

IL-16 Antibody

Catalog # ASC10832

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q14005
Other Accession	AAQ86961 , 36953836
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	141752
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IL-16 antibody can be used for detection of IL-16 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	3603
Other Names	Pro-interleukin-16, Interleukin-16, IL-16, Lymphocyte chemoattractant factor, LCF, IL16
Target/Specificity	IL16; This antibody will only detect the NIL-16 isoform.
Reconstitution & Storage	IL-16 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.
Precautions	IL-16 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IL16
Function	Interleukin-16 stimulates a migratory response in CD4+ lymphocytes, monocytes, and eosinophils. Primes CD4+ T-cells for IL-2 and IL-15 responsiveness. Also induces T-lymphocyte expression of interleukin 2 receptor. Ligand for CD4. Isoform 3 is involved in cell cycle progression in T-cells. Appears to be involved in transcriptional regulation of SKP2 and is probably part of a transcriptional repression complex on the core promoter of the SKP2 gene. May act as a scaffold for GABPB1 (the DNA- binding subunit the GABP transcription factor complex) and HDAC3 thus maintaining transcriptional repression and blocking cell cycle progression in resting

T-cells.

Cellular Location

[Interleukin-16]: Secreted. [Isoform 3]: Cytoplasm. Nucleus.

Tissue Location

[Isoform 3]: Expressed in hemopoietic tissues, such as resting T-cells, but undetectable during active T-cell proliferation

Background

IL-16 Antibody: IL-16 was initially identified as a chemotactic cytokine, but is now known to possess a wide range of activities. Later studies have more fully characterized IL-16 as an immunomodulatory cytokine that contributes to the regulatory process of CD4⁺ T cell recruitment and activation at sites of inflammation in association with asthma and several autoimmune diseases. The precursor of IL-16 (pro-IL-16) is thought to be cleaved towards the C-terminal region by Caspase-3, releasing a 20 kDa active form that binds to and signals through CD4. Besides acting as a chemotactic cytokine, IL-16 is thought to also be involved in the regulation of T cell proliferation and multiple infectious, immune-mediated, and autoimmune inflammatory disorders including irritable bowel syndrome, systemic lupus erythematosus, and neurodegenerative disorders. At least two isoforms of IL-16 are known to exist; the longer isoform (also known as NIL-16) is detected only in neurons of the cerebellum and hippocampus.

References

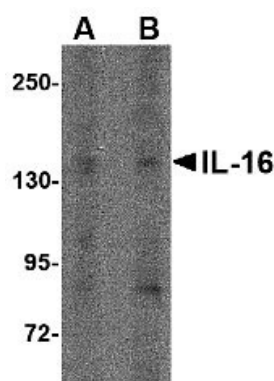
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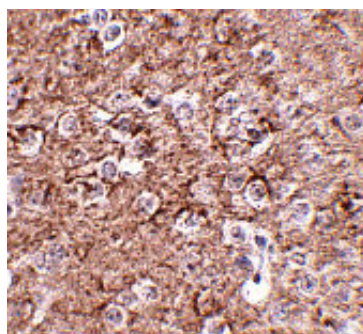
Zhang Y, Center DM, Wu DM, et al. Processing and activation of pro-interleukin-16 by caspase-3. *J. Biol. Chem.* 1998; 273:1144-9.

Maciaszek JW, Parada NA, Cruikshank WW, et al. IL-16 represses HIV-1 promoter activity. *J. Immunol.* 1997; 158:5-8.

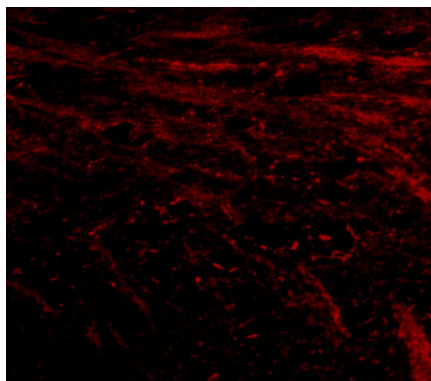
Images



Western blot analysis of IL-16 in rat brain tissue lysate with IL-16 antibody at (A) 1 μ g/ml and (B) 2 μ g/mL.



Immunohistochemistry of IL-16 in mouse brain tissue with IL-16 antibody at 2.5 μ g/mL.



Immunofluorescence of IL-16 in mouse brain tissue with IL-16 antibody at 20 µg/mL.

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