CD32 Monoclonal Mouse Antibody (8.7)

Product Description

This MAb reacts with a CD32 (FcgRII) 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 FcgRIIa. Its Fab'2 fragments block immune complex binding. CD32 (FcgRII) 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; FcgRII; Fcr-2; FcRII-a; IGFR2; 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 FcgRII 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	

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)