

## Datasheet: MCA1701

**BATCH NUMBER 162181**

<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.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Bovine, Cat, Horse, Green Monkey Does not react with: Mouse, Rat <b>N.B.</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.

---

<b>Product Form</b>	Purified IgG - liquid
---------------------	-----------------------

---

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A.
--------------------	--

---

<b>Buffer Solution</b>	Phosphate buffered saline
------------------------	---------------------------

---

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
---------------------------------	--------------------

---

<b>Carrier Free</b>	Yes
---------------------	-----

---

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
---------------------------------------	-----------------------------

---

<b>Immunogen</b>	Recombinant human p53.
------------------	------------------------

---

<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>
--------------------------------	---

---

<b>Synonyms</b>	P53
-----------------	-----

---

<b>RRID</b>	AB_322633
-------------	-----------

---

<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse X63Ag8.653 myeloma cell line.
------------------------	--

---

<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>
--------------------	--

---

<b>Histology Positive Control Tissue</b>	Colon or breast carcinoma
--	---------------------------

---

## 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. 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

---

## Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories

---

## Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA170110040>

---

## Regulatory

For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

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)  
'M393632:220113'

**Printed on 18 Jan 2024**

---

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)