Datasheet: MCA87APCT

BATCH NUMBER INN1702

Description:	MOUSE ANTI HUMAN CD45:APC
Specificity:	CD45
Other names:	LCA
Format:	APC
Product Type:	Monoclonal Antibody
Clone:	F10-89-4
Isotype:	IgG2a
Quantity:	25 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	▪			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 conjugated to Allophycocyanin (APC) - lyophilised

Reconstitution

Reconstitute in 0.25 ml disilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
APC	650	661

Preparation

Purified IgG prepared by affinity chromatography from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin
5% Sucrose

Immunogen	Human T lymphocytes.
External Database Links	**UniProt:** P08575 Related reagents **Entrez Gene:** 5788 PTPRC Related reagents
Synonyms	CD45
RRID	AB_1102055
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	**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 10^6 cells or 100ul whole blood
References	1. Dalchau, R. *et al.* (1980) Monoclonal antibody to a human leukocyte-specific membrane glycoprotein probably homologous to the leukocyte-common (L-C) antigen of the rat. Eur J Immunol. 10 (10): 737-44. 2. Quenby, S *et al.* (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. 7. Paul, G. *et al.* (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. PLoS One. 7: e35577. 8. Sadarangani, A. *et al.* (2015) GLI2 inhibition abrogates human leukemia stem cell

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15. Mohamed Suhaimi, N.A. *et al.* (2015) Non-invasive sensitive detection of KRAS and BRAF mutation in circulating tumor cells of colorectal cancer patients. Mol Oncol. 9 (4): 850-60.
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18. GarikipatiV, N.S. *et al.* (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. PLoS One. 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. Cold Spring Harb Mol Case Stud. Nov 17 [Epub ahead of print].

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
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA87APCT 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:APC (MCA929APC)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America	Tel: +1 800 265 7376 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M375681:210104'

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