

DESCRIPTION

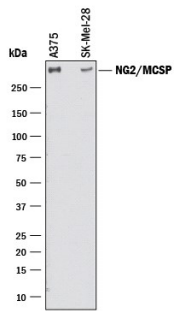
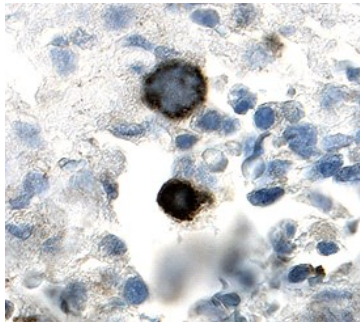
Species Reactivity	Human
Specificity	Detects human NG2/MCSP in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # LHM-2
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human melanoma cells
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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	1 µg/mL	See Below
Flow Cytometry	0.25 µg/10 ⁶ cells	G361 human melanoma cell line (Smith, F.O. <i>et al.</i> (1996) <i>Blood</i> 87 :1123).
Immunohistochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>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 1 µg/mL of Mouse Anti-Human NG2/MCSP Monoclonal Antibody (Catalog # MAB2585) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). 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.</p>	<p>Immunohistochemistry</p>  <p>NG2/MCSP in Human Skin Cancer Tissue. NG2/MCSP was detected in immersion fixed paraffin-embedded sections of human skin cancer tissue (melanoma) using 10 µg/mL Mouse Anti-Human NG2/MCSP Monoclonal Antibody (Catalog # MAB2585) overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained with the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 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, also known as MCSP, is a chondroitin sulfate proteoglycan that has been used as a cell surface marker for melanoma (1) and glial precursor cells (2). NG2 also promotes epidermal stem cell patterned clustering (3).

References:

1. Kupsch, J.M. *et al.* (1995) *Melanoma Res.* **5**:403.
2. Stegmuller, J. *et al.* (2002) *J. Neurocytol.* **31**:497.
3. Legg, J. *et al.* (2003) *Development* **130**:6049.