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DATA SHEET

Mouse Anti-CSPG4/NG2/MCSP [LHM 2]: MC0690, MC0690RTU7

Intended Use: For Research Use Only

Description: CSPG4 (Chondroitin Sulfate Proteoglycan 4), also known as NG2 or MCSP, is a type I membrane protein expressed by subpopulations of glia, including oligodendroglial precursor cells and a variety of tumor cells. CSPG4 stabilizes cell-substratum interactions during early melanoma cell spreading on endothelial basement membranes. This stabilization promotes primary melanoma progression by enhancing activation of signaling pathways essential for tumor invasion and growth. Phosphorylation of Threonine 2252 in human CSPG4 triggers redistribution on astrocytoma surfaces, cell polarization, and increased cell motility. CSPG4 functions as a co-receptor in malignant melanoma cells, promoting spreading and focal contact formation with α4 β1 integrin. CSPG4 appears on blood vessels throughout rat embryos and endothelial cells in central nervous system microvessels, while serving as a novel marker for epidermal stem cells, contributing to their patterned distribution and clustering.

Specifications

Clone:	LHM 2
Source:	Mouse
Isotype:	IgG1k
Reactivity:	Human
Immunogen:	Cell preparation containing CSPG4 protein
Localization:	Membrane
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC, WB

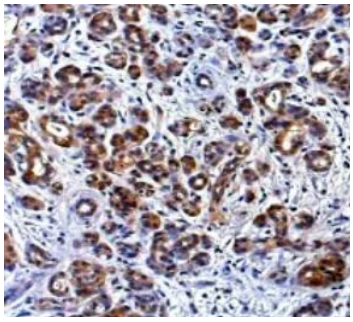
Package:

Description	Catalog No.	Size
CSPG4/NG2/MCSP [LHM 2] Concentrated	MC0690	1 ml
CSPG4/NG2/MCSP [LHM 2] Prediluted	MC0690RTU7	7 ml

IHC Procedure*

Positive Control Tissue:	Malignant melanoma, fibroblasts, glioblastoma, chondrosarcoma
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human ADM stained with anti-CSPG4 using DAB

References:

1. Differential expression of stem cell-like proteins in normal, hyperplastic and dysplastic oral epithelium. Sarah Mohammed Mohammed Barakat, et al. Journal of applied oral science: revista FOB 23:79-86. 2015.
2. The relationship between homologous recombination repair and the sensitivity of human epidermis to the size of daily doses over a 5-week course of breast radiotherapy. Navita Somaiah, et al. Clinical cancer research: an official journal of 18:5479-88. 2012.

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