

Datasheet: MCA1728F

Description:	MOUSE ANTI HUMAN CD44v4:FITC
Specificity:	CD44v4
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	VFF-11
Isotype:	IgG1
Quantity:	100 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
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Buffer Solution	Tris buffered saline		
Preservative	0.02% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Immunogen	Glutathione S Transferase (GST) fusion protein corresponding to the variable domains (v3 to v10) of human CD44.		
External Database	UniProt:		

Links

[P16070](#) [Related reagents](#)

Entrez Gene:

[960](#) CD44 [Related reagents](#)

Synonyms

LHR, MDU2, MDU3, MIC4

RRID

AB_322691

Fusion Partners

Spleen cells from immunized BALB/c mice were fused with cells of the P3X63Ag8.653 myeloma cell line.

Specificity

Mouse anti Human CD44v4 antibody, clone VFF-11 recognizes an epitope encoded by exon v4 on the variant portion of human CD44. CD44v4 is strongly expressed on some breast cancer cell lines, notably epithelial-like BT-20 cells where v4 containing isoforms possess functional E-selectin ligand activity mediating cell adhesion under physiological flow conditions ([Shirure et al. 2014](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Koopman, G. *et al.* (1993) Activated human lymphocytes and aggressive non-Hodgkin's lymphomas express a homologue of the rat metastasis-associated variant of CD44. [J Exp Med. 177 \(4\): 897-904.](#)
2. Hanley, W.D. *et al.* (2005) Variant isoforms of CD44 are P- and L-selectin ligands on colon carcinoma cells. [FASEB J. 20: 337-9.](#)
3. Rajarajan, A. *et al.* (2012) CD44 expression in oro-pharyngeal carcinoma tissues and cell lines. [PLoS One. 7: e28776.](#)
4. Chandrasekaran, S. *et al.* (2012) Effect of homotypic and heterotypic interaction in 3D on the E-selectin mediated adhesive properties of breast cancer cell lines [Biomaterials. 33: 9037-48.](#)
5. El-Sharkawy, M.M. *et al.* (2003) CD44 expression and soluble CD44 as a potential marker of tumor load in pediatric acute leukemia. [J Egypt Nat Cancer Inst. 15: 129-35.](#)
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. Hudson, D.L. *et al.* (1995) CD44 is the major peanut lectin-binding glycoprotein of human epidermal keratinocytes and plays a role in intercellular adhesion. [J Cell Sci. 108: 1959-70.](#)
8. De Sousa, P. A. (2009) Method for differentiation of stem cells. [U.S. Patent Application: US20090123430 A1](#)
9. Lallana, E. *et al.* (2017) Chitosan/Hyaluronic Acid Nanoparticles: Rational Design Revisited for RNA Delivery. [Mol Pharm. 14 \(7\): 2422-36.](#)
10. Spadea, A. *et al.* (2019) Evaluating the Efficiency of Hyaluronic Acid for Tumor Targeting via CD44. [Mol Pharm. 16 \(6\): 2481-93.](#)
11. Noori, M.S. *et al.* (2018) An adhesion based approach for the detection of esophageal cancer. [Integr Biol \(Camb\). 10 \(12\): 747-57.](#)

Storage

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. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10058 available at: 10058: https://www.bio-rad-antibodies.com/uploads/MSDS/10058.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

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

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

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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
'M385480:210513'

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