

# Product Datasheet

## NG2/MCSP Antibody - BSA Free NBP1-89682

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP1-89682**

NG2/MCSP Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

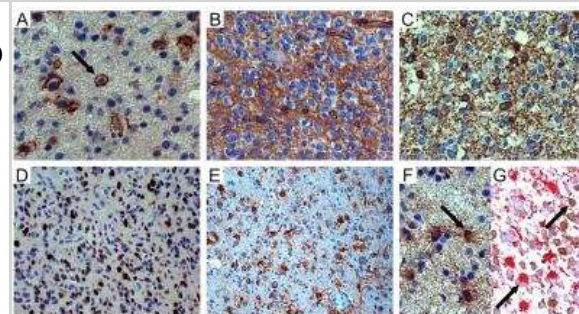
Product Description	
Host	Rabbit
Gene ID	1464
Gene Symbol	CSPG4
Species	Human
Reactivity Notes	Immunogen displays the following percentage of sequence identity for non-tested species: Mouse (87%), Rat (83%)
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: ILYEHEMPPEPFWEAHDITLELQLSSPPARDVAATLAVAVSFEAACPQRPSHLW KNKGLWVPEGQRARITVAALDASNLLASVPSPQRSEHDVLFQVTQFPSRGQLL VSEEPLHAGQPHFLQSQLAAGQLVYAHGGGGTQQDGFHFRAHL

Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Immunohistochemistry 1:200 - 1:500, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1:200 - 1:500
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended.

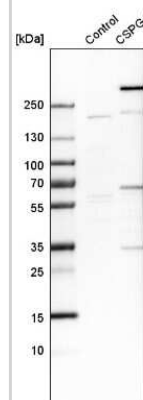


## Images

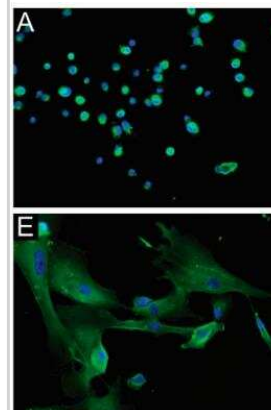
**Immunohistochemistry: NG2/MCSP Antibody [NBP1-89682] - NG2/CSPG4 immunohistochemistry in oligodendroglial tumors.** (A) WHO grade II oligodendroglioma. Isolated tumor cells (arrow) with NG2/CSPG4+ cell membranes; DAB, 400x. (B) WHO grade III oligodendroglioma. NG2/CSPG4-positive area with honeycomb appearance; DAB, OM 400x. (C) Id. Isolated CNPase-positive tumor cells in infiltration area; DAB, OM 400x. (D) Id. Sox10-positive tumour cells; DAB, OM 200x. (E) Id. NG2/CSPG4-positive reactive astrocytes inside the tumor; DAB, OM 200x. (F) Id. GFAP-positive reactive astrocytes (arrow) intermingled with GFAP-negative tumor cells; DAB, OM 400x. (G) Id. GFAP-positive (alkaline phosphatase red) and mIDH1R132H-negative reactive astrocytes (arrow) intermingled with mIDH1R132H-positive (DAB) and GFAP-negative tumor oligodendrocytes (arrow); OM 400x. Image collected and cropped by CiteAb from the following publication (<https://www.mdpi.com/2073-4409/9/6/1538>) licensed under a CC-BY license.



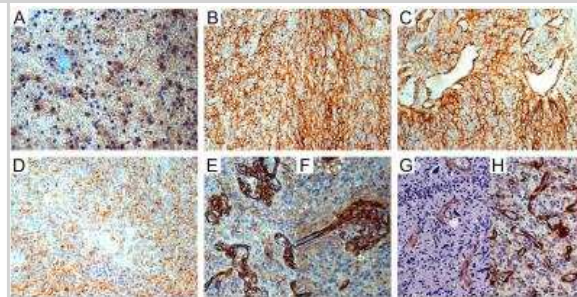
**Western Blot: NG2/MCSP Antibody [NBP1-89682] - Analysis in control (vector only transfected HEK293T lysate) and CSPG4 over-expression lysate (Co-expressed with a C-terminal myc-DDK tag (3.1 kDa) in mammalian HEK293T cells).**



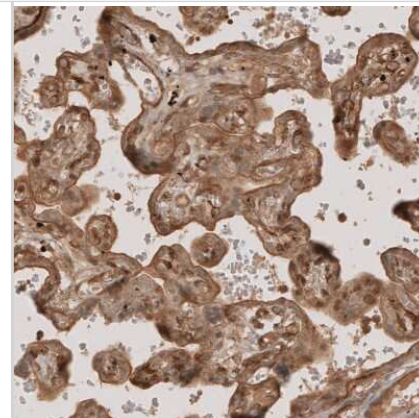
**Immunocytochemistry/Immunofluorescence: NG2/MCSP Antibody [NBP1-89682] - Immunofluorescence (IF) analysis of NG2/CSPG4 expression in glioblastoma (GB)-derived human cell lines.** IF of a GB-derived neurosphere cell line for (A) NG2/CSPG4 (green), original magnification (OM) 200x; IF staining of an adherent cell line for (E) NG2/CSPG4 (green), OM 400x; Nuclei were counterstained with DAPI (blue). Image collected and cropped by CiteAb from the following publication (<https://www.mdpi.com/2073-4409/9/6/1538>) licensed under a CC-BY license.



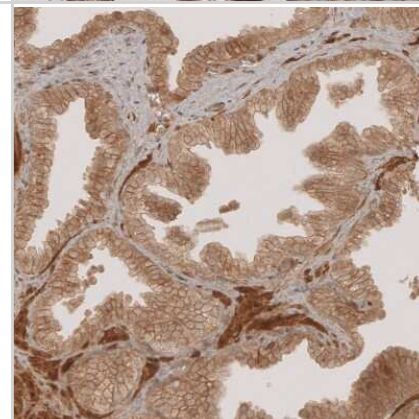
**Immunohistochemistry: NG2/MCSP Antibody [NBP1-89682] - (A) WHO grade II astrocytoma. NG2/CSPG4-negative tumor cells and -positive reactive astrocytes; DAB, original magnification (OM) 200x. (B) IDH-wild type glioblastoma (GB). Area of NG2/CSPG4-positive cells; DAB, OM 200x. (C) Id. NG2/CSPG4-positive tumor cells and reactive astrocytes oriented on vessels; DAB, OM 200x. (D) Id. NG2/CSPG4-negative area of necrosis; DAB, OM 200x. (E) Id. NG2/CSPG4-positive vascular pericytes in microvascular proliferations; DAB, OM 200x. (F) Id. NG2/CSPG4-positive pericytes in a glomerulus with sprout; DAB, OM 200x. (G) Id. a-SMA-positive pericytes in infiltration area; DAB, OM 200x. (H) Id. PDGFRB-positive pericytes in hyperproliferative area. Image collected and cropped by CiteAb from the following publication (<https://www.mdpi.com/2073-4409/9/6/1538>) licensed under a CC-BY license.**



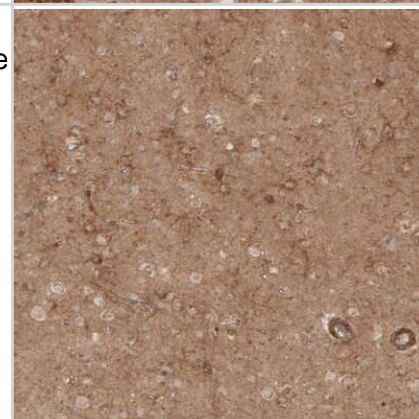
Immunohistochemistry-Paraffin: NG2/MCSP Antibody [NBP1-89682] - Immunohistochemical staining of human placenta shows moderate membranous and cytoplasmic positivity in trophoblast.



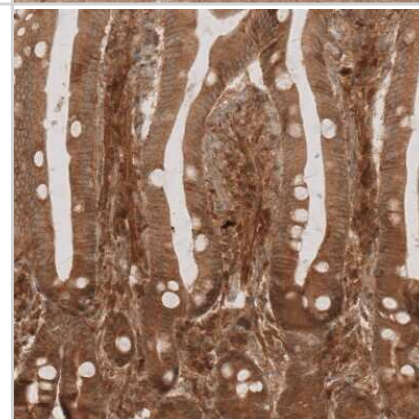
Immunohistochemistry-Paraffin: NG2/MCSP Antibody [NBP1-89682] - Immunohistochemical staining of human prostate shows moderate membranous and cytoplasmic positivity in glandular cells.



Immunohistochemistry-Paraffin: NG2/MCSP Antibody [NBP1-89682] - Immunohistochemical staining of human cerebral cortex shows moderate positivity in neuropil.

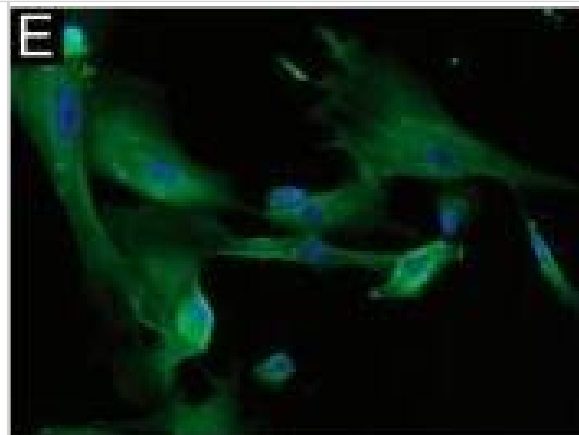


Immunohistochemistry-Paraffin: NG2/MCSP Antibody [NBP1-89682] - Immunohistochemical staining of human duodenum shows moderate membranous and cytoplasmic positivity in glandular cells.





Immunocytochemistry/ Immunofluorescence: NG2/MCSP Antibody [NBP1-89682] - Immunofluorescence (IF) analysis of NG2/CSPG4 expression in glioblastoma (GB)-derived human cell lines. IF of a GB-derived neurosphere cell line for (A) NG2/CSPG4 (green), original magnification (OM)  $\times 200$ ; (B) Nestin (red), OM  $\times 200$ ; (C) MSe1 (red), OM  $\times 200$ ; (D) Notch-2 (green), OM  $\times 200$ . IF staining of an adherent cell line for (E) NG2/CSPG4 (green), OM  $\times 400$ ; (F) GFAP (green), OM  $\times 400$ ; (G)  $\beta$ -III Tubulin (red), OM  $\times 200$ ; (H) Galactocerebroside C (red), OM  $\times 200$ . Nuclei were counterstained with DAPI (blue). DAPI, 4',6-diamidino-2-phenylindole. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32599896>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Mellai M, Annovazzi L, Bisogno I et al. Chondroitin Sulphate Proteoglycan 4 (NG2/CSPG4) Localization in Low- and High-Grade Gliomas Cells 2020-06-24 [PMID: 32599896] (Human)



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NBP1-89682PEP	NG2/MCSP Recombinant Protein Antigen
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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