

IL-23 Antibody Catalog # ASC10416

Specification

IL-23 Antibody - Product Information

Application WB, IHC, IF
Primary Accession
Other Accession
AAH66268,
42542809

Reactivity
Host
Clonality
Isotype
Human, Mouse
Rabbit
Polyclonal
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 immunohistoc hemistry starting at 2 µg/mL. For i mmunofluorescen ce start at 20

μg/mL.

IL-23 Antibody - Additional Information

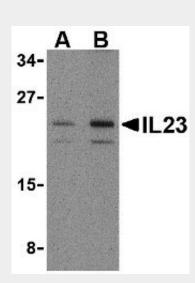
Gene ID 51561 Other Names

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

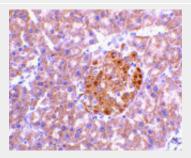
Target/Specificity IL23A;

Reconstitution & Storage

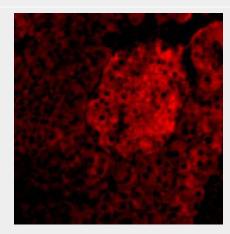
IL-23 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.



Western blot analysis of IL-23 in mouse pancreas tissue lysate with IL-23 antibody at (A) 1 and (B) 2 μ g/mL.



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



Immunofluorescence of IL-23 in Mouse





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 IL-23 interleukin, a heterodimeric cytokine which functions in innate and adaptive immunity. IL-23 may constitute with IL-17 an acute response to infection in peripheral tissues. IL-23 binds to a heterodimeric receptor complex composed of IL12RB1 and IL23R, activates the Jak-Stat signaling cascade, stimulates memory rather than naive T-cells and promotes production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may be responsible for autoimmune inflammatory diseases and may be important for tumorigenesis.

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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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 I. 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.