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IL23A Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22239c

Product Information

Application	WB, FC, E
Primary Accession	Q9NPF7
Reactivity	Human, Rat, Mouse
Predicted	Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB56752
Calculated MW	20730

Additional Information

Gene ID	51561
Other Names	Interleukin-23 subunit alpha, IL-23 subunit alpha, IL-23-A, Interleukin-23 subunit p19, IL-23p19, IL23A, SGRF
Target/Specificity	This IL23A antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 33-67 amino acids from the Central region of human IL23A.
Dilution	WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	IL23A Antibody (Center) 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).

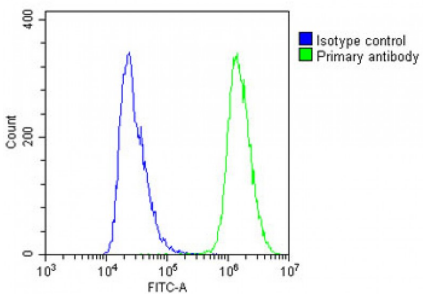
Background

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.

References

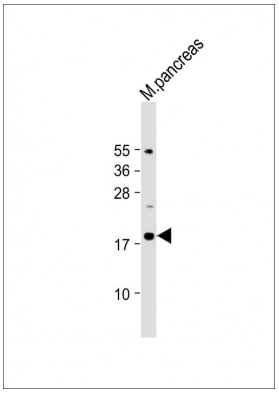
Oppmann B.,et al.Immunity 13:715-725(2000).
Hirata Y.,et al.Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases.
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).
Parham C.,et al.J. Immunol. 168:5699-5708(2002).
Pirhonen J.,et al.J. Immunol. 169:5673-5678(2002).

Images



Overlay histogram showing A431 cells stained with AP22239c(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

Anti-IL23A Antibody (Center) at 1:2000 dilution + Mouse pancreas lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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