

## 36-1663: Monoclonal Antibody to S100A1 (Astrocyte Marker)(Clone : S100A1/1012)(Discontinued)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	S100A1/1012
<b>Application :</b>	FACS,WB,IF
<b>Gene :</b>	S100A1
<b>Gene ID :</b>	6271
<b>Uniprot ID :</b>	P23297
<b>Format :</b>	Purified
<b>Alternative Name :</b>	S100A1,S100A
<b>Isotype :</b>	Mouse IgG2a
<b>Immunogen Information :</b>	Recombinant full-length human S100A1 protein

### Description

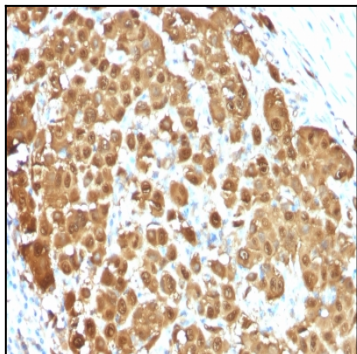
The family of EF-hand type Ca<sup>2+</sup>-binding proteins includes calbindin, S-100 alpha and beta, calgranulins, B and C, and the parvalbumin family members, including parvalbumin alpha and parvalbumin beta. The S-100 protein is involved in the regulation of cellular processes such as cell cycle progression and differentiation. S-100 protein may function in the activation of Ca<sup>2+</sup> induced Ca<sup>2+</sup> release, inhibition of microtubule assembly and inhibition of protein kinase C mediated phosphorylation. Two S-100 subunits, sharing 60% sequence identity, have been described as S-100 alpha chain and S-100 beta chain. Three S-100 dimeric forms have been characterized, differing in their subunit composition of two alpha chains, two beta chains or one alpha and one beta chain. S-100 localizes to the cytoplasm and nuclei of astrocytes, Schwann's cells, ependymomas and astroglomas. S-100 is also detected in almost all benign naevi, malignant melanocytic tumours and in Langerhans cells in the skin. Calbindin, S-100 proteins and parvalbumin proteins are each expressed in neural tissues. In addition, S-100 alpha and beta are present in a variety of other tissues and calbindin is present in intestine and kidney.

### Product Info

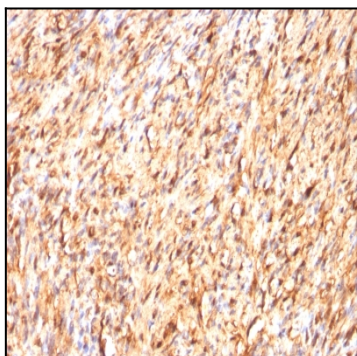
<b>Amount :</b>	100 µg
<b>Purification :</b>	Affinity Chromatography
<b>Content :</b>	100 µg in 500 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

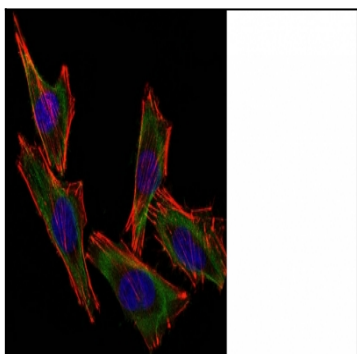
Flow Cytometry (0.5-1µg/million cells in 0.1ml); Immunofluorescence (1-2µg/ml); Western Blot (0.5-1µg/ml); immunohistology (Formalin-fixed) (0.25-0.5µg/ml for 30 minutes at RT); (Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes); Optimal dilution for a specific application should be determined.



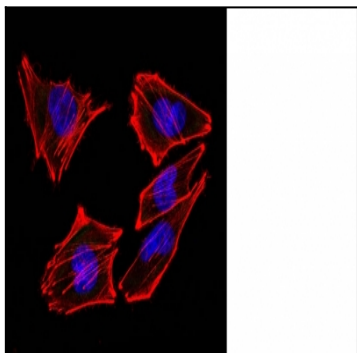
Formalin-fixed, paraffin-embedded human Melanoma stained with S100A1 Monoclonal Antibody (S100A1/1012).



Formalin-fixed, paraffin-embedded human Schwannoma stained with S100A1 Monoclonal Antibody (S100A1/1012).



Confocal Immunofluorescent analysis of A2058 cells using AF488-labeled S100A1 Monoclonal Antibody (S100A1/1012) (Green). F-actin filaments were labeled with DyLight 554 Phalloidin (red). DAPI was used to stain the cell nuclei (blue).



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)