

## Datasheet: MCA1729

<b>Description:</b>	MOUSE ANTI HUMAN CD44v5
<b>Specificity:</b>	CD44v5
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	VFF-8
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## 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	▪			1/10
Immunohistology - Frozen	▪			1/10
Immunohistology - Paraffin (1)	▪			1/10
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>	Antibody purified from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	<0.1% sodium azide (NaN <sub>3</sub> )

**Approx. Protein Concentrations** IgG concentration 0.1 mg/ml

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**External Database Links**

**UniProt:**  
[P16070](#)   [Related reagents](#)

**Entrez Gene:**  
[960](#) CD44   [Related reagents](#)

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**Synonyms** LHR, MDU2, MDU3, MIC4

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**RRID** AB\_322692

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**Specificity**

**Mouse anti Human CD44v5 antibody, clone VFF-8** specifically recognises an epitope encoded by exon v5 on the variant region of human CD44. CD44 is a type I transmembrane glycoprotein of variable molecular weight ranging from ~90 kDa to ~220 kDa depending on alternate splicing of the variable region exons and on the degree of glycosylation. CD44 is expressed on multiple cell types and is involved in multiple functions including cell-cell interactions and cell-extracellular matrix binding. Hyaluronan, a high molecular weight polysaccharide component of the extracellular matrix acts as the principal ligand for the CD44 receptor ([Laurent and Fraser 1992](#)).

CD44 isoforms containing one or more sequences encoded by the variant region exons have a much more restricted expression pattern both in terms of organ specificity and immune activation ([Mackay et al. 1994](#)). CD44 isoforms bearing the v5 exon product have been implicated in various neoplasms including breast cancer ([Tempfer et al. 1996](#)), renal cell carcinoma ([Wu et al. 2003](#)) and cervical cancer metastases ([Kainz et al. 1996](#)).

Mouse anti Human CD44v5 antibody has proved a useful reagent for the immunohistochemical or flow cytometric evaluation of CD44 variants containing the v5 exon product expression in normal and neoplastic cells ([Ringel et al. 2001](#))

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**Flow Cytometry** Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl

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**References**

1. Bånkfalvi, A. *et al.* (1998) Gains and losses of CD44 expression during breast carcinogenesis and tumour progression. [Histopathology. 33 \(2\): 107-16.](#)
2. Alam, T.N. *et al.* (2004) Differential expression of CD44 during human prostate epithelial cell differentiation. [J Histochem Cytochem. 52: 1083-90.](#)
3. Rajarajan, A. *et al.* (2012) CD44 expression in oro-pharyngeal carcinoma tissues and cell lines. [PLoS One. 7: e28776.](#)
4. Hanley, W.D. *et al.* (2006) Variant isoforms of CD44 are P- and L-selectin ligands on colon carcinoma cells. [FASEB J. 20: 337-9.](#)
5. Chaiyarit, P. *et al.* (2008) Alteration of the expression of CD44 [corrected] isoforms in oral epithelia and saliva from patients with oral lichen planus. [J Clin Immunol. 28: 26-34.](#)
6. Shirure, V.S. *et al.* (2015) CD44 variant isoforms expressed by breast cancer cells are functional E-selectin ligands under flow conditions. [Am J Physiol Cell Physiol. 308 \(1\): C68-78.](#)

7. Spadea, A. *et al.* (2019) Evaluating the Efficiency of Hyaluronic Acid for Tumor Targeting via CD44. [Mol Pharm. 16 \(6\): 2481-93.](#)
8. Noori, M.S. *et al.* (2018) An adhesion based approach for the detection of esophageal cancer. [Integr Biol \(Camb\). 10 \(12\): 747-57.](#)

<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/MCA1729">https://www.bio-rad-antibodies.com/SDS/MCA1729</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</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>

### 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://www.bio-rad-antibodies.com/datasheets)

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