

**Mouse Anti-S100 [4C4.9]: MC0570, MC0570RTU7**

**Intended Use:** For Research Use Only

**Description:** S100 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 a beta chain whereas S100B is composed of two beta chains. This antibody is specific against an epitope located on the beta-chain (i.e. in S-100A and S-100B) but not on the alpha-chain of S-100 (i.e. in S-100A and S100A0). This antibody can be used to localize S-100A and S-100B in various tissue sections. 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.

**Specifications**

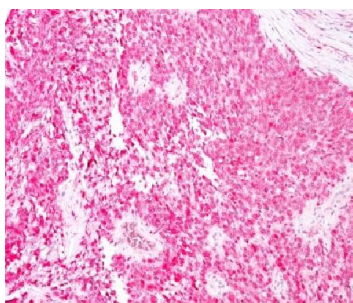
Clone:	4C4.9
Source:	Mouse
Isotype:	IgG2a/k
Reactivity:	Human, mouse, rat, cow
Immunogen:	Purified bovine brain S100 protein
Localization:	Cytoplasm, nucleus
Formulation:	Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC, Flow Cyt., ICC/IF, WB
Package:	

Description	Catalog No.	Size
S100 Concentrated	MC0570	1 ml
S100 Prediluted	MC0570RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue:	Melanoma
Concentrated Dilution:	100-300
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human melanoma stained with anti-S100 using AEC

**References:**

1. Functional labeling of neurons and their projections using the synthetic activity-dependent promoter E-SARE. Kawashima T, et al. Nat Methods 10:889-95, (2013).
2. Lack of evidence for vesicular glutamate transporter expression in mouse astrocytes. Li D, et al. J Neurosci 33:4434-55, 2013.
3. The chromodomain helicase Chd4 is required for Polycomb-mediated inhibition of astroglial differentiation. Sparmann A, et al. EMBO J 32:1598-612, 2013.