

## 36-3128: Anti-S100B (Astrocyte and Melanoma Marker) Monoclonal Antibody(Clone: 4C4.9)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	4C4.9
<b>Application :</b>	IHC,FACS,WB,IF
<b>Reactivity :</b>	Human
<b>Gene :</b>	S100B
<b>Gene ID :</b>	6285
<b>Uniprot ID :</b>	P04271
<b>Alternative Name :</b>	NEF; Protein S100-B; S-100 protein beta chain; S100 calcium binding protein beta (neural); S100 calcium-binding protein B; S100 protein beta chain; S100B; S100beta
<b>Isotype :</b>	Mouse IgG2a, kappa
<b>Immunogen Information :</b>	Purified bovine brain S100 protein

### Description

S100 belongs to the family of calcium binding proteins. S100A and S100B proteins are two members of the S100 family. S100A is composed of an alpha and a beta chain whereas S100B is composed of two beta chains. This antibody is specific against an epitope located on the beta-chain (i.e. in S-100A and S-100B) but not on the alpha-chain of S-100 (i.e. in S-100A and S100A0). This antibody can be used to localize S-100A and S-100B in various tissue sections. S-100 protein has been found in normal melanocytes, Langerhans cells, histiocytes, chondrocytes, lipocytes, skeletal and cardiac muscle, Schwann cells, epithelial and myoepithelial cells of the breast, salivary and sweat glands, as well as in glial cells. Neoplasms derived from these cells also express S-100 protein, albeit non-uniformly. A large number of well-differentiated tumors of the salivary gland, adipose and cartilaginous tissue, and Schwann cell-derived tumors express S-100 protein. Almost all malignant melanomas and cases of histiocytosis X are positive for S-100 protein.

### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

### Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (0.25-0.5ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

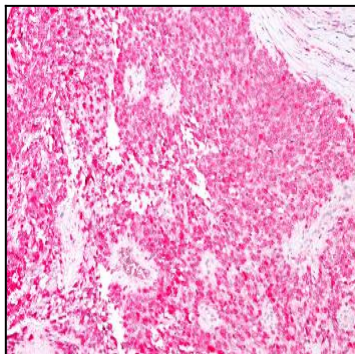


Fig. 1: Formalin-fixed, paraffin-embedded human Melanoma stained with S100B Mouse Monoclonal Antibody (4C4.9) (AEC Chromogen)

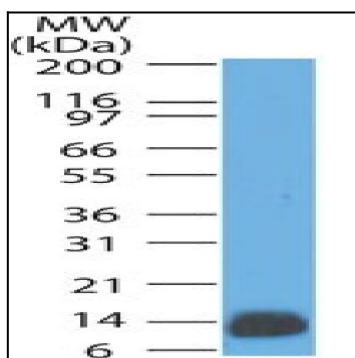


Fig. 2: Western Blot Analysis of human brain lysate using S100B Mouse Monoclonal Antibody (4C4.9).

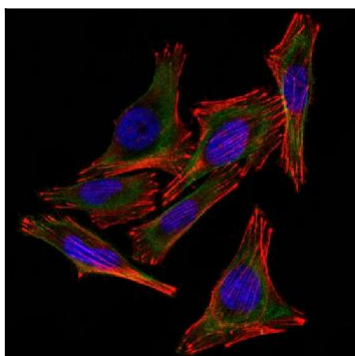


Fig. 3: Confocal Immunofluorescent analysis of A2058 cells using AF488-labeled S100B Monoclonal Antibody (4C4.9) (Green). F-actin filaments were labeled with DyLight 554 Phalloidin (red). DAPI was used to stain the cell nuclei (blue).

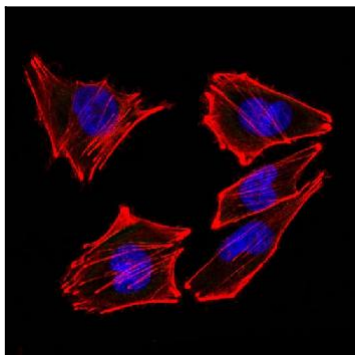


Fig. 4: Confocal Immunofluorescent analysis of A2058 cells using AF488-labeled Isotype Control Monoclonal Antibody (IgG2a) (Green). F-actin filaments were labeled with DyLight 554 Phalloidin (red). DAPI was used to stain the cell nuclei (blue). (Negative Control)

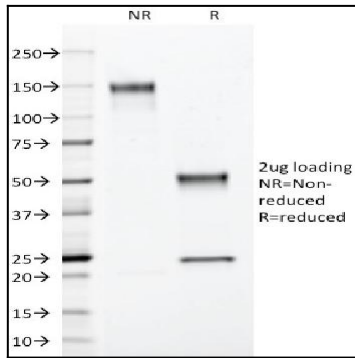


Fig. 5: SDS-PAGE Analysis Purified S100B Mouse Monoclonal Antibody (4C4.9). Confirmation of Integrity and Purity of Antibody