

## Datasheet: MCA2504T

<b>Description:</b>	MOUSE ANTI HUMAN CD44
<b>Specificity:</b>	CD44
<b>Other names:</b>	H-CAM, PGP-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	Bu52
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 µg

## 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	▪			1/25 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			1/100 - 1/200
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<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> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P16070</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">960</a>    CD44    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	LHR, MDU2, MDU3, MIC4
<b>RRID</b>	AB_1102047
<b>Specificity</b>	<p><b>Mouse anti Human CD44 antibody, clone Bu52</b> recognizes the human CD44 cell surface antigen, a ~100 kDa glycoprotein widely expressed on human leucocytes, white matter of the brain and by some epithelial cells of the intestine and of the breast. Several isoforms of CD44 exist, including the predominant CD44H isoform detected in many normal tissues. Mouse anti Human CD44 antibody, clone Bu52 recognizes an epitope that is common to all CD44 isoforms.</p> <p>CD44 is a receptor for hyaluronic acid (HA) and is involved in cell-cell interactions, cell adhesion and migration. CD44 also participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing. CD44 expression may be up-regulated upon some carcinomas, and it has been speculated that this may be related to metastatic potential.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Belitsos, P.C. <i>et al.</i> (1990) Homotypic cell aggregation induced by anti-CD44(Pgp-1) monoclonal antibodies and related to CD44(Pgp-1) expression. <a href="#">J Immunol. 144 (5): 1661-70.</a></li> <li>2. Katz, E. <i>et al.</i> (2012) Targeting of Rac GTPases blocks the spread of intact human breast cancer. <a href="#">Oncotarget. 3 (6): 608-19.</a></li> <li>3. Muerza-Cascante, M.L. <i>et al.</i> (2017) Endosteal-like extracellular matrix expression on melt electrospun written scaffolds. <a href="#">Acta Biomater. 52: 145-58.</a></li> <li>4. Hanke-Roos, M. <i>et al.</i> (2017) CD44 mediates the catch-bond activated rolling of HEPG2Iso epithelial cancer cells on hyaluronan. <a href="#">Cell Adh Migr. 11 (5-6): 476-87.</a></li> <li>5. Noda, S. <i>et al.</i> (2019) Effect of cell culture density on dental pulp-derived mesenchymal stem cells with reference to osteogenic differentiation. <a href="#">Sci Rep. 9 (1): 5430.</a></li> <li>6. Thorne, R.F. <i>et al.</i> (2020) Evaluating nuclear translocation of surface receptors: recommendations arising from analysis of CD44. <a href="#">Histochem Cell Biol. 153 (2): 77-87.</a></li> <li>7. Orikasa, S. <i>et al.</i> (2022) Hypoxia-inducible factor 1α induces osteo/odontoblast differentiation of human dental pulp stem cells via Wnt/β-catenin transcriptional cofactor</li> </ol>

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<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.  Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2504T">https://www.bio-rad-antibodies.com/SDS/MCA2504T</a> 10040
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://bio-rad-antibodies.com/datasheets)  
'M384430:210513'

Printed on 18 Jan 2024