Datasheet for ABIN5692796

anti-CD80 antibody (AA 35-244)

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Overview

Quantity:	100 µg
Target:	CD80
Binding Specificity:	AA 35-244
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CD80 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Purpose:	Anti-CD80 Antibody Picoband®
Immunogen:	E. coli-derived human CD80 recombinant protein (Position: V35-L244).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-CD80 Antibody Picoband® (ABIN5692796). Tested in ELISA, IF, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Target Details

Target:	CD80
Alternative Name:	CD80 (CD80 Products)
Background:	Synonyms: T-lymphocyte activation antigen CD80, Activation B7-1 antigen, BB1, CTLA-4 counter-receptor B7.1, B7, CD80, CD80, CD28LG, CD28LG1, LAB7 Tissue Specificity: Hematopoietic stem and progenitor cell- enriched populations. Found in brain, placenta and testis. Background: Cluster of Differentiation 80 (also CD80 and B7-1) is a protein found on activated B cells and monocytes that provides a costimulatory signal necessary for T cell activation and survival. It is the ligand for two different proteins on the T cell surface: CD28 (for autoregulation and intercellular association) and CTLA-4 (for attenuation of regulation and cellular disassociation). CD80 works in tandem with CD86 to prime T cells. The CD80 genes encode B7-1 which are structurally similar members of the immunoglobulin superfamily expressed on a variety of hematopoietic cell types.
Molecular Weight:	103 kDa
Gene ID:	941
UniProt:	P33681
Pathways:	TCR Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Positive Regulation of Immune Effector Process, Cancer Immune Checkpoints

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/mL Immunofluorescence, 5 µg/mL ELISA, 0.1-0.5 µg/mL 1. Peach, R J, Bajorath J, Naemura J, Leytze G, Greene J, Aruffo A, Linsley P S (Sep. 1995). "Both extracellular immunoglobin-like domains of CD80 contain residues critical for binding T cell surface receptors CTLA-4 and CD28". J. Biol. Chem. (UNITED STATES) 270 (36): 21181-7. 2. Stamper, C C, Zhang Y, Tobin J F, Erbe D V, Ikemizu S, Davis S J, Stahl M L, Seehra J, Somers W S, Mosyak L (Mar. 2001). "Crystal structure of the B7-1/CTLA-4 complex that inhibits human immune responses". Nature (England) 410 (6828): 608-11.
Restrictions:	For Research Use only

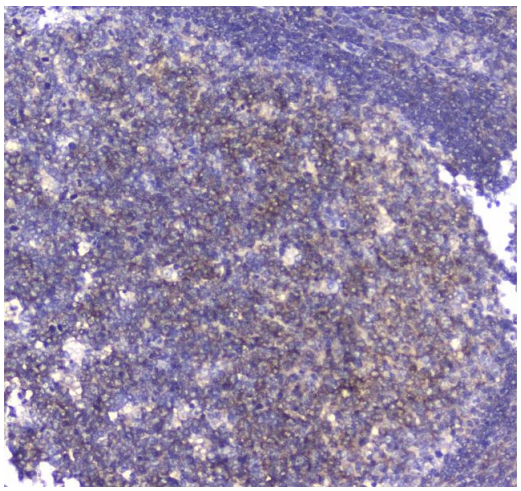
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

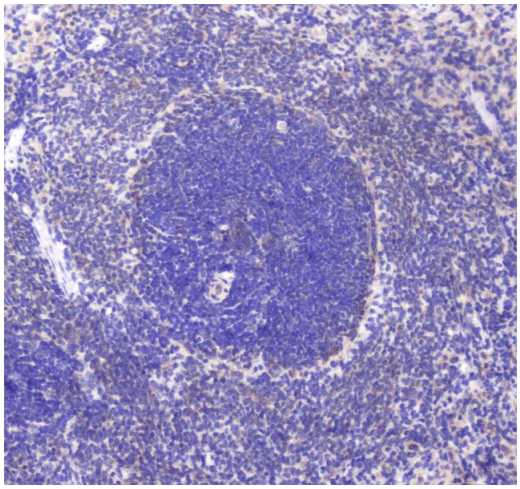
Product cited in:	Du, Dong, Zhao, Fu, Wang, Chen, Ou, Li, Sun, Tang, Song: "Immunostimulatory and anti-neoplasm effects of a novel palindrome CpG oligodeoxynucleotide in mice." in: **Acta pharmacologica Sinica**, Vol. 33, Issue 8, pp. 1047-54, (2012) (PubMed).

Images



Immunohistochemistry

Image 1. IHC analysis of CD80 using anti-CD80 antibody . CD80 was detected in paraffin-embedded section of human tonsil tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-CD80 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 2. IHC analysis of CD80 using anti-CD80 antibody . CD80 was detected in paraffin-embedded section of rat spleen tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-CD80 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.