# abcam

### Product datasheet

## Recombinant human YKL-40/CHI3L1 protein ab182706

2 References 1 Image

Decembration

Description		
Product name	Recombinant human YKL-40/CHI3L1 protein	
Biological activity	Measured by the ability of the immobilized protein to support the adhesion of FaDu human squamous cell carcinoma cells. When 50000 cells per well are added to rhCHI3-L1 coated plate, cell adhesion is enhanced in a dose dependent manner. The ED <sub>50</sub> for this effect is typically $0.8 - 3.5 \mu g/ml$ .	
Purity	> 95 % SDS-PAGE. Purified by Immobilized metal affinity chromatography.	
Endotoxin level	< 1.000 Eu/µg	
Expression system	HEK 293 cells	
Accession	<u>P36222</u>	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence		<ul> <li>YKLVCYYTSWSQYREGDGSCFPDALDRFLCTHIIYSFANIS</li> <li>NDHIDTWEW NDVTLYGMLN</li> <li>TLKNRNPNLKTLLSVGGWNFGSQRFSKIASNTQSRRTF</li> <li>IKSVPPFLRTHGFDGLDLAWLY</li> <li>PGRRDKQHFTTLIKEMKAEFIKEAQP</li> <li>GKKQLLLSAALSAGKVTIDSSYDIAKISQHLDFI</li> <li>SIMTYDFHGAWRGT</li> <li>TGHHSPLFRGQEDASPDRFSNTDYAVGYMLRLGAPASKL</li> <li>VMGIPTF GR</li> <li>SFTLASSETGVGAPISGPGIPGRFTKEAGTLAYYEICDFLR</li> <li>GATVHRILG QQVPYATK</li> <li>GNQWVGYDDQESVKSKVQYLKDRQLAGAMVWALDLDD</li> <li>FQG SFCGQDLRFPLTNAIKDALA AT</li> </ul>
Predicted molecular weight	41 kDa including tags	
Amino acids	22 to 383	
Tags	His tag C-Terminus	
Additional sequence information	Mature protein. NP_001267.	

#### Specifications

Our <u>Abpromise guarantee</u> covers the use of ab182706 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies
	SDS-PAGE
Form	Lyophilized
Additional notes	Previously labelled as CHI3L1.
Preparation and Storage	
Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. For long term storage it is recommended to add a carrier protein on reconstitution (0.1% HSA or BSA).
	pH: 7.40 Constituents: 95% PBS, 5% Trehalose
	This product is an active protein and may elicit a biological response in vivo, handle with caution
Reconstitution	Reconstitute with sterile deionized water to a concentration of 200 $\mu$ g/ml.
General Info	
Function	Carbohydrate-binding lectin with a preference for chitin. May play a role in defense against pathogens, or in tissue remodeling. May play an important role in the capacity of cells to respon to and cope with changes in their environment.
Tissue specificity	Present in activated macrophages, articular chondrocytes, synovial cells as well as in liver. Undetectable in muscle tissues, lung, pancreas, mononuclear cells, or fibroblasts.
Involvement in disease	A genetic variation in CHI3L1 is associated with susceptibility to asthma-related traits type 7 (ASRT7) [MIM:611960]. Asthma-related traits include clinical symptoms of asthma, such as coughing, wheezing and dyspnea, bronchial hyperresponsiveness (BHR) as assessed by methacholine challenge test, serum IgE levels, atopy, and atopic dermatitis.
	(ASRT7) [MIM:611960]. Asthma-related traits include clinical symptoms of asthma, such as coughing, wheezing and dyspnea, bronchial hyperresponsiveness (BHR) as assessed by
Involvement in disease Sequence similarities Post-translational modifications	(ASRT7) [MIM:611960]. Asthma-related traits include clinical symptoms of asthma, such as coughing, wheezing and dyspnea, bronchial hyperresponsiveness (BHR) as assessed by methacholine challenge test, serum IgE levels, atopy, and atopic dermatitis.

Images



DTT-reduced (+) SDS-PAGE analysis of ab182706, staining overnight with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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