

Human NG2/MCSP Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF2585

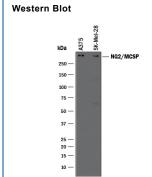
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human NG2/MCSP in direct ELISAs and Western blots. In Western blots, approximately 30% cross-reactivity with recombinant mouse CSPG4 is observed.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	Mouse myeloma cell line NS0-derived recombinant human NG2/MCSP Ser1583-Ser2224 Accession # Q6UVK1	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

APPLICATIONS

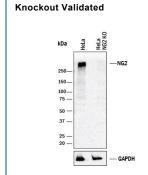
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample	
Western Blot	0.5 μg/mL	See Below	
Knockout Validated	•	NG2/MCSP is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in NG2/MCSP knockout HeLa cell line.	

DATA



Detection of Human NG2/MCSP by Western Blot. Western blot shows lysates of A375 human melanoma cell line and SK-Mel-28 human malignant melanoma cell line. PVDF membrane was probed with 0.5 µg/ml. of Goat Anti-Human NG2/MCSP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2585) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF-017). A specific band was detected for NG2/MCSP at approximately 300 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.



Western Blot Shows Human NG2/MCSP Specificity by Using Knockout Cell Line. Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and NG2/MCSP knockout HeLa cell line (KO). PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human NG2/MCSP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2585) followed by HRPconjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for NG2/MCSP at approximately 300 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line, GAPDH (Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.2 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

NG2 (neuron/glia-type 2 antigen; also MCSP/melanoma chondroitin sulfate proteoglycan) is a 250-500 kDa type I integral membrane proteoglycan found on synantocytes (NG2+ glia), vascular pericytes, chondroblasts, macrophages and melanoma cells. It binds multiple components of the ECM, and serves as a ligand for α3β1 and α4β1 integrins. Mature human NG2 is 2293 amino acids (aa) in length. It contains a large 2195 aa extracellular region (aa 30-2224) and a short 79 aa cytoplasmic tail. NG2 is variably glycanated. Without proteoglycan, NG2 is expressed as a 250 kDa glycoprotein. Juxtamembrane proteolysis generates a soluble ECD that noncovalently associates with the transmembrane fragment. Over aa 1583-2224, human NG2 is 81% aa identical to both mouse and canine NG2.

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