

CHI3L1 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP12913c

Specification

CHI3L1 Antibody (Center) Blocking peptide - Product Information

Primary Accession

P36222

CHI3L1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 1116

Other Names

Chitinase-3-like protein 1, 39 kDa synovial protein, Cartilage glycoprotein 39, CGP-39, hCGP-39, YKL-40, CHI3L1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CHI3L1 Antibody (Center) Blocking peptide - 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

CHI3L1 Antibody (Center) Blocking peptide - Protocols

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

Blocking Peptides

CHI3L1 Antibody (Center) Blocking peptide - Images

CHI3L1 Antibody (Center) Blocking peptide - Background

Chitinases catalyze the hydrolysis of chitin, which is anabundant glycopolymer found in insect exoskeletons and fungal cellwalls. The glycoside hydrolase 18 family of chitinases includeseight human family members. This gene encodes a glycoprotein member the glycosyl hydrolase 18 family. The protein lacks chitinaseactivity and is secreted by activated macrophages, chondrocytes, neutrophils and synovial cells. The protein is thought to play arole in the process of inflammation and tissue remodeling.

CHI3L1 Antibody (Center) Blocking peptide - References

Wu, A.C., et al. Am. J. Respir. Crit. Care Med. 182(7):884-889(2010)Lee, H., et al. Clin. Biochem. 43(15):1195-1200(2010)Park, J.A., et al. J. Biol. Chem. 285(39):29817-29825(2010)Zhang, W., et al. Cancer 116(11):2688-2697(2010)Bonneh-Barkay, D., et al. J Neuroinflammation 7, 34 (2010):