

## CD80 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5020b

## **Specification**

# CD80 Antibody (C-term) - Product Information

Application WB, FC,E
Primary Accession P33681
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 260-288

# CD80 Antibody (C-term) - Additional Information

#### Gene ID 941

### **Other Names**

T-lymphocyte activation antigen CD80, Activation B7-1 antigen, BB1, CTLA-4 counter-receptor B71, B7, CD80, CD80, CD28LG, CD28LG1, LAB7

# **Target/Specificity**

This CD80 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 260-288 amino acids from the C-terminal region of human CD80.

### **Dilution**

WB~~1:500-1000 FC~~1:10~50

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

CD80 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# CD80 Antibody (C-term) - Protein Information

# Name CD80

Synonyms CD28LG, CD28LG1, LAB7



**Function** Costimulatory molecule that belongs to the immunoglobulin superfamily that plays an important role in T-lymphocyte activation (PubMed:38467718). Acts as the primary auxiliary signal augmenting the MHC/TCR signal in naive T-cells together with the CD28 receptor which is constitutively expressed on the cell surface of T-cells (PubMed:12196291). In turn, activates different signaling pathways such as NF-kappa-B or MAPK leading to the production of different cytokines (PubMed:10438913). In addition, CD28/CD80 costimulatory signal stimulates glucose metabolism and ATP synthesis of T-cells by activating the PI3K/Akt signaling pathway (PubMed:12121659). Acts also as a regulator of PDL1/PDCD1 interactions to limit excess engagement of PDL1 and its inhibitory role in immune responses (PubMed:36727298). Expressed on B-cells, plays a critical role in regulating interactions between B-cells and T-cells in both early and late germinal center responses, which are crucial for the generation of effective humoral immune responses (By similarity).

### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

### **Tissue Location**

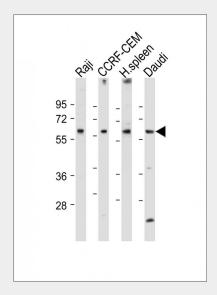
Expressed on activated B-cells, macrophages and dendritic cells

# CD80 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

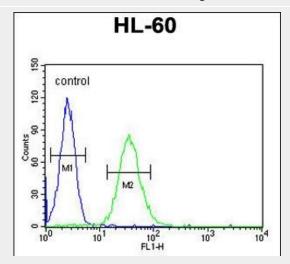
## CD80 Antibody (C-term) - Images



All lanes: Anti-CD80 Antibody (C-term) at 1:500-1000 dilution Lane 1: Raji whole cell lysate Lane 2: CCRF-CEM whole cell lysate Lane 3: Human spleen tissue lysate Lane 4: Daudi whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated



at 1/10000 dilution. Predicted band size: 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



CD80 Antibody (C-term) (Cat. #AP5020b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# CD80 Antibody (C-term) - Background

CD80 is activation antigen B7-1 (formerly referred to as B7) provides regulatory signals for T lymphocytes as a consequence of binding to the CD28 (MIM 186760) and CTLA4 (MIM 123890) ligands of T cells.

# CD80 Antibody (C-term) - References

Mosbruger, T.L., et al. J. Infect. Dis. 201(9):1371-1380(2010) Dubois, P.C., et al. Nat. Genet. 42(4):295-302(2010) Segat, L., et al. J. Gastroenterol. Hepatol. 24(12):1840-1846(2009)