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S100A9 Monoclonal Mouse Antibody (47-8D3)

Product Description

This MAb stains the cytoplasm of macrophages and histiocytes in hematopoietic organs, Kupffer's cells of the liver and Langerhan's cells of the skin. It also stains the mantle zone B-lymphocytes of the lymph node and spleen, spermatogonia, and chief cells of the stomach. S100A9 is expressed by macrophages in acutely inflamed tissues and in chronic inflammation. It is detected in peripheral blood leukocytes, in neutrophils and granulocytes. It is present at sites of vascular inflammation. S100A9 is also expressed in epithelial cells constitutively or induced during dermatoses. S100A9 is a Calcium-binding protein. It has antimicrobial activity towards bacteria and fungi. It is important for resistance to invasion by pathogenic bacteria. It up-regulates transcription of genes that are under the control of NF-kappa-B. S100A9 plays a role in the development of endotoxic shock in response to bacterial lipopolysaccharide (LPS). It promotes tubulin polymerization when unphosphorylated. It also promotes phagocyte migration and infiltration of granulocytes at sites of wounding. It plays a role as a pro-inflammatory mediator in acute and chronic inflammation and up-regulates the release of IL8 and cell-surface expression of ICAM1.

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 1093, Anti-S100A9 (47-8D3)

Product attributes

Antibody number	#1093
Antibody reactivity (target)	S100A9
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	47-8D3
Isotype	IgG1, kappa
Molecular weight of antigen	14 kDa
Synonyms	S100-A9; MRP14; calgranulin-B; calprotectin L1H subunit; leukocyte L1 complex heavy chain; migration inhibitory factor-related protein 14; S100 calcium-binding protein A9 (calgranulin B)
Human gene symbol	S100A9
Entrez gene ID	6280
SwissProt	P06702
Unigene	112405
Immunogen	Human peripheral blood monocyte components
Antibody target cellular localization	Cytoplasmic, Nucleus
Species reactivity	Human, Rat
Expected antibody applications	WB (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL, For staining of formalin-fixed, paraffin-embedded tissues, digest with trypsin at 1mg/mL PBS, 15 min at RT, Flow Cytometry 0.5-1 ug/million cells/0.1 mL
Positive control	Liver or histiocytoma
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	Inflammation
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Cell/tissue expression	Monocytes/macrophages

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
BNC74	CF®740	742/767	633-685	775/50	CF®740 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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References

Note: References for this clone sold by other suppliers may be listed for expected applications.

J Invest Dermatol (2010) 130(10) 2423-2430. (WB)