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

Anti-IL23 Picoband Antibody

Catalog # ABO12921

Product Information

Application	WB, E
Primary Accession	Q9NPF7
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for IL23 detection. Tested with WB, Direct ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	20730
Application Details	Western blot, 0.1-0.5 □g/ml Direct ELISA, 0.1-0.5 □g/ml
Subcellular Localization	Secreted.
Tissue Specificity	Secreted by activated dendritic and phagocytic cells and keratinocytes. Also expressed by dermal Langerhans cells (at protein level).
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg NaN_3.
Immunogen	E. coli-derived human IL23 recombinant protein (Position: R20-R178).
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C; for one year. After r˚Constitution, at 4˚C; for one month. It˚Can also be aliquotted and stored frozen at -20˚C; for a longer time. Avoid repeated freezing and thawing.

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

Interleukin-23 subunit alpha is a protein that in humans is encoded by the IL23A gene. IL-23, also known as Interleukin-23 subunit alphainin (IL23A), is a heterodimeric cytokine consisting of two subunits, one called p40, which is shared with another cytokine, IL-12, and another called p19 (the IL-23 alpha subunit). The International Radiation Hybrid Mapping Consortium mapped the IL-23 gene to chromosome 12. IL-23 is an important part of the inflammatory response against infection. It promotes upregulation of the matrix metalloprotease MMP9, increases angiogenesis and reduces CD8+ T-cell infiltration.

Images



Figure 1. Western blot analysis of IL23 using anti-IL23 antibody (ABO12921).

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