

S100A9 Monoclonal Mouse Antibody (S100A9/1075)

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 1075, Anti-S100A9 (S100A9/1075)

Product attributes

| | |
|---------------------------------------|--|
| Antibody number | #1075 |
| Antibody reactivity (target) | S100A9 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | S100A9/1075 |
| Isotype | IgG1, kappa |
| Molecular weight | 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 | Recombinant human S100A9 protein |
| Verified antibody applications | IHC (FPPE) (verified) |
| Antibody target cellular localization | Cytoplasmic, Nucleus |
| Species reactivity | Human, Rat |
| 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 |
| 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 |
| 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 | |

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, of LI-COR Bioscience.