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CD80 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5020b

Product Information

Application	WB, FC, E
Primary Accession	P33681
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22396
Calculated MW	33048
Antigen Region	260-288

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 E~~Use at an assay dependent concentration.
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.

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). 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 activated B-cells, macrophages and dendritic cells

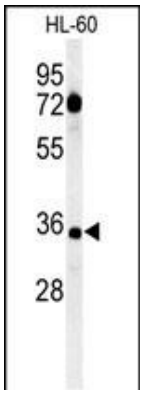
Background

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.

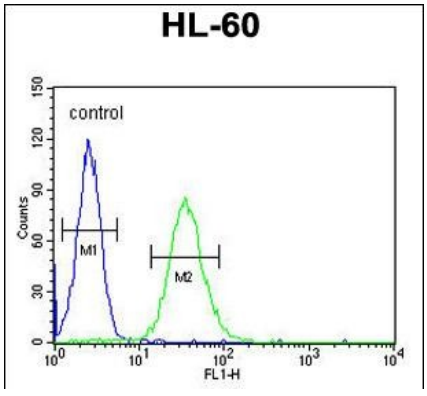
References

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)

Images



Western blot analysis of CD80 Antibody (C-term) (Cat. #AP5020b) in HL-60 cell line lysates (35ug/lane).CD80 (arrow) was detected using the purified Pab.



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.

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