

# iFluor™ 594 Conjugated Anti-S100 beta Antibody [SC57-02] HA720125F



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	IF-Tissue
<b>Molecular Wt:</b>	11 kDa
<b>Clone number:</b>	SC57-02

**Description:** S100 calcium-binding protein B (S100B) is a protein of the S100 protein family. S100 proteins are localized in the cytoplasm and nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100B is glial-specific and is expressed primarily by astrocytes, but not all astrocytes express S100B. It has been shown that S100B is only expressed by a subtype of mature astrocytes that ensheath blood vessels and by NG2-expressing cells. This protein may function in neurite extension, proliferation of melanoma cells, stimulation of Ca<sup>2+</sup> fluxes, inhibition of PKC-mediated phosphorylation, astrogliosis and axonal proliferation, and inhibition of microtubule assembly. In the developing CNS it acts as a neurotrophic factor and neuronal survival protein. In the adult organism it is usually elevated due to nervous system damage, which makes it a potential clinical marker.

**Conjugate:** iFluor™ 594, Amax: 587nm; Emax: 603nm.

**Immunogen:** Synthetic peptide within C-terminal human S100 beta.

**Positive control:** human malignant melanoma tissue, human meningioma tissue.

**Subcellular location:** Cytoplasm, Nucleus, Secreted.

**Database links:** SwissProt: P04271 Human | P50114 Mouse | P04631 Rat

**Recommended Dilutions:**  
**IF-Tissue** 1:50-1:200

**Storage Buffer:** Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS

**Storage Instruction:** Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

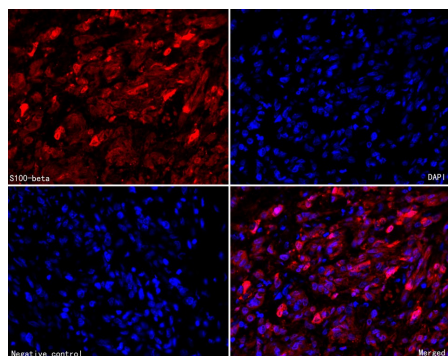
Technical: 0086-571-89986345

Service mail: support@huabio.cn

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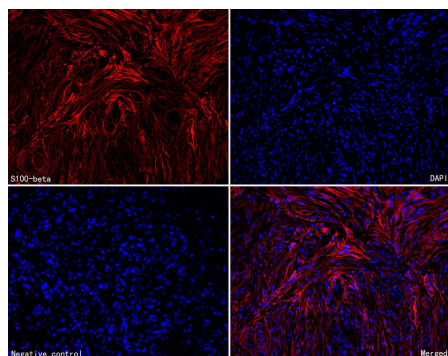
Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

## Images



**Fig1:** Immunofluorescence analysis of paraffin-embedded human malignant melanoma tissue labeling S100 beta.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. The section was then incubated overnight at +4℃ with HA720125F S100 beta (iFluor™ 594, red) at 1/100 dilution, washed with PBS. DAPI was used as nuclear counterstain.



**Fig2:** Immunofluorescence analysis of paraffin-embedded human meningioma tissue labeling S100 beta.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. The section was then incubated overnight at +4℃ with HA720125F S100 beta (iFluor™ 594, red) at 1/100 dilution, washed with PBS. DAPI was used as nuclear counterstain.

**Note:** All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

## Background References

1. Duan K et al. S100-beta aggravates spinal cord injury via activation of M1 macrophage phenotype. J Musculoskelet Neuronal Interact. 2021 Sep
2. Hanin A et al. Neuron Specific Enolase, S100-beta protein and progranulin as diagnostic biomarkers of status epilepticus. J Neurol. 2022 Jul

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