



Monoclonal Anti-mouse S100A11 Antibody

ORDERING INFORMATION

Catalog Number: MAB5167

Clone: 493804

Lot Number: CBDL01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS
with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: mouse S100A11

Immunogen: *E. coli*-derived rmS100A11

Ig class: rat IgG_{2A}

Recommended Application:
Western blot

Other Application:
Direct ELISA

Background

S100A11, also called calgizzarin or S100C, is an antiproliferative 10 kDa protein that is a member of the S100 family of EF-hand calcium binding proteins. It is found in the cytosol of proliferating fibroblasts and keratinocytes, but in the nucleus in differentiating cells. TGF-β treatment or calcium-induced S100A11 serine phosphorylation induces nuclear translocation of S100A11 and subsequent growth inhibition in normal cells. The 98 amino acid (aa) mouse S100A11 shares 82% and 94% aa identity with human and rat S100A11, respectively.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, *E. coli*-derived, recombinant mouse S100 calcium binding protein A11 (rmS100A11; aa 1 - 98; Accession # P50453). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects rmS100A11 in direct ELISAs and Western blots. In direct ELISAs, this antibody shows no cross-reactivity with rmS100A1, 4, 6, 8, 9, 10, 13, or 16. It shows approximately 75% cross-reactivity with rhS100A11 in direct ELISAs, but no cross-reactivity in Western blots.

Applications

Western blot - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect mouse S100A11. Using a colorimetric detection system, the detection limit for rmS100A11 is approximately 10 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection will increase sensitivity by 5 to 50 fold.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect mouse S100A11. The detection limit for rmS100A101 is approximately 1 ng/well.

Optimal dilutions should be determined by each laboratory for each application.