

## **CD80 Antibody**

Rabbit mAb Catalog # AP91096

### **Specification**

#### **CD80 Antibody - Product Information**

Application WB, IHC
Primary Accession P33681
Clonality Monoclonal

**Other Names** 

B7.1; BB1; CD28 antigen ligand 1; CD28LG1; CD80; CD80 antigen; T-lymphocyte activation

antigen CD80;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 33048 Da

# **CD80 Antibody - Additional Information**

Dilution WB~~1:1000

IHC~~1:100~500

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

**CD80** 

Description Expressed on activated B-cells,

macrophages and dendritic cells. Involved in the costimulatory signal essential for

T-lymphocyte activation. T-cell

proliferation and cytokine production is induced by the binding of CD28 or CTLA-4

to this receptor.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

## **CD80 Antibody - Protein Information**

Name CD80

Synonyms CD28LG1, CD28LG1, LAB7

#### **Function**

Costimulatory molecule that belongs to the immunoglobulin superfamily that plays an important role in T-lymphocyte activation (PubMed:<a href="http://www.uniprot.org/citations/38467718" target="\_blank">38467718</a>). 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:<a href="http://www.uniprot.org/citations/12196291"



target="\_blank">12196291</a>). In turn, activates different signaling pathways such as NF-kappa-B or MAPK leading to the production of different cytokines (PubMed:<a href="http://www.uniprot.org/citations/10438913" target="\_blank">10438913</a>). In addition, CD28/CD80 costimulatory signal stimulates glucose metabolism and ATP synthesis of T-cells by activating the PI3K/Akt signaling pathway (PubMed:<a

href="http://www.uniprot.org/citations/12121659" target="\_blank">12121659</a>). Also acts as a regulator of PDL1/PDCD1 interactions to limit excess engagement of PDL1 and its inhibitory role in immune responses (PubMed:<a href="http://www.uniprot.org/citations/36727298" target="\_blank">36727298</a>). 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

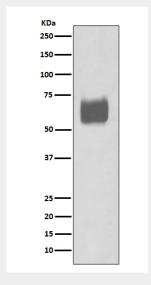
#### **Tissue Location**

Expressed on activated B-cells, macrophages and dendritic cells

## **CD80 Antibody - 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
- <u>Cell Culture</u>
   CD80 Antibody Images



Western blot analysis of CD80 expression in Raji cell lysate.