

Datasheet: MCA1728

BATCH NUMBER 159514

Description:	MOUSE ANTI HUMAN CD44v4
Specificity:	CD44v4
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	VFF-11
Isotype:	IgG1
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50
Immunohistology - Frozen	▪			1/50 - 1/500
Immunohistology - Paraffin (1)	▪			
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.

Target Species	Human
Product Form	Purified IgG - liquid
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein	IgG concentration 0.5 mg/ml

Concentrations

Immunogen Glutathione S Transferase (GST) fusion protein corresponding to the variable domains (v3 to v10) of human CD44.

External Database

Links

UniProt:

[P16070](#)

[Related reagents](#)

Entrez Gene:

[960](#)

CD44

[Related reagents](#)

Synonyms

LHR, MDU2, MDU3, MIC4

RRID

AB_322690

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 10^6 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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10094 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1728>
10094

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

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

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