

S-100 clone 4C4.9

Instructions for Use

Specification:

S-100 belongs to the family of calcium binding proteins. S100A and S100B proteins are two members of the S100 family. S100A is composed of an alpha and beta chain whereas S100B is composed of two beta chains. S-100 protein has been found in normal melanocytes, Langerhans cells, histiocytes, chondrocytes, lipocytes, skeletal and cardiac muscle, Schwann cells, epithelial and myoepithelial cells of the breast, salivary and sweat glands, as well as in glial cells. Neoplasms derived from these cells also express S-100 protein, albeit non-uniformly. A large number of well differentiated tumors of the salivary gland, adipose and cartilaginous tissue, and Schwann cell derived tumors express S-100 protein. Almost all malignant melanomas and cases of histiocytosis x are positive for S-100 protein. Despite the fact that S-100 protein is an ubiquitous substance, its demonstration is of great value in the identification of several neoplasms, particularly melanomas.

Availability:

Catalog No.	Contents	Volume
ILM3303-C01	S-100	0,1 ml concentrate
ILM3303-C05	S-100	0,5 ml concentrate
ILM3303-C1	S-100	1,0 ml concentrate

Intended use: For Research Use Only

Reactivity: Human, Mouse, Rat, Cow

Clone: 4C4.9

Species of origin: Mouse

Isotype: IgG_{2a}, κ

Control Tissue: Melanoma, Brain

Staining: Cytoplasmic

Immunogen: Purified bovine brain S100 protein

Presentation: Bioreactor Concentrate with 0.05% Azide, the ready-to-use antibody is diluted in Tris Buffer, pH 7.3-7.7, with 1% BSA and <0.1% Sodium Azide

Application and suggested dilutions:

Pretreatment: Heat induced epitope retrieval in 10 mM citrate buffer, pH6.0, for 20 minutes is required for IHC staining on formalin-fixed, paraffin embedded and cryostat tissue sections.

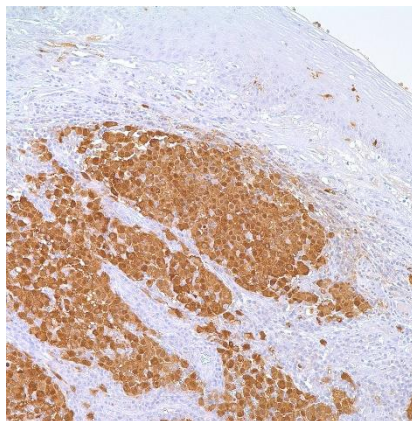
- Immunohistochemical staining of cryostat tissue sections (dilution up to 1:100-1:200)
- Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution up to 1:100-1:200)

The optimal dilution for a specific application should be determined by the investigator.

- Ready-to-use: Apply the prediluted antibody and incubate for 30-60 minutes at room temperature.

Note: Dilution of the antibody in 10% normal goat serum followed by a goat anti-mouse secondary antibody-based detection is recommended.

Storage & Stability: Store at 2-8 °C. Do not use after expiration date printed on the vial.



References:

- 1) Nakajima, et al. Ad J Surg Path 1982;6:715-727
- 2) Kuhn, et al. Am J Clin Path 1983; 79:341-347
- 3) Monda, L, et al. Hum Pathol 1985;16:287-293
- 4) Yaziji H, Gown AM. Int J Surg Pathol. 2003 Jan;11(1):11-5
- 5) Patel P et al. J Am Acad Dermatol. 2002 Feb;46(2):264-70
- 6) Morrison CD, Prayson RA. Semin Diagn Pathol. 2000 Aug;17(3):204-15
- 7) McLaren KM, Cossar DW. Hum Pathol. 1996 Jul;27(7):633-6