

Datasheet: MCA890HT

Description:	MOUSE ANTI HUMAN CYTOKERATIN 14
Specificity:	CYTOKERATIN 14
Format:	Ready To Use
Product Type:	Monoclonal Antibody
Clone:	LL002
Isotype:	IgG3
Quantity:	1 ml

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			■	
Immunohistology - Frozen	■			
Immunohistology - Paraffin (1)	■			Neat
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 - liquid
Preparation	Purified IgG prepared by ion exchange chromatography from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 0.5% Bovine Serum Albumin
Immunogen	Last 15 C-terminal residues of human cytokeratin 14 conjugated to thyroglobulin.
External Database Links	UniProt: P02533 Related reagents

Entrez Gene:[3861](#) KRT14 [Related reagents](#)

Specificity	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. Mouse anti cytokeratin 14, clone LL002 has been reported to be suitable for use in Western blotting (Alam et al. 2011)
Immunohistology	* This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH6.0 is recommended for this purpose. Enzyme digestion is not recommended.
Histology Positive Control Tissue	Skin
References	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. 16. Abdeen, S.K. <i>et al.</i> (2011) Wwox inactivation enhances mammary tumorigenesis. Oncogene.

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Storage	Store at +4°C.
	DO NOT FREEZE.
	This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	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 Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG3 (HCA039...)	FITC , HRP , RPE

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Printed on 05 May 2018

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