

Datasheet: MCA1701

Description:	MOUSE ANTI p53 (aa20-25)
Specificity:	p53 (aa20-25)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	DO-1
Isotype:	IgG2a
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			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			1/25
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting	▪			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. 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) 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

Reacts with: Bovine, Cat, Horse, Green Monkey

Does not react with: Mouse, Rat

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	Purified IgG - liquid
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Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
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Buffer Solution	Phosphate buffered saline
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Preservative Stabilisers	0.09% sodium azide (NaN ₃)
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Carrier Free	Yes
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Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
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Immunogen	Recombinant human p53.
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External Database Links	UniProt: P04637 Related reagents Entrez Gene: 7157 TP53 Related reagents
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Synonyms	P53
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RRID	AB_322633
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Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse X63Ag8.653 myeloma cell line.
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Specificity	<p>Mouse anti Human p53 antibody, clone DO-1 recognizes the human p53 tumor suppressor protein, also known as cellular tumor antigen p53 or NY-CO-13. Clone DO-1 binds to both wild type and mutant forms of the p53 protein found in various malignancies (Kern <i>et al.</i> 1992). p53 is important in multicellular organisms, where it regulates cell cycle progression to allow DNA repair or apoptosis in the case of irreparably damaged cells (Haupt <i>et al.</i> 2003) and thus functions as a tumor suppressor that is involved in preventing cancer. Mutations in the p53 gene are found in about half the cases of human cancer (Joerger and Fersht 2007)</p> <p>Mouse anti Human p53 antibody, clone DO-1 recognizes an epitope at the N-terminal end of p53 between amino acids 20-25, common to isoforms 1-3 of p53.</p>
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Histology Positive Control Tissue	Normal human colon or breast carcinoma
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References	1. Vojtěšek B <i>et al.</i> (1992) An immunochemical analysis of the human nuclear
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- phosphoprotein p53. New monoclonal antibodies and epitope mapping using recombinant p53. [J Immunol Methods. 151 \(1-2\): 237-44.](#)
2. Levesque, M.A. *et al.* (1995) Time-resolved immunofluorometric assay of p53 protein. [Clin Chem. 41 \(12 Pt 1\): 1720-9.](#)
3. Carvalho, T. *et al.* (2009) Immunohistochemical evaluation of vascular urinary bladder tumors from cows with enzootic hematuria. [Vet Pathol. 46 \(2\): 211-21.](#)
4. Phillips, A. *et al.* (2010) HDMX-L is expressed from a functional p53-responsive promoter in the first intron of the HDMX gene and participates in an autoregulatory feedback loop to control p53 activity. [J Biol Chem. 285 \(38\): 29111-27.](#)
5. Bergman, L.M. *et al.* (2009) CtBPs promote cell survival through the maintenance of mitotic fidelity. [Mol Cell Biol. 29: 4539-51.](#)
6. Hietanen, S. *et al.* (2000) Activation of p53 in cervical carcinoma cells by small molecules. [Proc Natl Acad Sci U S A. 97 \(15\): 8501-6.](#)
7. Phelps, M. *et al.* (2003) p53-independent activation of the hdm2-P2 promoter through multiple transcription factor response elements results in elevated hdm2 expression in estrogen receptor alpha-positive breast cancer cells. [Cancer Res. 63: 2616-23.](#)

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: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
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
Rabbit Anti Mouse IgG (STAR9...)	FITC
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

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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