

CD18 Monoclonal Mouse Antibody (68-5A5)

Product Description

This antibody recognizes a transmembrane glycoprotein of 95 kDa, identified as CD18 or integrin -2 (Workshop III). It complexes non-covalently with either L, M, or X integrin (CD11a, b, or c) to form the heterodimers, LFA-1, Mac-1, and p150,95, respectively. LFA-1 is the receptor for three members of the Ig supergene family of proteins, ICAM-1 (CD54), ICAM-2 (CD102), and Mac-1 and p150,95 bind to ICAM-1, fibrinogen, and iC3b. ICAM-3 (CD50). CD18/CD11 heterodimeric molecules are involved with cell/cell and cell/extracellular adhesion in immune and inflammatory responses. This MAb blocks these cellular interactions. 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 0321, Anti-CD18 (68-5A5)**

References

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

1. J Leukocyte Biol (1993) 54(1), 47-55. (Flow)
2. Am J Respir.Cell Mol Biol (2004) 30, 333-341. (functional studies)

Product attributes

| | |
|---------------------------------------|---|
| Antibody number | #0321 |
| Antibody reactivity (target) | CD18 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | 68-5A5 |
| Isotype | IgG2a, kappa |
| Molecular weight | 95 kDa |
| Synonyms | CD11 antigen-like family member B; CD11b/CD18; CD49d; Cell surface glycoprotein MAC-1 subunit alpha; Complement Component Receptor 3 Alpha; CR3 Alpha Chain (CR3A); Integrin alpha-M; Integrin beta 2 alpha subunit; ITGAM; Leukocyte adhesion receptor MO1; Ly-40; Mac-1a; MAC1; Mac1, alpha subunit; MAC1A; Macrophage antigen alpha polypeptide; MO1A; Neutrophil adherence receptor alpha M subunit |
| Human gene symbol | ITGB2 |
| Entrez gene ID | 3689 |
| SwissProt | P05107 |
| Unigene | 375957 |
| Immunogen | Stimulated human leukocytes |
| Antibody target cellular localization | Plasma membrane |
| Species reactivity | Human |
| Expected antibody applications | Flow, surface (published for clone), Functional studies (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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user |
| Positive control | Lymphocytes, granulocytes, and macrophages in tonsil or lymph node. |
| 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 | Immunology, Inflammation |

| 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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