

# Mouse anti S100 Monoclonal Antibody

Alternative Name(s): S100 calcium binding protein A1; NEF; S100; S100-B; S100beta

#### **Order Information**

- Description: S100
- Catalogue: 500-6824
- Lot: See label
- Size: 100ug/200ul
- Host: Mouse
- Clone: 15E2E2
- Application: IHC(P), WB
- Reactivity: Hu, Ms, Rt

### ANTIGEN PREPARATION

Purified bovine brain S100 protein.

#### BACKGROUND

S100 is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or 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. The family of EF-hand type Ca2+-binding proteins includes calbindin (previously designated vitamin D-dependent Ca2+-binding proteins), S-100 $\alpha$  and  $\beta$ , calgranulins A (also designated MRP8), B (also designated MRP14) and C (S-100 like proteins), and the parvalbumin family members, including parvalbumin  $\alpha$  and parvalbumin  $\beta$ , also designated oncomodulin (OCM). S100 may function in Neurite extension, proliferation of melanoma cells, stimulation of Ca2+ fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly. Chromosomal rearrangements and altered expression of this gene have been implicated in several neurological, neoplastic, and other types of diseases, including Alzheimer's disease, Down's syndrome, epilepsy, amyotrophic lateral sclerosis, melanoma, and type I diabetes.

#### PURIFICATION

The mouse IgG is purified by Protein A-Affinity Chromatography according to Isotyping

#### FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

#### SPECIFICITY

This antibody recognizes ~22 kDa (non-reduced) or 11 kDa (reduced) of S100. It reacts with human, rat, mouse and cow. The other species are not tested.

#### STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -200C to -700C. The antibodies can be stored at 20C-80C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

#### **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

- Western Blot: 0.1-1 µg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: Not tested
- Molecular Weight: 11.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

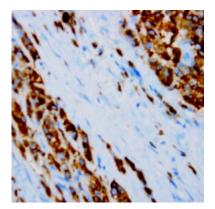
#### FOR RESEARCH USE ONLY.

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\*Optimal dilutions should be determined by researchers for the specific applications.





Immunohistochemistry: Human melanoma stained with anti S100 antibody (Cat# 500-6824) at 1:50 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

## REFERENCES