

Datasheet: MCA949FT

Description:	RAT ANTI MOUSE CD205:FITC
Specificity:	CD205
Other names:	DEC205
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	NLDC-145
Isotype:	IgG2a
Quantity:	25 µg

Product Details

RRID AB_2137654

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 - 1/10
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species Mouse

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 G from tissue culture supernatant

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide

Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.1 mg/ml

Immunogen Mouse lymph node stroma.

**External Database
Links**

UniProt:

[Q60767](#) [Related reagents](#)

Entrez Gene:

[17076](#) Ly75 [Related reagents](#)

Synonyms

Cd205

Specificity

Rat anti Mouse CD205, clone NLDC-145 recognizes DEC-205, a ~205 kDa integral membrane glycoprotein expressed by mouse dendritic cells and thymic epithelial cells. It is absent in bone marrow cells, all blood cells and freshly isolated macrophages from the peritoneal cavity. A subpopulation of the latter becomes positive in mice previously stimulated with thioglycollate. It is also absent on follicular dendritic cells of B cell follicles.

The antigen is found on Ia positive interdigitating cells in T cell areas of all secondary lymphoid organs. It is also present on veiled cells. In non-lymphoid organs, the antigen is only found on Langerhans cells of the skin but cross reactions with Ia positive thymic epithelial cells and intestinal villus epithelial cells are also observed.

DEC-205 is expressed at the cell surface of unfixed cells but can also be found in the cytoplasm of fixed cells.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR ([BUF041A/B](#)).

References

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3. Swiggard, W.J. *et al.* (1995) DEC-205, a 205-kDa protein abundant on mouse dendritic cells and thymic epithelium that is detected by the monoclonal antibody NLDC-145: purification, characterization, and N-terminal amino acid sequence. [Cell Immunol. 165 \(2\): 302-11.](#)
4. Inaba, K. *et al.* (1995) Tissue distribution of the DEC-205 protein that is detected by the monoclonal antibody NLDC-145. I. Expression on dendritic cells and other subsets of mouse leukocytes. [Cell Immunol. 163 \(1\): 148-56.](#)
5. Wolf AJ *et al.* (2007) *Mycobacterium tuberculosis* infects dendritic cells with high frequency and impairs their function *in vivo*. [J Immunol. 179 \(4\): 2509-19.](#)
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7. Jobe O *et al.* (2009) Immunization with radiation-attenuated *Plasmodium berghei* sporozoites induces liver cCD8alpha+DC that activate CD8+T cells against liver-stage malaria. [PLoS One. 4 \(4\): e5075.](#)
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and Induces the Systemic Expansion of CD11b(+)Gr1(+) Cells in a Transgenic Mouse Model.

[Biomed Res Int. 2016: 8091353.](#)

12. Wu Y *et al.* (2016) Effect of Aging on Periodontal Inflammation, Microbial Colonization, and Disease Susceptibility. [J Dent Res. 95 \(4\): 460-6.](#)

13. Kobayashi, A. *et al.* (2015) AG490, a Jak2 inhibitor, suppressed the progression of murine ovarian cancer. [Eur J Pharmacol. 766: 63-75.](#)

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15. Charmoy, M. *et al.* (2010) Neutrophil-derived CCL3 is essential for the rapid recruitment of dendritic cells to the site of *Leishmania major* inoculation in resistant mice. [PLoS Pathog. 6 \(2\): e1000755.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. 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.

Guarantee

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

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

North & South Tel: +1 800 265 7376

America 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

'M343352:190110'

Printed on 20 May 2019

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