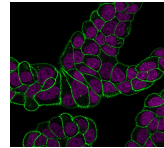


CD47 Monoclonal Mouse Antibody (B6H12.2)



Product Description

This antibody reacts with Ig domain of CD47 protein. It has been shown to inhibit polymorphonuclear neutrophil (PMN) transmigration across cell monolayers and matrix. CD47, originally named integrin-associated protein (IAP), is a 50 kDa protein containing five membrane-spanning sequences and a short cytoplasmic tail. CD47 plays a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins. It is important in memory formation and synaptic plasticity in the hippocampus. CD47 may play a role in membrane transport and/or integrin dependent signal transduction. 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.

References

Note: References for this clone sold by other suppliers may be listed for expected applications. 1. J Biol Chem (2002) 277(12): 10028-10036. (functional studies) 2. Cell (2009) 138(2): 286-299. (functional studies) 3. J Immunol (2014) 193: 3914-3924. (immunofluorescence) 4. J Immunol (2015) 195: 661-671. (flow, surface; immunofluorescence; western) 5. Nat Med (2019) 25(4): 612-619. (immunoprecipitation)

Product attributes

Antibody number	#0437
Antibody reactivity (target)	CD47
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	B6H12.2
Isotype	IgG1, kappa
Molecular weight	~50 kDa
Synonyms	Antigenic Surface Determinant Protein OA3; IAP; Integrin Associated Protein; Integrin Associated Signal Transducer; MER6; OA3; Protein MER6; Rh Related Antigen
Human gene symbol	CD47
Entrez gene ID	961
SwissProt	Q08722
Unigene	446414
Immunogen	Intact CD47 purified from placenta
Antibody target cellular localization	Plasma membrane
Verified antibody applications	Flow (surface) (verified), IF (verified)
Species reactivity	Human, Mouse
Expected antibody applications	Functional studies (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: 1-2 ug/mL Immunohistology formalin-fixed 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user
Positive control	HUVEC, OVCA3 cells, Placenta, Brain and Ovarian Tumors, MCF-7
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	Cell adhesion, Hematology, Neuroscience, Signal transduction

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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