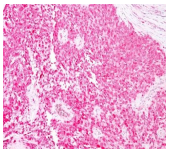
S100B Monoclonal Mouse Antibody (4C4.9)



Product 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. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0143, Anti-S100B (4C4.9)**

Product attributes

Antibody number	#0143
Antibody reactivity (target)	S100B
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	4C4.9
Isotype	IgG2a, kappa
Molecular weight	10-12 kDa
Synonyms	NEF, Protein S100-B, S-100 protein beta chain, S100 calcium binding protein beta (neural); S100 calcium-binding protein B, S100 protein beta chain, S100B, S100beta
Human gene symbol	S100B
Entrez gene ID	6285
SwissProt	P04271
Unigene	422181
Immunogen	Purified bovine brain S100 protein
Antibody target cellular localization	Cytoplasmic, Nucleus, Vesicular
Verified antibody applications	IF (verified), IHC (FFPE) (verified), WB (verified)
Species reactivity	Cow, Human, Mouse, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Immunohistology formalin-fixed 0.25-0.5 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user
Positive control	Brain, Melanoma
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer
Tumor expression	Melanoma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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LI-COR Bioscience.