

CD32 Monoclonal Mouse Antibody (8.7)

Product Description

This MAb reacts with a CD32 (FcγRII) epitope distinct from that defined by MAb 8.26 and the epitope overlaps with that of MAb 7.30 (cluster 4). It displays a stronger reaction with Daudi than with U937 cells. The epitope is located in domain 2 of FcγRIIa. Its Fab'2 fragments block immune complex binding. CD32 (FcγRII) is a type 1 transmembrane glycoprotein that mediates several functions including phagocytosis, cytotoxicity, and immunomodulation as well as platelet aggregation. Three genes (A, B, and C) encode CD32 and at least 6 isoforms are generated via alternative mRNA splicing, i.e., IIa1, IIa2, IIb1, IIb2, IIb3 and IIc. Monocytes/macrophages, placental trophoblasts and endothelial cells express all isoforms. In addition, the IIb isoform is expressed by B cells, and the IIa isoform by platelets, granulocytes and, weakly, by B cells. NK cells and neutrophils express Isoform IIc. CD32 binds weakly to the Fc region of monomeric IgG but more strongly to IgG aggregates and immune complexes.

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 1079, Anti-CD32 (8.7)

Product attributes

| | |
|---------------------------------------|--|
| Antibody number | #1079 |
| Antibody reactivity (target) | CD32 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | 8.7 |
| Isotype | IgG1, kappa |
| Molecular weight | 40 kDa |
| Synonyms | CD32A; Fc fragment of IgG low affinity IIa receptor; Fc gamma RIIa; Fc-gamma RII-a; Fc-gamma-RIIa; FCGR2A; FcγRII; Fcγ-2; FcRII-a; IGF2; IgG Fc receptor II-a; Low affinity immunoglobulin gamma Fc region receptor II-a; Ly-17; Ly-m20; LyM-1; Lymphocyte antigen 17 |
| Human gene symbol | FCGR2A |
| Entrez gene ID | 2212 |
| SwissProt | P12318 |
| Unigene | 352642 |
| Immunogen | K562 and FcγRII L cells |
| Antibody target cellular localization | Plasma membrane |
| Species reactivity | Human |
| Expected antibody applications | Flow, surface (published for clone), Functional studies (published for clone), IP (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 | K-562 cells. Lymph node, tonsil and placenta. |
| 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 |
| 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 | Endothelial cells |

| 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.

1. J Immunol (1993) 150(5): 1794-1803. (Flow; IP; epitope mapping)
2. J Exp Med (2001) 194(6): 747-756. (functional studies)
3. J Immunol (2014) 192:792-803. (Flow)