

Datasheet: MCA2502F

Description:	MOUSE ANTI HUMAN CD74:FITC
Specificity:	CD74
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	Bu45
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 (1)	■			Neat - 1/5

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.

(1) **Membrane permeabilisation may enhance CD74 staining. Bio-Rad recommend the use of Leucoperm™ (product code [BUF09](#)) for this purpose.**

Target Species	Human		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore FITC	Excitation Max (nm) 490	Emission Max (nm) 525
Preparation	Purified IgG prepared by affinity chromatography on Protein G 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	B lymphoblastoid cell line HFB1.		
External Database Links	UniProt: P04233 Related reagents		

Entrez Gene:[972](#) CD74 [Related reagents](#)

Synonyms	DHLAG
Fusion Partners	Spleen cells from immunised mice were fused with cells of the Ag8.653 myeloma cell line.
Specificity	Mouse anti Human CD74 antibody, clone Bu45 recognizes human CD74, a type II transmembrane protein, which is also known as the MHC class II associated invariant chain. The Bu45 antibody recognizes 33, 35 and 41 kDa isoforms of CD74. The CD74 molecule plays a critical role in the presentation of peptides, by the MHC class II antigens, to CD4 positive lymphocytes. CD74 is expressed on MHC class II positive cells including B cells, a subset of activated T cells, monocytes, dendritic cells and by various types of carcinoma. Expression of CD74 is primarily intracellular with moderate expression at the cell surface of B cells and monocytes. Mouse anti Human CD74 antibody, clone Bu45 binds to an epitope within the extracytoplasmic domain of the CD74 molecule, which is distal from the C-terminus.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.
References	1. Wraight, C.J. <i>et al.</i> (1990) Human major histocompatibility complex class II invariant chain is expressed on the cell surface. J Biol Chem. 265 (10): 5787-92. 2. Beswick, E.J. <i>et al.</i> (2005) <i>Helicobacter pylori</i> binds to CD74 on gastric epithelial cells and stimulates interleukin-8 production. Infect Immun. 73: 2736-43. 3. Lapaque, N. <i>et al.</i> (2009) The HLA-DRA chain is modified by polyubiquitination. J Biol Chem. 284: 7007-16. 4. van Bergen, J. <i>et al.</i> (1997) Efficient loading of HLA-DR with a T helper epitope by genetic exchange of CLIP. Proc Natl Acad Sci U S A. 94: 7499-502. 5. Barrera, C.A. <i>et al.</i> (2005) Polarized expression of CD74 by gastric epithelial cells. J Histochem Cytochem. 53: 1481-9. 6. Beswick, E.J. <i>et al.</i> (2006) The <i>Helicobacter pylori</i> urease B subunit binds to CD74 on gastric epithelial cells and induces NF-kappaB activation and interleukin-8 production. Infect Immun. 74: 1148-55.
Storage	Store at +4°C or at -20°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 \(MCA928F\)](#)

Recommended Useful Reagents

[LEUCOPERM™ \(BUF09\)](#)

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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