

Datasheet: MCA1701

**BATCH NUMBER 166441**

<b>Description:</b>	MOUSE ANTI p53 (aa20-25)
<b>Specificity:</b>	p53 (aa20-25)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	DO-1
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

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<b>Product Form</b>	Purified IgG - liquid
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<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
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<b>Carrier Free</b>	Yes
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<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
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<b>Immunogen</b>	Recombinant human p53.
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<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P04637</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">7157</a> TP53 <a href="#">Related reagents</a>
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<b>Synonyms</b>	P53
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<b>RRID</b>	AB_322633
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<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse X63Ag8.653 myeloma cell line.
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<b>Specificity</b>	<p><b>Mouse anti Human p53 antibody, clone DO-1</b> 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 (<a href="#">Kern et al. 1992</a>). 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 (<a href="#">Haupt et al. 2003</a>) 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 (<a href="#">Joerger and Fersht 2007</a>)</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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<b>Histology Positive Control Tissue</b>	Normal human colon or breast carcinoma
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## References

1. Vojtěšek B *et al.* (1992) An immunochemical analysis of the human nuclear 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. Sironi, G. *et al.* (1999) p53 protein expression in conjunctival squamous cell carcinomas of domestic animals. [Vet Ophthalmol. 2 \(4\): 227-231.](#)
4. 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.](#)
5. 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.](#)
6. Carvalho, T. *et al.* (2009) Immunohistochemical evaluation of vascular urinary bladder tumors from cows with enzootic hematuria. [Vet Pathol. 46 \(2\): 211-21.](#)
7. Bergman, L.M. *et al.* (2009) CtBPs promote cell survival through the maintenance of mitotic fidelity. [Mol Cell Biol. 29: 4539-51.](#)
8. 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.](#)

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### 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.

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### Guarantee

12 months from date of despatch

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### Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1701>  
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### Regulatory

For research purposes only

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## 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 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](https://bio-rad-antibodies.com/datasheets)

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