Datasheet: MCA2504

BATCH NUMBER 166452

Description:	MOUSE ANTI HUMAN CD44
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	Bu52
Isotype:	IgG1
Quantity:	0.2 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	▪			1/25 - 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.**

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
External Database Links	**UniProt:** P16070 Related reagents **Entrez Gene:** 960 CD44 Related reagents
Synonyms	LHR, MDU2, MDU3, MIC4
RRID	AB_808430
Specificity	**Mouse anti Human CD44 antibody, clone Bu52** 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. 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.
Flow Cytometry	Use 10ul of the suggested working dilution to label $1x10^6$ cells in 100ul.
References	1. Belitsos, P.C. *et al.* (1990) Homotypic cell aggregation induced by anti-CD44(Pgp-1) monoclonal antibodies and related to CD44(Pgp-1) expression. J Immunol. 144 (5): 1661-70. 2. Katz, E. *et al.* (2012) Targeting of Rac GTPases blocks the spread of intact human breast cancer. Oncotarget. 3 (6): 608-19. 3. Muerza-Cascante, M.L. *et al.* (2017) Endosteal-like extracellular matrix expression on melt electrospun written scaffolds. Acta Biomater. 52: 145-58. 4. Hanke-Roos, M. *et al.* (2017) CD44 mediates the catch-bond activated rolling of HEPG2Iso epithelial cancer cells on hyaluronan. Cell Adh Migr. 11 (5-6): 476-87. 5. Noda, S. *et al.* (2019) Effect of cell culture density on dental pulp-derived mesenchymal stem cells with reference to osteogenic differentiation. Sci Rep. 9 (1): 5430. 6. Thorne, R.F. *et al.* (2020) Evaluating nuclear translocation of surface receptors: recommendations arising from analysis of CD44. Histochem Cell Biol. 153 (2): 77-87. 7. Orikasa, S. *et al.* (2022) Hypoxia-inducible factor 1α induces osteo/odontoblast differentiation of human dental pulp stem cells via Wnt/β-catenin transcriptional cofactor

	BCL9. Sci Rep. 12 (1): 682.
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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2504 10040
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 IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
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 (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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