

ARG59522 anti-NG2 / Chondroitin sulfate proteoglycan 4 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NG2 / Chondroitin sulfate proteoglycan 4
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NG2 / Chondroitin sulfate proteoglycan 4
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1950-2210 of Human NG2 / Chondroitin sulfate proteoglycan 4 (NP_001888.2).
Conjugation	Un-conjugated
Alternate Names	HMW-MAA; MCSPG; Chondroitin sulfate proteoglycan NG2; MCSP; Chondroitin sulfate proteoglycan 4; MSK16; NG2; Melanoma chondroitin sulfate proteoglycan; MEL-CSPG; Melanoma-associated chondroitin sulfate proteoglycan

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	
Observed Size	320 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CSPG4
Gene Full Name	chondroitin sulfate proteoglycan 4
Background	Chondroitin sulfate proteoglycan 4 (CSPG4): A human melanoma-associated chondroitin sulfate proteoglycan plays a role in stabilizing cell-substratum interactions during early events of melanoma cell spreading on endothelial basement membranes. CSPG4 represents an integral membrane chondroitin sulfate proteoglycan expressed by human malignant melanoma cells. [provided by RefSeq, Jul 2008]
Function	Proteoglycan playing a role in cell proliferation and migration which stimulates endothelial cells motility during microvascular morphogenesis. May also inhibit neurite outgrowth and growth cone collapse during axon regeneration. Cell surface receptor for collagen alpha 2(VI) which may confer cells ability to migrate on that substrate. Binds through its extracellular N-terminus growth factors, extracellular matrix proteases modulating their activity. May regulate MMP16-dependent degradation and invasion of type I collagen participating in melanoma cells invasion properties. May modulate the plasminogen system by enhancing plasminogen activation and inhibiting angiostatin. Functions also as a signal transducing protein by binding through its cytoplasmic C-terminus scaffolding and signaling proteins. May promote retraction fiber formation and cell polarization through Rho GTPase activation. May stimulate alpha-4, beta-1 integrin-mediated adhesion and spreading by recruiting and activating a signaling cascade through CDC42, ACK1 and BCAR1. May activate FAK and ERK1/ERK2 signaling cascades. [UniProt]
Research Area	Angiogenesis Study antibody; Mural cell Marker antibody
Calculated Mw	251 kDa
PTM	O-glycosylated; contains glycosaminoglycan chondroitin sulfate which are required for proper localization and function in stress fiber formation (By similarity). Involved in interaction with MMP16 and ITGA4. Phosphorylation by PRKCA regulates its subcellular location and function in cell motility. [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein; Extracellular side. Apical cell membrane; Single-pass type I membrane protein; Extracellular side. Cell projection, lamellipodium membrane; Single-pass type I membrane protein; Extracellular side. Cell surface. Note=Localized at the apical plasma membrane it relocalizes to the lamellipodia of astrocytoma upon phosphorylation by PRKCA. Localizes to the retraction fibers. Localizes to the plasma membrane of oligodendrocytes. [UniProt]

Images



ARG59522 anti-NG2 / Chondroitin sulfate proteoglycan 4 antibody
WB image

Western blot: 25 µg of HeLa cell lysate stained with ARG59522 anti-NG2 / Chondroitin sulfate proteoglycan 4 antibody at 1:1000 dilution.

ARG59522 anti-NG2 / Chondroitin sulfate proteoglycan 4 antibody
WB image

Western blot: 25 µg of extracts from normal (control) and NG2 knockout (KO) HeLa cells, using ARG59522 anti-NG2 / Chondroitin sulfate proteoglycan 4 antibody at 1:500 dilution.

