Datasheet: MCA2873F

Description:	MOUSE ANTI RAT CD80:FITC
Specificity:	CD80
Other names:	B7-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	3H5
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Rat

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.1mg/ml

Immunogen

HTLV-1 transformed Lewis-S1 cells.

External Database Links

UniProt:
O55202 Related reagents

Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the P3U1 mouse myeloma cell line.
Specificity	**Mouse anti Rat CD80, clone 3H5** specifically recognizes rat CD80, otherwise known as B7-1, a type I transmembrane glycoprotein and member of the Ig superfamily, which acts as a ligand for both CD28 and CD152 (CTLA-4), and is primarily expressed on antigen presenting cells (APCs) including dendritic cells. CD80 is a B cell activation antigen, which functions in the CD28-CD80/CD86 co-stimulatory pathway vital for T cell activation and proliferation. In contrast, the interaction of CD80 with CD152 has an inhibitory effect on T cell responses. Clone 3H5 has been shown to block the co-stimulatory activity of rat CD80.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10^6 cells in 100ul.
References	1. Maeda, K. *et al.* (1997) Characterization of rat CD80 and CD86 by molecular cloning and mAb. Int. Immunol. 9: 993-1000. 2. Damoiseaux, J.G. *et al.* (1998) Costimulatory molecules CD80 and CD86 in the rat; tissue distribution and expression by antigen-presenting cells. J Leukoc Biol. 64 (6): 803-9. 3. Kano, M. *et al.* (1998) A crucial role of host CD80 and CD86 in rat cardiac xenograft rejection in mice. Transplantation. 65: 837-43. 4. Hanabuchi, S. *et al.* (2000) Development of human T-cell leukemia virus type 1-transformed tumors in rats following suppression of T-cell immunity by CD80 and CD86 blockade. J Virol. 74: 428-35. 5. Tamatani, T. *et al.* (2000) AILIM/ICOS: a novel lymphocyte adhesion molecule. Int Immunol. 12: 51-5. 6. Dilek, N. *et al.* (2012) Control of transplant tolerance and intragraft regulatory T cell localization by myeloid-derived suppressor cells and CCL5. J Immunol. 188: 4209-16. 7. Ghiringhelli, F. *et al.* (2005) Tumor cells convert immature myeloid dendritic cells into TGF-beta-secreting cells inducing CD4+CD25+ regulatory T cell proliferation. J Exp Med. 202: 919-29. 8. Sacedón, R. *et al.* (1999) Glucocorticoid-mediated regulation of thymic dendritic cell function. Int Immunol. 11: 1217-24. 9. Kawai, T. *et al.*r (2000) T(h)1 transmigration anergy: a new concept of endothelial cell-T cell regulatory interaction. Int Immunol. 12: 937-48. 10. Macphee, I.A. *et al.* (2002) The Th2-response in mercuric chloride-induced autoimmunity requires continuing costimulation via CD28. Clin Exp Immunol. 129: 405-10. 11. MacPhee, I.A. *et al.* (2006) Blockade of OX40-ligand after initial triggering of the T helper 2 response inhibits mercuric chloride-induced autoimmunity. Immunology. 117: 402-8. 12. Yrlid, U. *et al.* (2006) A distinct subset of intestinal dendritic cells responds selectively to oral TLR7/8 stimulation. Eur J Immunol. 36: 2639-48. 13. Fan, C.B. *et al.* (2015) Alloantigen-specific T-cell hyporesponsiveness induced by dnIKK2 gene-transfected recipient immature dendritic cells. Cell Immunol. 297 (2): 100-7.
Storage	Store at +4^{o}C or at -20^{o}C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.

Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA1209F)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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