

Datasheet: MCA87P647

Description:	MOUSE ANTI HUMAN CD45:RPE-Alexa Fluor® 647		
Specificity:	CD45		
Other names:	LCA		
Format:	RPE-ALEXA FLUOR® 647		
Product Type:	Monoclonal Antibody		
Clone:	F10-89-4		
Isotype:	lgG2a		
Quantity:	100 TESTS/1ml		

## **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 <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 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	Human		
Product Form	Purified IgG conjugat	ed to R. Phycoerythrin	(RPE) - Alexa Fluc
Reconstitution	Reconstitute with 1 m	l distilled water	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	RPE-Alexa Fluor®647 488nm laser	496	667
	RPE-Alexa Fluor®647 561nm laser	546	667
Preparation	Purified IgG prepared supernatant	by affinity chromatog	raphy on Protein A
Buffer Solution	Phosphate buffered s	aline	

Preservative Stabilisers
Immunogen
External Database Links
Synonyms
RRID
Fusion Partners

**Specificity** 

0.09% Sodium Azide

1% Bovine Serum Albumin

5% Sucrose

Human T lymphocytes.

# **UniProt:**

P08575 Related reagents

**Entrez Gene:** 

5788 PTPRC Related reagents

**CD45** 

AB 566769

Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1 myeloma cell line.

Mouse anti Human CD45 antibody, clone F10-89-4 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

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

- 7. Paul, G. *et al.* (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. PLoS One. 7: e35577.
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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.
- 17. Branly, T. *et al.* (2017) Characterization and use of Equine Bone Marrow Mesenchymal Stem Cells in Equine Cartilage Engineering. Study of their Hyaline Cartilage Forming Potential when Cultured under Hypoxia within a Biomaterial in the Presence of BMP-2 and TGF-β1. Stem Cell Rev. Jun 09 [Epub ahead of print].
- 18. GarikipatiV, N.S. *et al.* (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. <u>PLoS One. 13 (2): e0192244.</u>
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# Storage

Prior to reconstitution store at +4°C. Following 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

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**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 IgG2a NEGATIVE CONTROL:RPE-Alexa Fluor® 647 (MCA929P647)

## **Recommended Useful Reagents**

**HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)** 

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