

Datasheet for ABIN457341

anti-CD86 antibody (FITC)



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Publications



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Overview

Quantity:	0.1 mg
Target:	CD86
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This CD86 antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	LPS-activated CBA/Cs mouse splenic B cells
Clone:	GL-1
Isotype:	IgG2a kappa
Specificity:	The rat monoclonal antibody GL-1 reacts with an extracellular epitope of CD86 (B7-2), a 70-80 kDa type I transmembrane glycoprotein of immunoglobulin supergene family, expressed on professional antigen-presenting cells, such as dendritic cells, macrophages or activated B lymphocytes.
Cross-Reactivity (Details):	Mouse
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	CD86
Alternative Name:	CD86 (CD86 Products)
Background:	CD86 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.,B7-2, FUN-1, Ly58
Gene ID:	12524
UniProt:	P42082
Pathways:	TCR Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin
	Signaling Pathway, Activation of Innate immune Response, Cellular Response to Molecule of
	Bacterial Origin, Positive Regulation of Immune Effector Process, Activated T Cell Proliferation
Application Details	
Application Notes:	Flow cytometry: Recommended dilution: 1-2 µg/mL, positive control: murine splenocytes.
Comment:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum
	conditions. The reagent is free of unconjugated FITC.
Restrictions:	For Research Use only
Handling	
Concentration:	0.5 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.
	Avoid prolonged exposure to light.
Storage:	4 °C

Storage Comment:

Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:

Nolan, Kobayashi, Naveed, Kelly, Hoshino, Hoshino, Karulf, Rom, Weiden, Gold: "Differential role for CD80 and CD86 in the regulation of the innate immune response in murine polymicrobial sepsis." in: **PLoS ONE**, Vol. 4, Issue 8, pp. e6600, (2009) (PubMed).

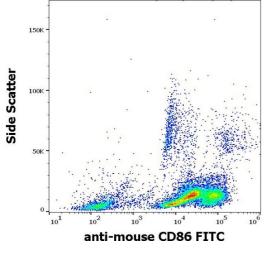
Radhakrishnan, Arneson, Upshaw, Howe, Felts, Colonna, Leibson, Rodriguez, Pease: "TREM-2 mediated signaling induces antigen uptake and retention in mature myeloid dendritic cells." in: **Journal of immunology (Baltimore, Md.: 1950)**, Vol. 181, Issue 11, pp. 7863-72, (2008) (PubMed).

Edgtton, Kausman, Li, OSullivan, Lo, Hutchinson, Yagita, Holdsworth, Kitching: "Intrarenal antigens activate CD4+ cells via co-stimulatory signals from dendritic cells." in: **Journal of the American Society of Nephrology : JASN**, Vol. 19, Issue 3, pp. 515-26, (2008) (PubMed).

Nolan, Weiden, Kelly, Hoshino, Hoshino, Mehta, Gold: "CD40 and CD80/86 act synergistically to regulate inflammation and mortality in polymicrobial sepsis." in: **American journal of respiratory and critical care medicine**, Vol. 177, Issue 3, pp. 301-8, (2008) (PubMed).

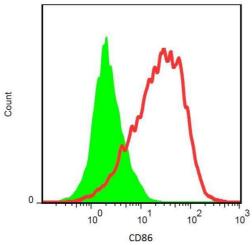
Steptoe, Ritchie, Jones, Harrison: "Autoimmune diabetes is suppressed by transfer of proinsulin-encoding Gr-1+ myeloid progenitor cells that differentiate in vivo into resting dendritic cells." in: **Diabetes**, Vol. 54, Issue 2, pp. 434-42, (2005) (PubMed).

There are more publications referencing this product on: Product page



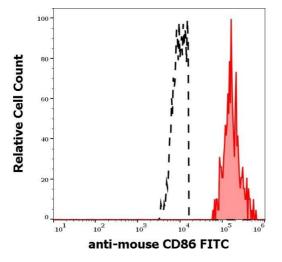
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of murine splenocyte suspension stained using anti-mouse CD86 (GL-1) FITC antibody (concentration in sample 0,33 μg/mL).



Flow Cytometry

Image 2. Surface staining of PHA-activated murine splenocytes with anti-CD86 (GL-1) FITC.



Flow Cytometry

Image 3. Separation of murine CD86 positive myeloid cells (red-filled) from CD86 negative lymphoid cells (black-dashed) in flow cytometry analysis (surface staining) murine splenocyte suspension stained using anti-mouse CD86 (GL-1) FITC antibody (concentration in sample 0,33 μ g/mL).