

CD80 Antibody [12D9]
Catalog # ASC12148

Specification

CD80 Antibody [12D9] - Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P33681
Other Accession	NP_005182
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	Predicted: 32 kDa
	Observed: 50 kDa KDa

CD80 Antibody [12D9] - Additional Information

Gene ID	941
Alias Symbol	CD80
Other Names	
CD80 Antibody:	CD80 molecule, B7, BB1, B7-1, B7.1, LAB7, CD28LG, CD28LG1

Reconstitution & Storage

CD80 antibody can be stored at 4°C for three months and -20°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.

Precautions

CD80 Antibody [12D9] is for research use only and not for use in diagnostic or therapeutic procedures.

CD80 Antibody [12D9] - Protein Information

Name CD80

Synonyms CD28LG, CD28LG1, LAB7

Function

Involved in the costimulatory signal essential for T- lymphocyte activation. T-cell proliferation and cytokine production is induced by the binding of CD28, binding to CTLA-4 has opposite effects and inhibits T-cell activation.

Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

Expressed on activated B-cells, macrophages and dendritic cells

CD80 Antibody [12D9] - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD80 Antibody [12D9] - Images

CD80 Antibody [12D9] - Background

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).

CD80 Antibody [12D9] - 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.