## CD80 Monoclonal Mouse Antibody (C80/2723)



## **Product Description**

T cell proliferation and lymphokine production are triggered by occupation of the TCR by antigen, followed by a costimulatory signal that is delivered by a ligand expressed on antigen presenting cells. The B7-related cell surface proteins CD80 (B7-1) and CD86 (B7-2) are expressed on antigen presenting cells bind the homologous T cell receptors CTLA-4 (cytotoxic T lymphocyte-associated protein-4) and CD28 and trigger costimulatory signals for optimal T cell activation. CTLA-4 shares 31% overall amino acid identity with CD28 and it has been proposed that CD28 and CTLA-4 are functionally redundant. SLAM is a novel receptor on T cells that, when engaged, potentiates T cell expansion in a CD28-independent manner. B7, also designated BB1, is another ligand or counter receptor for CD28 and CTLA-4 that is expressed on the antigen-presenting cell.

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 2723, Anti-CD80 (C80/2723)

## Product attributes

Product attributes					
Antibody number	#2723				
Antibody reactivity (target)	CD80				
Antibody type	Primary				
Host species	Mouse				
Clonality	Monoclonal				
Clone	C80/2723				
Isotype	IgG2b, kappa				
Molecular weight	60 kDa				
Synonyms	Activation B7-1 antigen; B lymphocyte activation antigen B7; B7; B7-1; BB1; CD28 antigen ligand 1; CD28LG; CD28LG1; CD80; Costimulatory factor CD80; CTLA-4 counter-receptor B7.1; LAB7; T-lymphocyte activation antigen CD80				
Human gene symbol	CD80				
Entrez gene ID	941				
SwissProt	P33681				
Unigene	838				
Immunogen	Recombinant fragment of human CD80 protein (around aa 35-142) (exact sequence is proprietary)				
Antibody target cellular localization	Plasma membrane				
	Human				
Species reactivity	Human				
Species reactivity  Antibody application notes	Human  For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry				
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Antibody application notes  Positive control Shipping condition Storage Conditions Regulatory status Antibody/conjugate	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/ml. for most applications, or 1 ug/million cells/100 uL for flow cytometry  Raji or Ramos Cells. Tonsil, Spleen or Thymus  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  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/0.05% azide, Purflied: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purflied: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purflied: 1.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purflied in PBS/0.05% BSA/0.05% BSA/0.05% azide, Purflied in PBS/0.05% BSA/0.05%				
Antibody application notes  Positive control Shipping condition Storage Conditions Regulatory status Antibody/conjugate formulation	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/ml. for most applications, or 1 ug/million cells/100 uL for flow cytometry  Raji or Ramos Cells. Tonsil, Spleen or Thymus  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  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/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide				
Antibody application notes  Positive control Shipping condition Storage Conditions Regulatory status Antibody/conjugate formulation  Validated in protein array	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry  Raji or Ramos Cells. Tonsil, Spleen or Thymus  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  For research use only (RUO)  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  Monospecific  Guaranteed for at least 24 months from date of receipt when				

Call us: 800-304-5357 Email: btinfo@biotium.com

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	

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