

# Datasheet for ABIN2173010 anti-CHI3L1 antibody (AA 301-383)





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#### Overview

Quantity:	100 μL
Target:	CHI3L1
Binding Specificity:	AA 301-383
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHI3L1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunocytochemistry (ICC), ELISA, Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

# **Product Details**

Immunogen:	KLH conjugated synthetic peptide derived from Human CHI3L1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Rat
Purification:	Purified by Protein A.

## **Target Details**

Target:	CHI3L1			
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# **Target Details**

Alternative Name:	CHI3L1 (CHI3L1 Products)
Target Type:	Viral Protein
Background:	Synonyms: GP39, ASRT7, GP-39, YKL4, CGP-39, YKL-4, YYL-4, HC-gp39, HCGP-3P, hCGP-39,
	Chitinase-3-like protein 1, 39 kDa synovial protein, Cartilage glycoprotein 39, CHI3L1
	Background: 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.
Gene ID:	1116
UniProt:	P36222

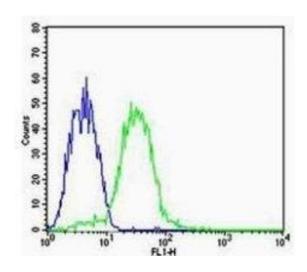
## **Application Details**

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Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200
	ICC 1:100-500
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	1 μg/μL

#### Handling

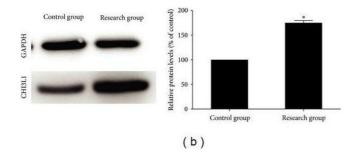
Buffer:	0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

#### **Images**



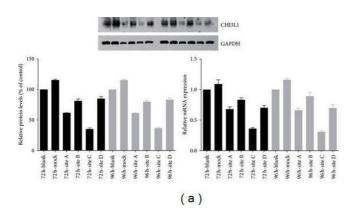
#### **Flow Cytometry**

Image 1. HepG2 cells probed with Rabbit Anti-CHI3L1 Polyclonal Antibody Alexa Fluor 488 Secondary



### **Western Blotting**

Image 2. (a) Immunohistochemical staining of CHI3L1 on sections of arterial vessels in control group and research group. The expression of CHI3L1 was increased in the arterial specimens of CAD patients in research group. (scalebars = 100μm) (b) Western blot analysis and quantification of CHI3L1 protein expression in control group and research group. The levels of CHI3L1 protein expression were higher in research group than in control group. \*P < 0.05 versus control group. (c) Quantitative analysis of arterial CHI3L1 expression in research group patients according to gender, smoking, hypertension, and diabetes mellitus. The expression levels of CHI3L1 were elevated in smokers and patients with hypertension or



diabetes mellitus, whereas gender had no significant effect. \*P < 0.05. (d) Relationship between arterial CHI3L1 expression and coronary severity scores. The arterial CHI3L1 expression levels were significantly correlated with coronary severity Gensini scores. Each point represents one patient. - figure provided by CiteAb. Source: PMID24729664

#### **Western Blotting**

Image 3. (a) Target site screening for CHI3L1 by western blot analysis and real-time RT-PCR in RAW264.7 cells. The RAW264.7 cell line was transfected with lentivirus expressing different CHI3L1 siRNAs, and gene silencing analysis showed that site C lentivirus was the most effective vector in blocking CHI3L1 expression. (b) immunohistochemical staining of CHI3L1 and electron microscopy in control group and silenced group. In the control group CHI3L1 expression (arrow) could be demonstrated according to the immunohistochemical staining. However, little CHI3L1 was expressed in silenced group. For electron microscopy, in control group most of the endothelial cells denudated and there were a large number of lipid granules (LG) under the basement membrane (BM) in the vessel wall. The atherosclerotic plaques were occupied with necrotic particles (NP), calcification crystals (CC), and cellular debrises. However, in silenced group the number of lipid granules was relatively decreased. (scalebars = 100µm) (c) Western blot analysis and quantification of CHI3L1 protein expression in control group and silenced group. The levels of CHI3L1 protein expression were higher in control group than in silenced group. (d) Realtime RT-PCR quantification of CHI3L1 mRNA expression in control group and silenced group. \*P < 0.05 versus control group. - figure provided by CiteAb. Source: PMID24729664

Please check the product details page for more images. Overall 4 images are available for ABIN2173010.