot analysis of IL-23 in mouse pancreas tissue lysate with IL-23 antibody at (A) 1 and (B)

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-α from activated T cells, and can stimulate macrophages to produce TNF-α 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.