

Datasheet: MCA87PECY5.5

| Description: | MOUSE ANTI HUMAN CD45:RPE-Cy5.5 |
|---------------|---------------------------------|
| Specificity: | CD45 |
| Other names: | LCA |
| Format: | RPE-CY5.5 |
| Product Type: | Monoclonal Antibody |
| Clone: | F10-89-4 |
| Isotype: | lgG2a |
| Quantity: | 100 TESTS |
| | |

Product Details

Applications

Preservative

Stabilisers

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 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.

| Target Species | Human | | | |
|-----------------|--------------------------|------------------------|----------------------------|----------------------|
| Product Form | Purified IgG conjugate | ed to R. Phycoerythrin | -Cy5.5 (RPE-Cy5.5) - Iyo | philized |
| Reconstitution | Reconstitute with 1.0 i | ml distilled water | | |
| | Care should be taken | during reconstitution | as the protein may appea | r as a film at the |
| | bottom of the vial. Bio- | -Rad recommend that | the vial is gently mixed a | after reconstitution |
| 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

Bovine Serum Albumin

1%

| | 5% Sucrose |
|----------------------------|--|
| Immunogen | Human T lymphocytes. |
| External Database Links | UniProt: P08575 Related reagents Entrez Gene: 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 | 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 | 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. Quenby, S et al. (1999) Pre-implantation endometrial leukocytes in women with recurrent miscarriage. Human Reprod. 14(9):2386-2391. 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. 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. Marrinucci, D. et al. (2010) Cytomorphology of circulating colorectal tumor cells:a small case series. J Oncol. 2010: 861341. 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. Paul, G. et al. (2012) The adult human brain harbors multipotent perivascular |

mesenchymal stem cells. PLoS One. 7: e35577.

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- 10. Gogoi P *et al.* (2016) Development of an Automated and Sensitive Microfluidic Device for Capturing and Characterizing Circulating Tumor Cells (CTCs) from Clinical Blood Samples. <u>PLoS One. 11 (1): e0147400.</u>
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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. <u>Mol Oncol. 9 (4):</u> 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. <u>J Transl Med. 17 (1): 294.</u>
- 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>.

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: 20487: https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf |

Related Products

Recommended Useful Reagents

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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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