

Mouse anti-Human CD80 Monoclonal Antibody | anti-CD80 antibody

CD80 Antibody [8G12]

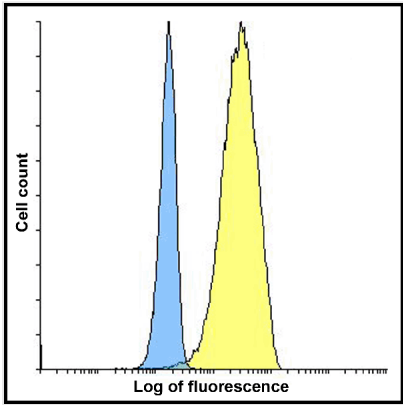
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA10996	Mouse	Human	ELISA, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

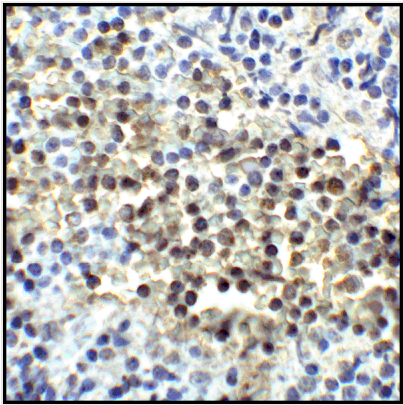
CD80; Monoclonal Antibody; CD80 Antibody [8G12]; CD80 molecule; B7; BB1; B7-1; B7.1; LAB7; CD28LG; CD28LG1; anti-CD80 antibody

PRODUCT SPECIFICATIONS

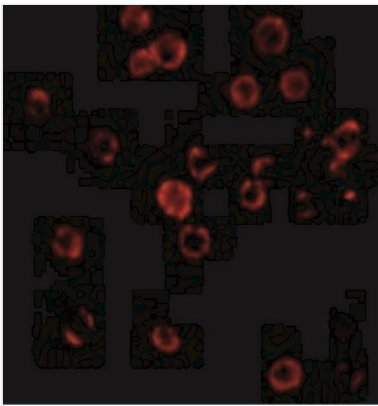
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2b
Clone Number	8G12
Purity/Purification	Protein A purified
Form/Format	Liquid Supplied in PBS containing 0.02% sodium azide.
Concentration	1 mg/mL (varies by lot)
Sequence Length	288
Applicable Applications for anti-CD80 antibody	ELISA, IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Application Notes	IHC starting at 2-5 ug/mL IF start at 5 ug/mL FC/FACS 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.
Immunogen	CD80 antibody was raised against the extracellular domain of human CD80.
Conjugate	Unconjugated
Preparation and Storage	Store at 4 degree C for three months and -20 degree C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.



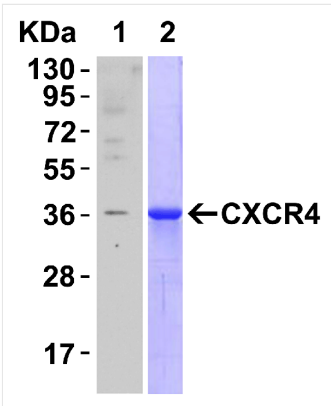
FCM (Flow Cytometry)
Flow cytometry analysis of CD80 overexpressing HEK293 cells using CD80 antibody and control mouse IgG antibody at 10 µg/ml. Blue: Untransfected HEK293 cells. Yellow: CD80 overexpressing HEK293 cells.



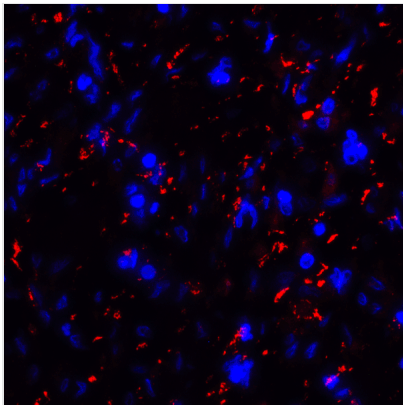
IHC (Immunohistochemistry)
Immunohistochemistry of CD80 in human tonsil tissue with CD80 antibody at 5 µg/mL.



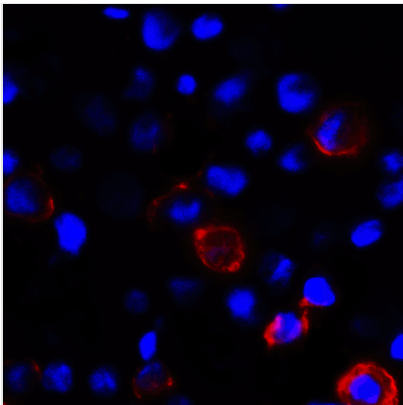
IHC (Immunohistochemistry)
Immunohistochemistry of CD80 in human stomach carcinoma tissue with CD80 antibody at 5 µg/mL.



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



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



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

ADDITIONAL INFORMATION

Related Product Information for anti-CD80 antibody	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).
Product Categories/Family for anti-CD80 antibody	Immunology
References	Lane P. Regulation of T and B cell responses by modulating interactions between CD28/CTLA-4 and their ligands, CD80 and CD86. Ann NY Acad Sci 1997; 815:392-400. Feucht J, Kayser S, Gorodezki D, et al. T-cell responses against CD19+ pediatric acute lymphoblastic leukemia mediated by bispecific T-cell engager (BiTE) are regulated contrarily by PD-L1 and CD80/CD86 on leukemic blasts. Oncotarget 2016; 7:76902-19.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4885123
NCBI GeneID	941
NCBI Accession #	NP_005182
NCBI GenBank Nucleotide #	NM_005191.3
UniProt Accession #	P33681; Q5DTA9; Q5DTB0
Molecular Weight	Predicted: 32 kDa Observed: 50 kDa
NCBI Official Full Name	T-lymphocyte activation antigen CD80
NCBI Official Synonym Full Names	CD80 molecule
NCBI Official Symbol	CD80
NCBI Official Synonym Symbols	B7; BB1; B7-1; B7.1; LAB7; CD28LG; CD28LG1
NCBI Protein Information	T-lymphocyte activation antigen CD80
UniProt Protein Name	T-lymphocyte activation antigen CD80
UniProt Gene Name	CD80
UniProt Synonym Gene Names	CD28LG; CD28LG1; LAB7; B7

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.