

## Recombinant S100B Monoclonal Antibody

**catalog number: AN300068P**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

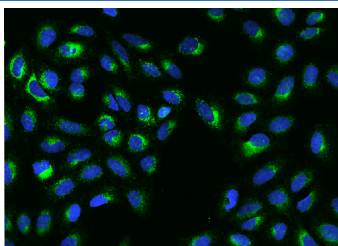
### Description

<b>Reactivity</b>	Human
<b>Immunogen</b>	Recombinant Human S100B Protein
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Clone</b>	10F8
<b>Purification</b>	Protein A
<b>Buffer</b>	0.2 µm filtered solution in PBS

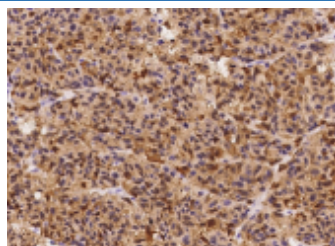
### Applications Recommended Dilution

<b>IHC-P</b>	1:1000-1:10000
<b>ICC/IF</b>	1:20-1:100

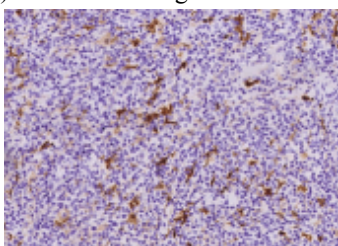
### Data



Immunofluorescence analysis of S100B in U2OS cells. Cells were fixed with 4% PFA, permeabilized with 0.1% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human S100B Monoclonal Antibody (dilution ratio 1:60) at 4°C overnight. Then cells were stained with the Alexa Fluor®488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI for nuclear staining (blue). Positive staining was localized to Cytoplasm.



Immunohistochemistry of paraffin-embedded human malignant melanoma using S100B Monoclonal Antibody at dilution of 1:10000.



Immunohistochemistry of paraffin-embedded human lymphoma using S100B Monoclonal Antibody at dilution of 1:10000.

### Preparation & Storage

<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
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### For Research Use Only

**Shipping**

Ice bag

**Background**

S100B is a member of the S100 family of proteins containing two EF-hand-type calcium-binding motifs. S100B exerts both intracellular and extracellular functions. Intracellular S100B acts as a stimulator of cell proliferation and migration and an inhibitor of apoptosis and differentiation, which might have important implications during brain, cartilage and skeletal muscle development and repair, activation of astrocytes in the course of brain damage and neurodegenerative processes, and of cardiomyocyte remodeling after infarction, as well as in melanomagenesis and gliomagenesis. As an extracellular factor, S100B engages RAGE (receptor for advanced glycation end products) in a variety of cell types with different outcomes (i.e. beneficial or detrimental, pro-proliferative or pro-differentiative) depending on the concentration attained by the protein, the cell type and the microenvironment. This calcium binding astrocyte-specific cytokine, presents a marker of astrocytic activation and reflects CNS injury. The excellent sensitivity of S100B has enabled it to confirm the existence of subtle brain injury in patients with mild head trauma, strokes, and after successful resuscitation from cardiopulmonary arrest. Recent findings provide evidence, that S100B may decrease neuronal injury and/or contribute to repair following traumatic brain injury (TBI). Hence, S100B, far from being a negative determinant of outcome, as suggested previously in the human TBI and ischemia literature, is of potential therapeutic value that could improve outcome in patients who sustain various forms of acute brain damage.

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