

## Anti-CD80 Monoclonal Antibody [8G12]

Catalog Number: M00196-1

### About CD80

CD80, also known as B7-1, is a type I membrane protein that is a member of the immunoglobulin superfamily. Like the related protein CD86, this protein is expressed by antigen-presenting cells, and is the ligand for two proteins at the cell surface of T cells, CD28 and the cytotoxic T-lymphocyte-associated protein 4 (CTLA-4). Binding of this protein with CD28 antigen is a costimulatory signal for activation of the T-cell and induces T-cell proliferation and cytokine production. CTLA-4 binding negatively regulates T-cell activation and diminishes the immune response (1). Blocking the CTLA-4-CD80/CD86 interaction has been shown to enhance T-cell functions in acute lymphoblastic leukemia (ALL), suggesting that this pathway may be an attractive target for future cancer immunotherapy (2).

### Overview

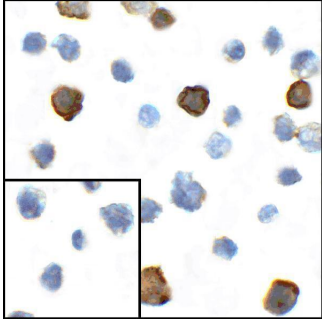
Product Name	Anti-CD80 Monoclonal Antibody [8G12]
Reactive Species	Human
Description	Boster Bio Anti-CD80 Monoclonal Antibody [8G12] (Catalog # M00196-1). Tested in ELISA, IHC-P, ICC, IF, Flow Cytometry applications. This antibody reacts with Human.
Application	ELISA, Flow Cytometry, IF, IHC-P, ICC
Clonality	Monoclonal Clone: 8G12
Formulation	CD80 Antibody is supplied in PBS containing 0.02% sodium azide and 50% glycerol.
Storage Instructions	CD80 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. Avoid repeated freeze-thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Host	Mouse
Uniprot ID	P33681

### Technical Details

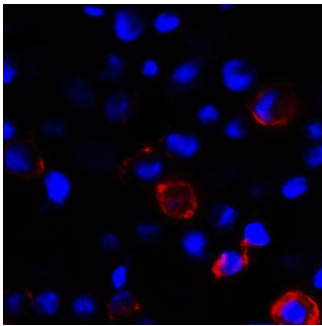
Immunogen	CD80 antibody was raised against the extracellular domain of human CD80.
Predicted Reactive Species	Mouse, Rat
Isotype	IgG2b
Form	Liquid
Concentration	1 mg/mL
Purification	CD80 Antibody is supplied as protein A purified IgG2b.
Suggested Dilutions	CD80 antibody can be used for immunohistochemistry starting at 2 - 5 ug/mL. For

immunofluorescence start at 5 ug/mL. Flow cytometry at 10 ug/ml.  
Antibody validated: Immunohistochemistry in human samples; Immunocytochemistry in human samples; Immunofluorescence in human samples and Flow Cytometry in mouse samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

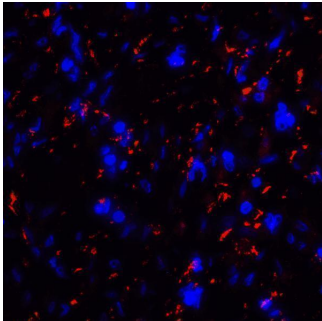
## Anti-CD80 Monoclonal Antibody [8G12] (M00196-1) Images



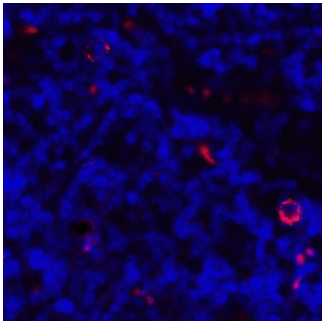
Immunocytochemistry of CD80 in transfected HEK293 cells with CD80 antibody at 1 ug/mL. Lower left: Immunocytochemistry in transfected HEK293 cells with control mouse IgG antibody at 1 ug/mL.



Immunofluorescence of CD80 in transfected HEK293 cells with CD80 antibody at 2 ug/mL. Red: CD80 Antibody [8G12] (M00196-1) Blue: DAPI staining

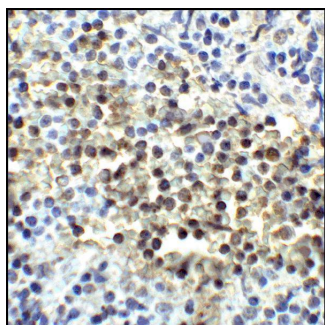
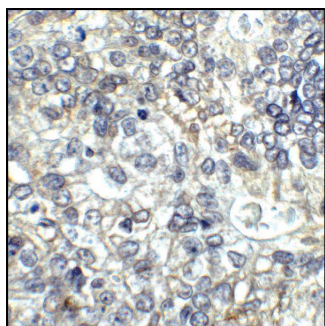


Immunofluorescence of CD80 in human stomach carcinoma tissue with CD80 antibody at 20 ug/mL. Red: CD80 Antibody [8G12] (M00196-1) Blue: DAPI staining

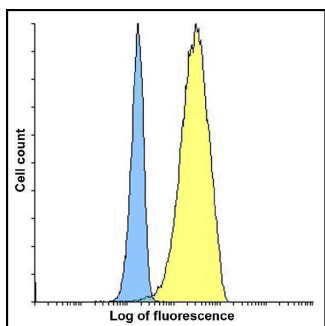


Immunofluorescence of CD80 in human tonsil tissue with CD80 antibody at 2 ug/mL. Red: CD80 Antibody [8G12] (M00196-1) Blue: DAPI staining

Immunohistochemistry of CD80 in human stomach carcinoma tissue with CD80 antibody at 5 ug/mL.



Immunohistochemistry of CD80 in human tonsil tissue with CD80 antibody at 5 ug/mL.



Flow cytometry analysis of CD80 overexpressing HEK293 cells using CD80 antibody and control mouse IgG antibody at 10 ug/ml. Blue: Untransfected HEK293 cells. Yellow: CD80 overexpressing HEK293 cells.

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