

For Research Use Only

# CSPG4/NG2 Polyclonal antibody

Catalog Number: 55027-1-AP **24 Publications**



## Basic Information

<b>Catalog Number:</b> 55027-1-AP	<b>GenBank Accession Number:</b> NML_001897	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 800 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1464	<b>Recommended Dilutions:</b> WB 1:1000-1:4000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q6UVK1	
<b>Isotype:</b> IgG	<b>Full Name:</b> chondroitin sulfate proteoglycan 4	
	<b>Calculated MW:</b> 251 kDa	
	<b>Observed MW:</b> 240-250 kDa, 450kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : A375 cells,
<b>Cited Applications:</b> WB, FC, IHC	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, rat, mouse	

## Background Information

CSPG4, also named as HMW-MAA, MCSP, MCSPG, MEL-CSPG, MSK16 and NG2, is a proteoglycan playing a role in cell proliferation and migration which stimulates endothelial cells motility during microvascular morphogenesis. CSPG4 may inhibit neurite outgrowth and growth cone collapse during axon regeneration. It is cell surface receptor for collagen alpha 2(VI) which may confer cells ability to migrate on that substrate. CSPG4 may regulate MMP16-dependent degradation and invasion of type I collagen participating in melanoma cells invasion properties. It modulates the plasminogen system by enhancing plasminogen activation and inhibiting angiotatin. CSPG4 functions as a signal transducing protein by binding through its cytoplasmic C-terminus scaffolding and signaling proteins. It promotes retraction fiber formation and cell polarization through Rho GTPase activation and stimulates alpha-4, beta-1 integrin-mediated adhesion and spreading by recruiting and activating a signaling cascade through CDC42, ACK1 and BCAR1. CSPG4 activates FAK and ERK1/ERK2 signaling cascades. The antibody is specific to CSPG4.

## Notable Publications

Author	Pubmed ID	Journal	Application
Lirong Liang	34585785	J Pineal Res	WB
Yu Shen	31563141	J Neurochem	
Shuisheng Yu	34646136	Front Pharmacol	

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



A375 cells were subjected to SDS PAGE followed by western blot with 55027-1-AP (CSPG4,NG2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.