

# CD80 Antibody

Rabbit mAb

Catalog # AP91096

## Product Information

<b>Application</b>	WB, IHC
<b>Primary Accession</b>	<a href="#">P33681</a>
<b>Reactivity</b>	Human
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	B7.1; BB1; CD28 antigen ligand 1; CD28LG1; CD80; CD80 antigen; T-lymphocyte activation antigen CD80;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	33048

## Additional Information

<b>Dilution</b>	WB 1:500~1:2000 IHC 1:50~1:200
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human CD80
<b>Description</b>	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.
<b>Storage Condition and Buffer</b>	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.

## Protein Information

<b>Name</b>	CD80
<b>Synonyms</b>	CD28LG, CD28LG1, LAB7
<b>Function</b>	Costimulatory molecule that belongs to the immunoglobulin superfamily that plays an important role in T-lymphocyte activation (PubMed: <a href="#">38467718</a> ). Acts as the primary auxiliary signal augmenting the MHC/TCR signal in naive T-cells by acting as a ligand for the CD28 receptor which is constitutively expressed on the cell surface of T- cells (PubMed: <a href="#">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="#">10438913</a> ). Also acts as an inhibitor of T- cell activation by acting as a ligand for CTLA4, a decoy receptor, thereby blocking CD28-mediated T-cell priming (PubMed: <a href="#">10583602</a> , PubMed: <a href="#">11279502</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="#">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:[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**

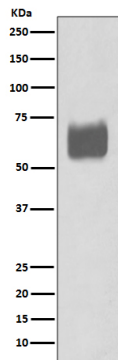
Cell membrane; Single-pass type I membrane protein

**Tissue Location**

Expressed on the surfaces of antigen-presenting cells.

## Images

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Western blot analysis of CD80 expression in Raji cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.