ARG66231
anti-NG2 / Chondroitin sulfate proteoglycan 4 antibody [7.1]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [7.1] recognizes NG2 / Chondroitin sulfate proteoglycan 4
Tested Reactivity	Hu
Tested Application	FACS
Specificity	This antibody recognizes NG2, the melanoma-associated chondroitin sulfate proteoglycan 4 of MW ~ 220 - 300 kDa.
Host	Mouse
Clonality	Monoclonal
Clone	7.1
Isotype	IgG1
Target Name	NG2 / Chondroitin sulfate proteoglycan 4
Species	Human
Immunogen	Human bone marrow stromal cells infected with SV-40.
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
FACS	1 - 4 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

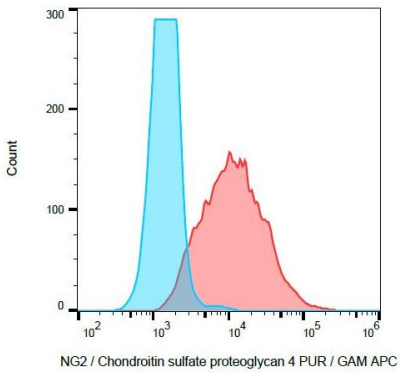
Form	Liquid
Purification	Purification with Protein A.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. 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 MPP16-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]

Images



ARG66231 anti-NG2 / Chondroitin sulfate proteoglycan 4 antibody [7.1] FACS image

Flow Cytometry: SK-MEL-30 cells stained with ARG66231 anti-NG2 / Chondroitin sulfate proteoglycan 4 antibody [7.1].