

CD70 Monoclonal Mouse Antibody (BU69)

Product Description

This antibody recognizes a protein of 30 kDa, identified as CD70. It is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. This cytokine is a ligand for TNFRSF27/CD27. It is a surface antigen on activated, but not on resting, T- and B-lymphocytes. It induces proliferation of co-stimulated T cells, enhances the generation of cytolytic T cells, and contributes to T cell activation. This cytokine is also reported to play a role in regulating B-cell activation, cytotoxic function of natural killer cells, and immunoglobulin synthesis. This MAb blocks the interaction between CD27 and CD70, and has been shown to inhibit T cell proliferation induced by dendritic cells. 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 0187, Anti-CD70 (BU69)**

References

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

1. Lymphology (2003) 36: 74-83. (Flow)
2. J Immunol (2006) 176:7726-7735. (functional studies)
3. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 1137-1138.

Product attributes

Antibody number	#0187
Antibody reactivity (target)	CD70
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	BU69
Isotype	IgG1, kappa
Molecular weight	~30 kDa
Synonyms	CD27 ligand (CD27L); CD27LG; K124; Surface antigen CD70; Tumor necrosis factor (ligand) superfamily, member 7 (TNFSF7)
Human gene symbol	CD70
Entrez gene ID	970
SwissProt	P32970
Unigene	501497 & 715224
Immunogen	Human WM-1 (Waldenström's macroglobulinemia) cell line
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, Immunoprecipitation: 0.5-1 ug/500 ug protein lysate, Immunofluorescence: 0.5-1 ug/mL, Immunohistology (frozen) 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, ELISA For coating, order Ab without BSA, Inhibits T cell proliferation induced by dendritic cells, Optimal dilution for a specific application should be determined by user
Positive control	Raji cells. Lymph node or 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	Cytokines, Immunology

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	

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, LI-COR Bioscience.