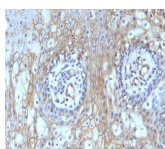


CD59 Monoclonal Mouse Antibody (BRA-10G)



Product Description

Reacts with human CD59, a 20 kDa glycosyl phosphatidyl-inositol (GPI)-anchored cell surface protein. CD59 regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. This protein is a potent inhibitor of the complement membrane attack complex, whereby it binds complement C8 and/or C9 during the assembly of this complex, thereby inhibiting the incorporation of multiple copies of C9 into the complex, which is necessary for osmolytic pore formation. CD59 is widely distributed on cells in all tissues. It inhibits formation of MAC, thus protecting cells from complement-mediated lysis. The expression of CD59 on erythrocytes is important for their survival. Genetic defects in GPI-anchor attachment, that cause a reduction or loss of CD59 and CD55 on erythrocytes produce the symptoms of the disease paroxysmal hemoglobinuria (PNH). This MAb is useful for study on GPI-anchored proteins, PNH and CD59 functions.

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 0181, Anti-CD59 (BRA-10G)

Product attributes

Antibody number	#0181
Antibody reactivity (target)	CD59
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	BRA-10G
Isotype	IgG1, kappa
Molecular weight	20 kDa
Synonyms	20kDa homologous restriction factor (HRF20); Complement regulatory protein; Human leukocyte antigen MIC11; MAC-inhibitory protein (MACIP); Membrane attack complex inhibition factor (MACIF); Membrane inhibitor of reactive lysis; MIRL; MSK21; Protectin; T cell activating protein
Human gene symbol	CD59
Entrez gene ID	966
SwissProt	P13987
Unigene	278573; 709466 & 710641
Immunogen	Human K562 tumor cells
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Expected antibody applications	Flow, surface (published for clone), IP (published for clone), 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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	Daudi, CEM, K562, HPB.ALL, Jurkat, Raji, and human lymphocytes. Human lymph node and tonsil.
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	Hematology, 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.

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	

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, and Odyssey are registered trademarks of LI-COR Bioscience.

References

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

- Neoplasma (1992) 39(6),325-9. (surface Flow, IP)
- Diabetes (2002) 51(12), 3499-3504. (IP)
- Infection Immunity (2006) 74(2):1189-1195. (WB blot)
- Leukocyte Typing V (S F Schlossman, et al, eds.) Oxford University Press, Oxford (1995) p. 1476-1477.