

## Datasheet: MCA87SBV440

<b>Description:</b>	MOUSE ANTI HUMAN CD45:StarBright Violet 440
<b>Specificity:</b>	CD45
<b>Other names:</b>	LCA
<b>Format:</b>	StarBright Violet 440
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	F10-89-4
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS/0.5ml

### 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](http://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.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to StarBright Violet 440 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	StarBright Violet 440	385	438
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350		

<b>Immunogen</b>	Human T lymphocytes.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P08575</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">5788</a>    PTPRC    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD45
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1 myeloma cell line.
<b>Specificity</b>	<p><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.</p> <p>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.</p> <p>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.</p> <p>Mouse anti Human CD45 antibody, clone F10-89-4 is routinely tested in flow cytometry on human peripheral blood leucocytes.</p>
<b>Flow Cytometry</b>	Use 5ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
<b>References</b>	<ol style="list-style-type: none"> <li>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. <a href="#">Eur J Immunol. 10 (10): 737-44.</a></li> <li>2. Quenby, S <i>et al.</i> (1999) Pre-implantation endometrial leukocytes in women with recurrent miscarriage. <a href="#">Human Reprod. 14(9):2386-2391.</a></li> <li>3. Hauser, P.V. <i>et al.</i> (2010) Stem cells derived from human amniotic fluid contribute to acute kidney injury recovery. <a href="#">Am J Pathol. 177: 2011-21.</a></li> <li>4. Mallam, E. <i>et al.</i> (2010) Characterization of <i>in vitro</i> expanded bone marrow-derived mesenchymal stem cells from patients with multiple sclerosis. <a href="#">Mult Scler. 16: 909-18.</a></li> <li>5. Marrinucci, D. <i>et al.</i> (2010) Cytomorphology of circulating colorectal tumor cells:a small case series. <a href="#">J Oncol. 2010: 861341.</a></li> <li>6. Kazane, S.A. <i>et al.</i> (2012) Site-specific DNA-antibody conjugates for specific and sensitive immuno-PCR. <a href="#">Proc Natl Acad Sci U S A. 109: 3731-6.</a></li> <li>7. Paul, G. <i>et al.</i> (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. <a href="#">PLoS One. 7: e35577.</a></li> <li>8. Sadarangani, A. <i>et al.</i> (2015) GLI2 inhibition abrogates human leukemia stem cell dormancy. <a href="#">J Transl Med. 13: 98.</a></li> </ol>

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<b>Storage</b>	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20438 available at: 20438: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/20438.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/20438.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Useful Reagents

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

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

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