

Monoclonal Antibody to CD86 - FITC

Alternate names:	Activation B7-2 antigen, B7.2, B70, BU63, CD28LG2, CTLA-4 counter-receptor B7.2, FUN-1, T-lymphocyte activation antigen CD86
Catalog No.:	AM08053FC-N
Quantity:	0.5 mg
Concentration:	0.5 mg/ml
Background:	CD86 (also known as B7-2) is a type I transmembrane glycoprotein and a member of the immunoglobulin superfamily of cell surface receptors. It is expressed at high levels on resting peripheral monocytes and dendritic cells and at very low density on resting B and T lymphocytes. (Ref.1-5) CD86 expression is rapidly upregulated by B-cell specific stimuli with peak expression at 18-42 hours after stimulation. (Ref.1,5) CD86, along with CD80/B7-1, is an important accessory molecule in T cell costimulation via its interaction with CD28 and CD152/CTLA-4. Since CD86 has rapid kinetics of induction, it is believed to be the major CD28 ligand expressed early in the immune response. (Ref.1-9). The monoclonal antibody GL1 blocks mixed lymphocyte reactions and stimulation of T cells by antigen-presenting cells. (Ref.1,3,5)
Uniprot ID:	P42082
NCBI:	NP_062261
GenEID:	12524
Host / Isotype:	Rat / IgG2a
Clone:	GL1
Immunogen:	LPS-activated mouse B cells. (Ref.1)
Format:	State: Liquid purified Ig fraction. Buffer System: PBS containing 0.09% Sodium Azide as preservative. Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow Cytometry: < / = 1 µg/10e6 cells. (Ref.1-7) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises CD86, the B7-2 co-stimulatory molecule and a ligand for CD28 and CD152/CTLA-4. Species: Mouse. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

For research and in vitro use only. Not for diagnostic or therapeutic work.
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

- General Readings:**
1. Hathcock, K., G. Laszlo, C. Pucello, O. Linsley, and R.J. Hodes. 1994. *J. Exp. Med.* 180:631.
 2. Freeman, G.J., F. Borriello, R.J. Hodes, H. Reiser, K.S. Hathcock, G. Laszlo, A.J. McKnight, J. Kim, L. Du, D.B. Lombard, G.S. Gray, L.M. Nadler, and A.H. Sharpe. 1993. *Science* 262:907.
 3. Inaba, K. M. Witmer-Pack, M. Inaba, K.S. Hathcock, H. Sakuta, et al. 1994. *J. Exp. Med.* 180:1849.
 4. Larsen, C.P., S.C. Ritchie, R. Hendrix, P.S. Linsley, K.S. Hathcock, R.J. Hodes, R.P. Lowry, and T.C. Pearson. 1994. *J. Immunol.* 152:5208.
 5. Hathcock, K.S., G. Laszlo, C. Pucillo, P. Linsley, and R.J. Hodes. 1994. *J. Exp. Med.* 180:631.
 6. Laszlo, G., K.S. Hathcock, H.B. Dickler, and R.J. Hodes. 1993. *J. Immunol.* 150:5252.
 7. Hathcock, K., G. Laszlo, H. Dickler, J. Bradshaw, P. Linsley, and R. Hodes. 1993. *Science* 262:905.
 8. Thompson, C.B. 1995. *Cell* 978:982.
 9. June, C.H., J.A. Bluestone, L.M. Nadler, and C.B. Thompson. 1994. *Immuol. Today* 15:321.
 10. Han, S. et. al. 1995. *J. Immunol.* 155:556.

Pictures:

Immunofluorescent Staining: BALB/c spleen cells were activated by incubation for 72 hours with LPS. The cells were then harvested and stained with Rat anti-Mouse CD86-FITC. A wide gate was set to include small, medium and large cells, following which the cells were analyzed on a FACScan(TM) flow cytometer (BDIS, San Jose, CA). Amount Used: < / = 1 µg/10e6 cells.

