## CD86 Monoclonal Mouse Antibody (BU63)



## **Product Description**

Recognizes a protein of 70 kDa, which is identified as CD86. CD86, along with CD80/B71, is an important accessory molecule in T cell co-stimulation via its interaction with CD28 and CD152/CTLA4, a cancer immunotherapy target. It is a type I transmembrane glycoprotein and a member of the immunoglobulin superfamily of cell surface receptors. It is expressed at high levels on resting peripheral monocytes and dendritic cells and at very low density on resting B and T lymphocytes. CD86 expression is rapidly upregulated by B cell specific stimuli with peak expression at 18 to 42 hours after stimulation. Since CD86 has rapid kinetics of induction, it is believed to be the major CD28 ligand expressed early in the immune response. It is also found on malignant Hodgkin and Reed Sternberg (HRS) cells in Hodgkin's disease.

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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0193, Anti-CD86 (BU63)

## Product attributes

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Product attributes			
Antibody number	#0193		
Antibody reactivity (target)	CD86		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	BU63		
Isotype	IgG1, kappa		
Molecular weight	70 kDa		
Synonyms	Activation B7-2 antigen, B lymphocyte activation antigen B72, CD28 antigen ligand 2, CD28LG2, CLS1, CTLA-4 counter-receptor B7.2, Early T-cell co-stimulatory molecule 1, ETC-1, FUN-1, LAB72, Ly-58, MB7-2, TS/A-2		
Human gene symbol	CD86		
Entrez gene ID	942		
SwissProt	P42081		
Unigene	171182		
Immunogen	ARH-77 (B-lymphoblastoid cell line)		
Verified antibody applications	Flow (verified), IF (verified), IHC (FFPE) (verified)		
Antibody target cellular localization	Plasma membrane		
Species reactivity	Human, Mouse, Rat		
	Flow, surface (published for clone), Functional studies (published for clone)		
Expected antibody applications			
applications	(published for clone)  Immunohistology formalin-fixed 2-4 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris buffer with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Immunoprecipitation 0.5-1 ug/500 ug protein lysate, Optimal dilution for a specific application should be		
applications  Antibody application notes	(published for clone)  Immunohistology formalin-fixed 2-4 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris buffer with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Immunoprecipitation 0.5-1 ug/500 ug protein lysate, Optimal dilution for a specific application should be determined by user  293T or Jukat cells. Monocytes and dendritic cells, activated T,		
applications Antibody application notes Positive control	(published for clone)  Immunohistology formalin-fixed 2-4 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris buffer with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Immunoprecipitation 0.5-1 ug/500 ug protein lysate, Optimal dilution for a specific application should be determined by user  293T or Jukat cells. Monocytes and dendritic cells, activated T, B and natural killer cells in lymph node or tonsil.		
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applications Antibody application notes  Positive control Shipping condition Storage Conditions Shelf life	(published for clone)  Immunchistology formalin-fixed 2-4 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris buffer with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Immunoprecipitation 0.5-1 ug/500 ug protein lysate, Optimal dilution for a specific application should be determined by user  293T or Jukat cells. Monocytes and dendritic cells, activated T, B and natural killer cells in lymph node or tonsil.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended		
applications Antibody application notes  Positive control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate	(published for clone)  Immunohistology formalin-fixed 2-4 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris buffer with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Immunoprecipitation 0.5-1 ug/500 ug protein lysate, Optimal dilution for a specific application should be determined by user  293T or Jukat cells. Monocytes and dendritic cells, activated T, B and natural killer cells in lymph node or tonsil.  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended  For research use only (RUO)  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, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified: 1 mg/mL in PBS/0.05% BSA/0.05% et 1 mg/mL in PBS/0.05% ESA/0.05% et 1 mg/mL in PBS/0.05% et 1 mg/mL in PBS/0		
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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,	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.

J Immunol (1998) 161: 6375-6382. (functional studies; Flow, surface)

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