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DM111-05 Monoclonal Antibody to S100B - Ascites

Alternate names: Astrocyte Marker, Protein S100-B, S-100 protein beta chain, S-100 protein subunit beta, S100 beta, S100 calcium-binding protein B

Quantity: 0.5 ml

Background: S100 belongs to the family of calcium binding proteins such as calmodulin and troponin C. 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. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. S100A is composed of an alpha and beta chain whereas S100B is composed of two beta chains. S100 protein may function in stimulation of Ca2+ induced Ca2+ release, inhibition of microtubule assembly, and inhibition of protein kinase C mediated phosphorylation. Reduced expression of this protein has been implicated in cardiomyopathies. Immunoreactive S100 protein localizes in the cytoplasm and nuclei of astrocytes, Schwann's cells, ependymomas and astrogliomas. Ganglion cells do not stain for S100 protein. S100 can be detected in almost all benign naevi and malignant melanocytic tumours of the skin, and in Langerhans cells in the skin.

Uniprot ID: P04271

NCBI: NP_006263.1

GeneID: 6285

Host / Isotype: Mouse / IgG1

Clone: SH-B1

Immunogen: Purified bovine brain S-100b preparation.

Format: **State:** Diluted ascites containing Sodium Azide as preservative.

Applications: Immunohistochemistry on Paraffin Sections: Dilute 1/50-1/100 in an ABC method (30 minutes at room temperature).
Proteolytic digestion of tissue sections is required prior to immunostaining.
Recommended Positive Control: Melanoma.
Also suitable for ELISA and Blot (denaturating conditions).
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody is specific against an epitope located on the beta chain but not on the alpha chain of S-100 (i.e. in S-100a and S-100ao).
This antibody can be used to localize S-100a and S-100b in various tissue sections.
Cellular Localization: Cytoplasmic.
Species: Human, Bovine, Porcine, Rabbit, Cat and Rat.
Other species not tested.

Storage: Store the antibody undiluted at 2-8°C.
Shelf life: one year from despatch.

For research and in vitro use only. Not for diagnostic or therapeutic work.
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

General Readings:

1. Baudier et al. J Biol Chem 261: 8192, 1986.
2. Mani et al. Biochemistry 21: 2607, 1982.
3. Takahashi et al. Virchows Arch (Cell Pathol) 45: 385, 1984.
4. Kan-Mitchell et al. Invest Opthal 31: 1492, 1990.

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