## Recombinant Mouse CHI3L1/YKL40 protein (His Tag)

Catalog Number: PDEM100244



Description			
Species	Mouse		
Mol_Mass	39.5 kDa		
Accession	Q61362		
<b>Bio-activity</b>	Not validated for activity		
Properties			
Purity	> 95% as determined by reducing SDS-PAGE.		
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method		
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80		
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of		
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.		
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.		
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%		
	Mannitol.		
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of		
	0.5 mg/mL. Concentration is measured by UV-Vis.		
Data			

Note: Centrifuge before opening to ensure complete recovery of vial contents.

KDa	М	R	
80	_	-	
60	-	-	
40	-		1
30	-	-	
			82
20	_	-	
12			

> 95 % as determined by reducing SDS-PAGE.

## Background

Chitinase-3-like protein 1 (CHI3L1) is a secreted heparin-binding glycoprotein whose expression is associated with vascular smooth muscle cell migration. CHI3L1 is expressed at high levels in postconfluent nodular VSMC cultures and at low levels in subconfluent proliferating cultures. CHI3L1 is a tissue-restricted, chitin-binding lectin and member of glycosyl hydrolase family 18. In contrast to many other monocyto / macrophage markers, its expression is absent in monocytes and strong induced during late stages of human macrophage differentiation. Elevated levels of CHI3L1 are associated with disorders exhibiting increased connective tissue turnover, such as rheum atoid, arthritis, osteoarthritis, scleroderma, and cirrhosis of liver, but is produced in cartilage from old donors or patiens with osteoarthritis. CHI3L1 is abnormally expressed in the hippocampus of subjects with schizophrenia and may be involved in the cellular response to various environmental events that are reported to increase the risk of schizophrenia.

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