

# CHI3L1 / YKL-40 Antibody

Rabbit Polyclonal Antibody Catalog # ALS17175

## **Specification**

### CHI3L1 / YKL-40 Antibody - Product Information

Application IHC-P, WB
Primary Accession P36222
Other Accession 1116

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 42625

### CHI3L1 / YKL-40 Antibody - Additional Information

#### **Gene ID 1116**

### **Other Names**

CHI3L1, 39 kDa synovial protein, ASRT7, Cartilage glycoprotein 39, CGP-39, Chitinase-3-like protein 1, gp39, HCGP-39, HCGP-3P, GP-39, HC-gp39, YKL40, YYL-40, YKL-40

### Target/Specificity

Human CHI3L1 / YKL-40

## **Reconstitution & Storage**

PBS, pH 7.3, 0.02% sodium azide, 50% glycerol. Long term: -80°C; Short term: -20°C. Avoid freeze-thaw cycles.

### **Precautions**

CHI3L1 / YKL-40 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# CHI3L1 / YKL-40 Antibody - Protein Information

# Name CHI3L1

### **Function**

Carbohydrate-binding lectin with a preference for chitin. Has no chitinase activity. May play a role in tissue remodeling and in the capacity of cells to respond to and cope with changes in their environment. Plays a role in T-helper cell type 2 (Th2) inflammatory response and IL-13-induced inflammation, regulating allergen sensitization, inflammatory cell apoptosis, dendritic cell accumulation and M2 macrophage differentiation. Facilitates invasion of pathogenic enteric bacteria into colonic mucosa and lymphoid organs. Mediates activation of AKT1 signaling pathway and subsequent IL8 production in colonic epithelial cells. Regulates antibacterial responses in lung by contributing to macrophage bacterial killing, controlling bacterial dissemination and augmenting host tolerance. Also regulates hyperoxia- induced injury, inflammation and epithelial



apoptosis in lung.

#### **Cellular Location**

Secreted, extracellular space. Cytoplasm. Cytoplasm, perinuclear region. Endoplasmic reticulum

#### **Tissue Location**

Present in activated macrophages, articular chondrocytes, synovial cells as well as in liver. Very low or undetectable expression in non-inflammatory colon. Undetectable in muscle tissues, lung, pancreas, mononuclear cells, or fibroblasts

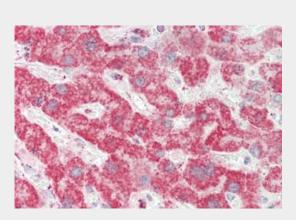
Volume 50 µl

## CHI3L1 / YKL-40 Antibody - Protocols

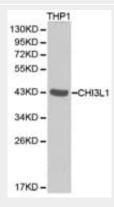
Provided below are standard protocols that you may find useful for product applications.

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

# CHI3L1 / YKL-40 Antibody - Images



Human Liver: Formalin-Fixed, Paraffin-Embedded (FFPE)





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Western blot analysis of extracts of THP1 cells, using CHI3L1 antibody.

# CHI3L1 / YKL-40 Antibody - Background

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Hakala B.E., et al.J. Biol. Chem. 268:25803-25810(1993). Rehli M., et al. Genomics 43:221-225(1997). Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBI databases.