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Datasheet for ABIN489934

anti-CD80 antibody

2 Images

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Overview

Quantity:	0.1 mg
Target:	CD80
Reactivity:	Mouse, Dog
Host:	Armenian Hamster
Clonality:	Monoclonal
Conjugate:	This CD80 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunoprecipitation (IP), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	CD80-transfected CHO cell line
Clone:	16-10A1
Isotype:	IgG2
Specificity:	The Armenian hamster monoclonal antibody 16-10A1 reacts with an extracellular epitope of CD80 (B7-1), a 60 kDa single chain type I glycoprotein of immunoglobulin supergene family, expressed on professional antigen-presenting cells, such as dendritic cells, macrophages or activated B lymphocytes.
Cross-Reactivity (Details):	Mouse, Canine (Dog)
Purification:	Purified by protein-A affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)

Target Details

Target:	CD80
Alternative Name:	CD80 (CD80 Products)
Background:	CD80 Molecule,CD80 (B7-1) and CD86 (B7-2) are ligands of T cell critical costimulatory molecule CD28 and of an inhibitory receptor CTLA-4 (CD152). The both B7 Molecules are expressed on professional antigen-presenting cells and are essential for T cell activation, the both molecules can also substitute for each other in this process. The question what are the differences in CD80 and CD86 competency has not been fully elucidated yet, there are still conflicts in results about their respective roles in initiation or sustaining of the T cell immune response.,B7-1, BB1
Gene ID:	12519
UniProt:	Q00609
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:	Flow cytometry: Recommended dilution: 1-4 µg/mL.
Restrictions:	For Research Use only

Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Do not freeze.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

Product cited in:

Mukherjee, Ahmed, Malu, Nandi: "Modulation of cell cycle progression by CTLA4-CD80/CD86 interactions on CD4+ T cells depends on strength of the CD3 signal: critical role for IL-2." in: **Journal of leukocyte biology**, Vol. 80, Issue 1, pp. 66-74, (2006) ([PubMed](#)).

Odobasic, Kitching, Semple, Timoshanko, Tipping, Holdsworth: "Glomerular expression of CD80 and CD86 is required for leukocyte accumulation and injury in crescentic glomerulonephritis." in: **Journal of the American Society of Nephrology : JASN**, Vol. 16, Issue 7, pp. 2012-22, (2005) ([PubMed](#)).

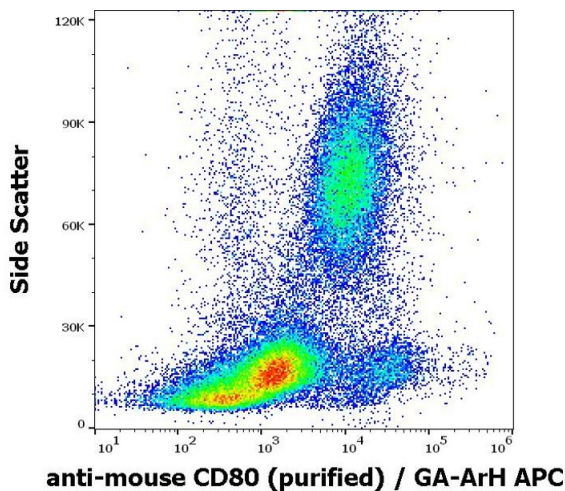
Paust, Lu, McCarty, Cantor: "Engagement of B7 on effector T cells by regulatory T cells prevents autoimmune disease." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 101, Issue 28, pp. 10398-403, (2004) ([PubMed](#)).

Quah, Ni, O'Neill: "In vitro hematopoiesis produces a distinct class of immature dendritic cells from spleen progenitors with limited T cell stimulation capacity." in: **International immunology**, Vol. 16, Issue 4, pp. 567-77, (2004) ([PubMed](#)).

Reiser, von Gersdorff, Loos, Oh, Asanuma, Giardino, Rastaldi, Calvaresi, Watanabe, Schwarz, Faul, Kretzler, Davidson, Sugimoto, Kalluri, Sharpe, Kreidberg, Mundel: "Induction of B7-1 in podocytes is associated with nephrotic syndrome." in: **The Journal of clinical investigation**, Vol. 113, Issue 10, pp. 1390-7, (2004) ([PubMed](#)).

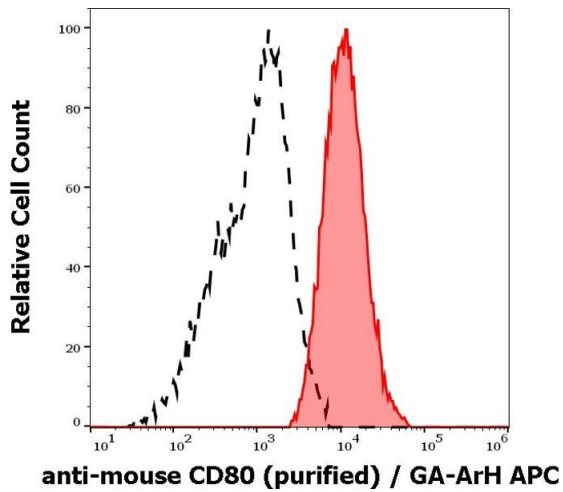
There are more publications referencing this product on: [Product page](#)

Images



Flow Cytometry

Image 1. Flow cytometry surface staining pattern of murine peripheral whole blood stained using anti-mouse CD80 (16-10A1) purified antibody (concentration in sample 2 µg/mL) GAM APC.



Flow Cytometry

Image 2. Separation of murine CD80 positive monocytes (red-filled) from CD80 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of murine peritoneal fluid cells stained using anti-mouse CD80 (16-10A1) purified antibody (concentration in sample 2 $\mu\text{g}/\text{mL}$) GAM APC.