

Anti-CSPG4 antibody



Description	Unconjugated Rabbit polyclonal to CSPG4
Model	STJ192412
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	IHC
Immunogen	Synthesized peptide derived from human CSPG4 protein.
Immunogen Region	1910-1990aa
Gene ID	1464
Gene Symbol	CSPG4
Dilution range	IHC-p 1:50-300
Specificity	CSPG4 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Detected only in malignant melanoma cells.
Purification	CSPG4 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Chondroitin sulfate proteoglycan 4 Chondroitin sulfate proteoglycan NG2 Melanoma chondroitin sulfate proteoglycan Melanoma-associated chondroitin sulfate proteoglycan
Molecular Weight	255 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:2466OMIM:601172
Alternative Names	Chondroitin sulfate proteoglycan 4 Chondroitin sulfate proteoglycan NG2 Melanoma chondroitin sulfate proteoglycan Melanoma-associated chondroitin sulfate proteoglycan
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.
Cellular Localization	Cell membrane Apical cell membrane Cell projection, lamellipodium membrane Cell surface. Localized at the apical plasma membrane it relocates to the lamellipodia of astrocytoma upon phosphorylation by PRKCA. Localizes to the retraction fibers. Localizes to the plasma membrane of oligodendrocytes .
Post-translational Modifications	O-glycosylated; contains glycosaminoglycan chondroitin sulfate which are required for proper localization and function in stress fiber formation . Involved in interaction with MMP16 and ITGA4. Phosphorylation by PRKCA regulates its subcellular location and function in cell motility.