

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects a synthetic peptide specific for human MCSP around amino acid 850 in Direct ELISA.
<b>Source</b>	Monoclonal Mouse IgG Clone # 1112217
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Synthetic Peptide Accession # Q6UVK1
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

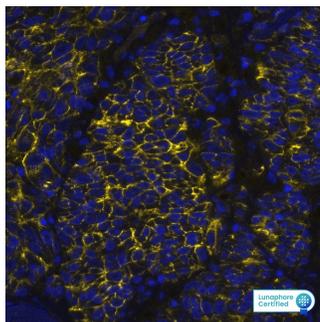
**APPLICATIONS**

*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.*

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	SK-Mel-28 human malignant melanoma cell line
<b>Multiplex Immunofluorescence</b>	15 µg/mL	Immersion fixed paraffin-embedded sections of human Melanoma.
<b>Immunohistochemistry</b>	3-25 µg/mL	Immersion fixed paraffin-embedded sections of human melanoma

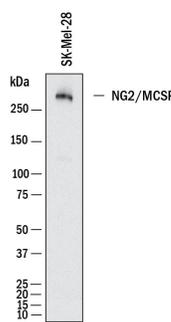
**DATA**

**Multiplex Immunofluorescence**



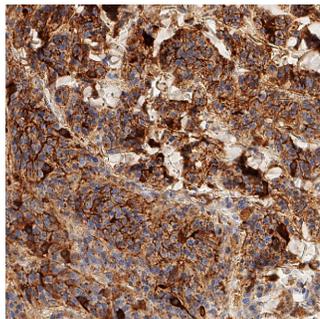
**NG2/MCSP in Human Melanoma via seqIF™ staining on COMET™** NG2/MCSP was detected in immersion fixed paraffin-embedded sections of human Melanoma using Mouse Anti-Human NG2/MCSP, Monoclonal Antibody (Catalog # MAB11767) at 15 µg/mL at 37° Celsius for 8 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Eprelia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647MS) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in **COMET™ Panel Builder**.

**Western Blot**



**Detection of Human NG2/MCSP by Western Blot.** Western Blot shows lysates of SK-Mel-28 human malignant melanoma cell line. PVDF membrane was probed with 2 µg/ml of Mouse Anti-Human NG2/MCSP Monoclonal Antibody (Catalog # MAB11767) 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 **Western Blot Buffer Group 1**.

**Immunohistochemistry**



**Immersion fixed paraffin-embedded sections of human melanoma** NG2/MCSP was detected in immersion fixed paraffin-embedded sections of human melanoma using Mouse Anti-Human NG2/MCSP Monoclonal Antibody (Catalog # MAB11767) at 5 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007) and counterstained with hematoxylin (blue). Specific staining was localized to the cell membrane. View our protocol for **Chromogenic IHC Staining of Paraffin-embedded Tissue Sections**.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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.