

**IL-16 Antibody**  
**Catalog # ASC10832****Specification**

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**IL-16 Antibody - Product Information**

Application	WB, IHC-P, IF, E
Primary Accession	<a href="#">Q14005</a>
Other Accession	<a href="#">AAQ86961</a> , <a href="#">36953836</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	IL-16 antibody can be used for detection of IL-16 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

**IL-16 Antibody - Additional Information**Gene ID **3603****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.

**IL-16 Antibody - 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.

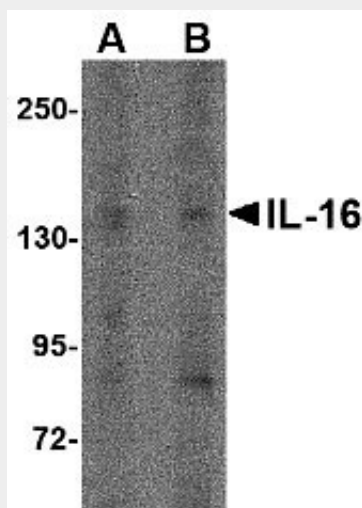
**Tissue Location**

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

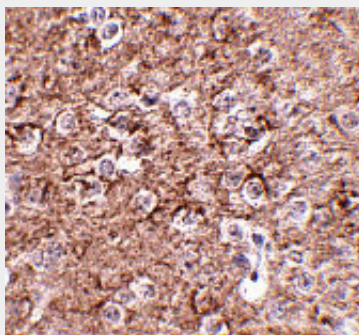
**IL-16 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

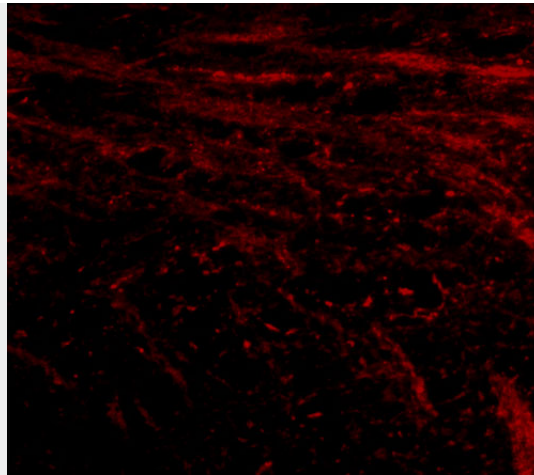
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**IL-16 Antibody - Images**

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



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



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

### **IL-16 Antibody - 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.

### **IL-16 Antibody - References**

Cruikshank WW, Center DM, Nisar N, et al. Molecular and functional analysis of a lymphocyte chemoattractant factor: association of biologic function with CD expression. *Proc. Natl. Acad. Sci. USA*1994; 91:5109-13.  
Interleukin-16. Cruikshank WW, Kornfeld H, and Center DM. *J. Leukoc. Biol.*2000; 67:757-66.  
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.