### For Research Use Only

# CSPG4/NG2 Polyclonal antibody

Catalog Number: 55027-1-AP

23 Publications



**Purification Method:** 

WB 1:1000-1:4000

Antigen affinity purification

Recommended Dilutions:

**Basic Information** 

Catalog Number:

55027-1-AP

150ul , Concentration: 800 µg/ml by

Nanodrop:

Source Rabbit

Isotype:

IgG

GeneID (NCBI):

**UNIPROT ID:** 

Q6UVK1

chondroitin sulfate proteoglycan 4

Observed MW:

**Applications** 

**Tested Applications:** 

WB, ELISA

Cited Applications:

WB, FC, IHC

Species Specificity: human, mouse, rat

**Cited Species:** 

human, rat, mouse

GenBank Accession Number:

NM 001897

Full Name:

Calculated MW: 251 kDa

240-250 kDa, 450kDa

Positive Controls:

WB: A375 cells,

## **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 MPP16dependent degradation and invasion of type I collagen participating in melanoma cells invasion properties. It modulates the plasminogen system by enhancing plasminogen activation and inhibiting angiostatin. 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

Store at -20°C. Stable for one year after shipment.

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:

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## 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.