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IL-23 Antibody

Catalog # ASC10416

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9NPF7
Other Accession	AAH66268, 42542809
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	20730
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IL-23 antibody can be used for the detection of IL-23 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2 g/mL. For immunofluorescence start at 20 g/mL.

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℃ for three months and -20℃, 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.
Precautions	IL-23 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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:29287995,

	PubMed:32474165, 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).

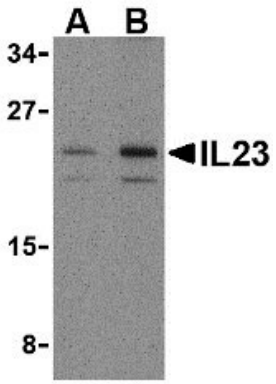
Background

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.

References

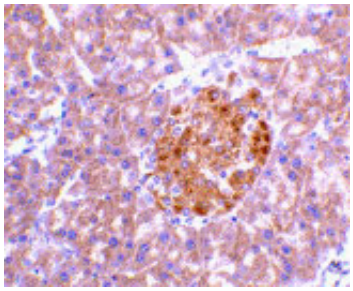
Hunter CA. New IL-12-family members: IL-23 and IL-27, cytokines with divergent functions. Nat. Rev. Immunol. 2005; 5:521-31.
Oppmann B, Lesley R, Blom B, et al. Novel p19 protein engages IL-12p40 to form a cytokine, IL-23, with biological activities similar as well as distinct from IL-12. Immunity 2000; 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.

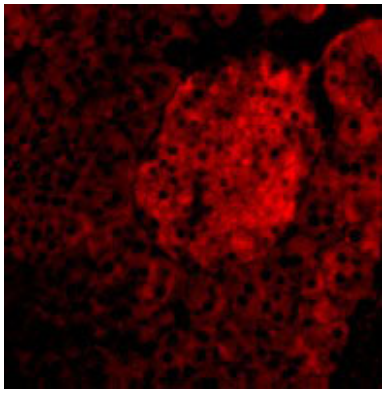
Images



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.