

Datasheet: MCA87PECY5.5

### **BATCH NUMBER 155119**

Description:	MOUSE ANTI HUMAN CD45:RPE-Cy5.5
Specificity:	CD45
Other names:	LCA
Format:	RPE-CY5.5
<b>Product Type:</b>	Monoclonal Antibody
Clone:	F10-89-4
Isotype:	IgG2a
Quantity:	100 TESTS

# **Product Details**

### **Applications**

**Preservative** 

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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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.

		<u> </u>		
Target Species	Human			
Product Form	Purified IgG conjugate	ed to R. Phycoerythrin	-Cy5.5 (RPE-Cy5.5) - lyophi	lized
Reconstitution	Reconstitute with 1.0 i	ml distilled water		
	Care should be taken	during reconstitution	as the protein may appear a	s a film
	bottom of the vial. Bio-	-Rad recommend that	the vial is gently mixed afte	r recons
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	RPE-Cy5.5 488nm laser	496	695	
Preparation	Purified IgG prepared	by affinity chromatog	raphy on Protein A	
Buffer Solution	Phosphate buffered sa	aline		

0.09% Sodium Azide

Stabilisers	1% Bovine Serum Albumin 5% Sucrose
Immunogen	Human T lymphocytes.
External Database Links	UniProt: P08575 Related reagents  Entrez Gene:
O	5788 PTPRC Related reagents
Synonyms	CD45
RRID	AB_10844351
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	<b>Mouse anti Human CD45 antibody, clone F10-89-4</b> recognizes the human CD45 cell surface antigen, also known as leucocyte common antigen (LCA). CD45 is a complex molecule existing in a number of isoforms.
	Antibodies recognizing a common epitope on all of these isoforms are termed CD45 whilst those recognizing only individual isoforms are termed CD45RA or CD45RO etc.
	Mouse anti Human CD45 antibody, clone F10-89-4 reacts with all forms of CD45 expressed by all haematopoietic cells, except erythrocytes, having a higher level of expression on lymphocytes than on granulocytes.
	Mouse anti Human CD45 antibody, clone F10-89-4 is routinely tested in flow cytometry on human peripheral blood leucocytes.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood
References	1. Dalchau, R. <i>et al.</i> (1980) Monoclonal antibody to a human leukocyte-specific membrane glycoprotein probably homologous to the leukocyte-common (L-C) antigen of the rat. <u>Eur J Immunol. 10 (10): 737-44.</u> 2. Quenby, S <i>et al.</i> (1999) Pre-implantation endometrial leukocytes in women with
	recurrent miscarriage. Human Reprod. 14(9):2386-2391.  3. Hauser, P.V. et al. (2010) Stem cells derived from human amniotic fluid contribute to acute kidney injury recovery. Am J Pathol. 177: 2011-21.  4. Mallam, E. et al. (2010) Characterization of in vitro expanded bone marrow-derived mesenchymal stem cells from patients with multiple sclerosis. Mult Scler. 16: 909-18.  5. Marrinucci, D. et al. (2010) Cytomorphology of circulating colorectal tumor cells:a small case series. J Oncol. 2010: 861341.  6. Kazane, S.A. et al. (2012) Site-specific DNA-antibody conjugates for specific and

sensitive immuno-PCR. Proc Natl Acad Sci U S A. 109: 3731-6.

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- 16. Ruiz, C. *et al.* (2015) Limited genomic heterogeneity of circulating melanoma cells in advanced stage patients. Phys Biol. 12 (1): 016008.
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- 18. GarikipatiV, N.S. *et al.* (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. <u>PLoS One</u>. 13 (2): e0192244.
- 19. Shishido, S.N. *et al.* (2019) Circulating tumor cells as a response monitor in stage IV non-small cell lung cancer. J Transl Med. 17 (1): 294.
- 20. Welter, L. *et al.* (2020) Treatment response and tumor evolution: Lessons from an extended series of multi-analyte liquid biopsies in a metastatic breast cancer patient. <u>Cold Spring Harb Mol Case Stud. Nov 17 [Epub ahead of print].</u>
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- 22. Shishido, S.N. *et al.* (2022) Liquid Biopsy Landscape in Patients with Primary Upper Tract Urothelial Carcinoma. <u>Cancers (Basel)</u>. 14 (12): 3007.
- 23. Chai, S. *et al.* (2022) Identification of epithelial and mesenchymal circulating tumor cells in clonal lineage of an aggressive prostate cancer case. NPJ Precis Oncol. 6 (1): 41.

#### Storage

Prior to reconstitution store at +4°C.

After reconstitution store at +4°C.

DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we

# recommend microcentrifugation before use

Guarantee	12 months from date of despatch
Acknowledgements	Cy® and CyDye® are registered trademarks of GE Healthcare
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA87PECY5.5">https://www.bio-rad-antibodies.com/SDS/MCA87PECY5.5</a> 20487
Regulatory	For research purposes only

# **Related Products**

# **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M375685:210104'

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