Datasheet: HCA053

BATCH NUMBER 151310

Description:	HUMAN ANTI Ki67
Specificity:	Ki67
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD02531_h/m_IgG1
Isotype:	HuCAL/mouse IgG1 Fc
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
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			0.2 ug/ml - 1.0 ug/ml
ELISA	▪			2.0 ug/ml
Western Blotting	▪			
Immunofluorescence	▪			

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

Species Cross Reactivity

Based on sequence similarity, is expected to react with:Bovine, Macaque, Dog, Chimpanzee, Rhesus Monkey

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Chimeric human-mouse IgG1 antibody selected from the HuCAL® phage display library

	and expressed in a human cell line. The antibody has variable regions of human origin and an Fc portion (including CH1 and CL domains) from mouse IgG1. It can be detected by anti mouse Fc specific secondary antibodies. This antibody is supplied liquid.
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Peptide derived from the human Ki67 protein, sequence GFKELFQTPG, coupled via a C-terminal cysteine to carrier proteins
External Database Links	**UniProt:** P46013 Related reagents **Entrez Gene:** 4288 MKI67 Related reagents
RRID	AB_915348
Specificity	**Human anti Ki67 antibody, clone AbD02531** recognizes the Ki67 cell-cycle associated protein. Ki67 is expressed in proliferating cells but not in quiescent cells. Expression of this antigen occurs preferentially during late G1, S, G2, and M phases of the cell cycle, while in cells in G0 phase the antigen cannot be detected. Consequently, Ki-67 antigen expression is used in tumor pathology to detect proliferating cells in neoplastic diseases. In cultured cells, Ki-67 is expressed in the nucleolus of interphase cells. The Ki67 gene contains 15 exons. The Ki67 repeat region, within which there is a 22-amino acid Ki67 motif, is encoded by exon 13. The shorter isoform lacks exon 7. Northern blot analysis reveals multiple transcripts ranging from approximately 8.9 to 12.5 kb in proliferating but not quiescent cells. Immunoblot analysis shows expression of 320 and 359 kDa proteins. Antisense oligonucleotides inhibit cellular proliferation in a dose-dependent manner, suggesting that Ki67 protein expression may be an absolute requirement for cell proliferation. Within cells Ki67 is predominantly localized in the G1 phase in the perinucleolar region, in the later phases it is also detected throughout the nuclear interior, being predominantly localized in the nuclear matrix. In mitosis, it is present on all chromosomes.
Histology Positive Control Tissue	Human tonsil
References	1. Jarutat, T. *et al.* (2006) Isolation and comparative characterization of Ki-67 equivalent antibodies from the HuCAL phage display library. Biol. Chem. 387: 995-1003.

2. Liu, S.K. *et al.* (2011) Delta-like ligand 4-notch blockade and tumor radiation response. J Natl Cancer Inst. 103 (23): 1778-98.

Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Acknowledgements	Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany.
Health And Safety Information	Material Safety Datasheet documentation #10094 available at: https://www.bio-rad-antibodies.com/SDS/HCA053 10094
Licensed Use	For *in vitro* research purposes only, unless otherwise specified in writing by Bio-Rad.
Regulatory	For research purposes only
Technical Advice	Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual

Related Products

Recommended Secondary Antibodies

Goat Anti Human IgG F(ab')2 (0500-0099...) HRP

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

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'M373283:200907'

Printed on 01 Mar 2024