

# IL-16 Antibody

Catalog # ASC10837

### Specification

# IL-16 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes IF <u>Q14005</u> <u>AAQ86961</u>, <u>3603</u> Human, Mouse, Rat Rabbit Polyclonal IgG IL-16 antibody can be used for detection of IL-16 by Western blot at 2.5 - 5 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

Target/Specificity

3603

IL-16 antibody was raised against a 14 amino acid synthetic peptide near the amino terminus of human IL-16.<br><br><br>The immunogen is located within amino acids 140 - 190 of IL-16.

#### **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** 

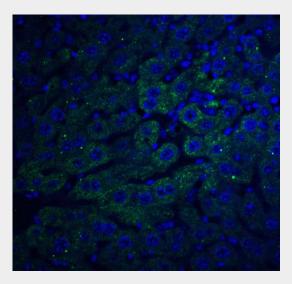
[Isoform 3]: Expressed in hemopoietic tissues, such as resting T-cells, but undetectable during active T-cell proliferation

### IL-16 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# IL-16 Antibody - Images



Immunofluorescence of F1A alpha in mouse liver tissue with F1A alpha 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. USA1994; 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.