

## Datasheet: MCA1704

<b>Description:</b>	MOUSE ANTI HUMAN p53 (aa181-190)
<b>Specificity:</b>	p53 (aa181-190)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	DO-11
<b>Isotype:</b>	IgG1
<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)	▪			1/1000
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			1/200 - 1/2000

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.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )

<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>	<p><b>UniProt:</b>  <a href="#">P04637</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">7157</a> TP53    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	P53
<b>RRID</b>	AB_322636
<b>Fusion Partners</b>	Spleen cells from immunised 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-11</b> recognizes the human Cellular tumor antigen p53, also known as p53 tumor suppressor protein or NY-CO-13. p53 is a 393 amino acid ~53kDa cytoplasmic/ nuclear protein up-regulated in response to DNA damage and is found in a wide variety of transformed cells (<a href="#">UniProt: P04637</a>).</p> <p>DO-11 binds to an epitope within the central region of p53 between amino acids <a href="#">181 - 190</a> defining a cryptic epitope exposed in unfolded/ denatured p53 (<a href="#">Shimitzu et al. 2006</a>). Nine isoforms of human p53 are produced by alternative splicing and promotor usage, the epitope recognized by clone DO-11 is present in all isoforms. Mouse anti Human p53 antibody, clone DO-11 recognizes mutant forms of p53 (<a href="#">Warnock et al. 2011</a>) and has been used successfully for detection of p53 by western blotting (<a href="#">Wei et al. 2012</a>).</p>
<b>Histology Positive Control Tissue</b>	Normal human colon or breast carcinoma
<b>References</b>	<ol style="list-style-type: none"> <li>1. Vojtesek, B. <i>et al.</i> (1995) Conformational changes in p53 analysed using new antibodies to the core DNA binding domain of the protein. <a href="#">Oncogene. 10 (2): 389-93.</a></li> <li>2. Palecek, E. <i>et al.</i> (2001) Binding of p53 and its core domain to supercoiled DNA. <a href="#">Eur J Biochem. 268: 573-81.</a></li> <li>3. Coomber, D.W. and Ward, .R.L. (2001) Isolation of human antibodies against the central DNA binding domain of p53 from an individual with colorectal cancer using antibody phage display. <a href="#">Clin Cancer Res. 7: 2802-8.</a></li> <li>4. Wei, J. <i>et al.</i> (2012) Pathogenic bacterium <i>Helicobacter pylori</i> alters the expression profile of p53 protein isoforms and p53 response to cellular stresses. <a href="#">Proc Natl Acad Sci U S A. 109: E2543-50.</a></li> <li>5. Warnock, L.J. <i>et al.</i> (2011) Aurora A mediates cross-talk between N- and C-terminal post-translational modifications of p53. <a href="#">Cancer Biol Ther. 12: 1059-68.</a></li> </ol>

**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: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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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 (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 IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<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>
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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://www.bio-rad-antibodies.com/datasheets)

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