

Datasheet: MCA2502PE

Description:	MOUSE ANTI HUMAN CD74:RPE
Specificity:	CD74
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	Bu45
Isotype:	IgG1
Quantity:	100 TESTS

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

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

Target Species	Human
Product Form	Purified Protein conjugated to R. Phycoerythrin (RPE) - lyophilized
Reconstitution	Reconstitute with 1.0 ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution
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 5% Sucrose

Immunogen	B lymphoblastoid cell line HFB1.
External Database Links	<p>UniProt: P04233 Related reagents</p> <p>Entrez Gene: 972 CD74 Related reagents</p>
Synonyms	DHLAG
Fusion Partners	Spleen cells from immunised mice were fused with cells of the Ag8.653 myeloma cell line.
Specificity	<p>Mouse anti Human CD74 antibody, clone Bu45 recognizes human CD74, a type II transmembrane protein, 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.</p> <p>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.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul
References	<ol style="list-style-type: none"> 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-DRAalpha 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. 7. Goldenberg, D.M. <i>et al.</i> (2019) Subcutaneous administration of anti-CD74 antibody for systemic lupus erythematosus US patent US 20170266281 A1
Storage	<p>Prior to reconstitution store at +4°C.</p> <p>After reconstitution store at +4°C.</p> <p>DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.</p>

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #20487 available at:
20487: <https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[LEUCOPERM \(BUF09\)](#)

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

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

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