

Datasheet: MCA890F

Description:	MOUSE ANTI HUMAN CYTOKERATIN 14:FITC
Specificity:	CYTOKERATIN 14
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	LL002
Isotype:	IgG3
Quantity:	0.1 mg

Product Details

RRID AB_872024

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)	▪			Neat - 1/10
Immunofluorescence	▪			

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.

(1) **Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

Target Species Human

Species Cross Reactivity Reacts with: Elephant, Dog, Pig, Lion
N.B. Antibody reactivity and working conditions may vary between species.

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

Preparation Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.09% Sodium Azide (NaN₃)
1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.1mg/ml

Immunogen	Last 15 C-terminal residues of human cytokeratin 14 conjugated to thyroglobulin.
External Database Links	<p>UniProt: P02533 Related reagents</p> <p>Entrez Gene: 3861 KRT14 Related reagents</p>
Specificity	<p>Mouse anti Human Cytokeratin 14 antibody, clone LL002 recognizes cytokeratin 14, a type I intermediate filament, expressed by stratifying epithelial cells and can be used to distinguish these cell types from simple epithelial cells, which do not express cytokeratin 14.</p> <p>Mouse anti cytokeratin 14, clone LL002 has been reported to be suitable for use in Western blotting (Alam et al. 2011)</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Purkis, P.E. <i>et al.</i> (1990) Antibody markers of basal cells in complex epithelia. J Cell Sci. 97 (Pt 1): 39-50. 2. Lane, E.B. & Alexander, C.M. (1990) Use of keratin antibodies in tumor diagnosis. Semin Cancer Biol. 1 (3): 165-79. 3. Wetzels, R.H. <i>et al.</i> (1989) Detection of basement membrane components and basal cell keratin 14 in noninvasive and invasive carcinomas of the breast. Am J Pathol. 134 (3): 571-9. 4. Moll, R. <i>et al.</i> (1982) The catalog of human cytokeratins: patterns of expression in normal epithelia, tumors and cultured cells. Cell. 31 (1): 11-24. 5. Richardson, G.D. <i>et al.</i> (2004) CD133, a novel marker for human prostatic epithelial stem cells. J Cell Sci. 117 (Pt 16): 3539-45. 6. Holliday, D. <i>et al.</i> (2009) Novel multicellular organotypic models of normal and malignant breast: tools for dissecting the role of the microenvironment in breast cancer progression. Breast Cancer Res. 11: R3 7. Eastman, R. Jr. <i>et al.</i> (2010) Fibroblast growth factor-10 signals development of von Brunn's nests in the exstrophic bladder. Am J Physiol Renal Physiol. 299:F1094-110. 8. Stumpf, P and Welsch, U. (2004) Secretory and defensive functions of the duct system of the lactating mammary gland of the African elephant (<i>Loxodonta africana</i>, Proboscidea) Zoomorphology 123:155-67 9. Alam H <i>et al.</i> (2011) Loss of keratins 8 and 18 leads to alterations in $\alpha 6\beta 4$-integrin-mediated signalling and decreased neoplastic progression in an oral-tumour-derived cell line. J Cell Sci. 124 (Pt 12): 2096-106. 10. Clark, S.E. <i>et al.</i> (2011) Molecular subtyping of DCIS: heterogeneity of breast cancer reflected in pre-invasive disease. Br J Cancer. 104: 120-7. 11. Hale, L.P. and Markert, M.L. (2004) Corticosteroids regulate epithelial cell differentiation and Hassall body formation in the human thymus. J Immunol. 172: 617-24. 12. Takahashi, C. <i>et al.</i> (2010) Newly established cell lines from mouse oral epithelium regenerate teeth when combined with dental mesenchyme. In Vitro Cell Dev Biol Anim. 46: 457-68. 13. Faustino, A.M. <i>et al.</i> (2007) A salivary malignant myoepithelioma in a dog. Faustino, A.M. and Dias Pereira, P. 14. Collins, A.T. <i>et al.</i> (2005) Prospective identification of tumorigenic prostate cancer stem cells. Cancer Res. 65: 10946-51. 15. Varley, C.L. <i>et al.</i> (2004) Activation of peroxisome proliferator-activated receptor-gamma reverses squamous metaplasia and induces transitional differentiation in normal human urothelial cells. Am J Pathol. 164: 1789-98.

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Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

[LEUCOPERM™ \(BUF09\)](#)

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

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

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