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# CD80 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14903

## Product Information

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| **Application** | WB |
| **Primary Accession** | P33681 |
| **Other Accession** | NM_005191, NP_005182 |
| **Reactivity** | Human, Pig |
| **Predicted** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 33048 |

## Additional Information

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| **Gene ID** | 941 |
| **Alias Symbol** | CD28LG, CD28LG1, LAB7, B7, BB1, B7-1, B7.1 |
| **Other Names** | T-lymphocyte activation antigen CD80, Activation B7-1 antigen, BB1, CTLA-4 counter-receptor B7.1, B7, CD80, CD80, CD28LG, CD28LG1, LAB7 |
| **Format** | Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. |
| **Reconstitution & Storage** | Add 50 ul of distilled water. Final anti-CD80 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles. |
| **Precautions** | CD80 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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 by acting as a ligand for 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). 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:10583602, PubMed:11279502). In addition, CD28/CD80 costimulatory signal stimulates glucose metabolism and ATP synthesis of T-cells by activating the PI3K/Akt signaling pathway (PubMed:12121659). 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).

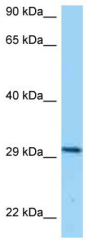
**Cellular Location** Cell membrane; Single-pass type I membrane protein

**Tissue Location** Expressed on the surfaces of antigen-presenting cells.

## References


Freeman G.J.,et al.J. Immunol. 143:2714-2722(1989).
Selvakumar A.,et al.Immunogenetics 36:175-181(1992).
Kakoulidou M.,et al.Scand. J. Immunol. 66:529-537(2007).
Muzny D.M.,et al.Nature 440:1194-1198(2006).
Freeman G.J.,et al.J. Exp. Med. 174:625-631(1991).


## Images




WB Suggested Anti-CD80 Antibody Titration: 1.0 µg/ml
Positive Control: Hela Whole Cell


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