

## Datasheet: MCA1704

**BATCH NUMBER 166947**

<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</b>	0.09% sodium azide (NaN <sub>3</sub> )

## Stabilisers

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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\_322636

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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

**Mouse anti Human p53 antibody, clone DO-11** 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 ([UniProt: P04637](#)).

DO-11 binds to an epitope within the central region of p53 between amino acids [181 - 190](#) defining a cryptic epitope exposed in unfolded/ denatured p53 ([Shimitzu et al. 2006](#)). 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 ([Warnock et al. 2011](#)) and has been used successfully for detection of p53 by western blotting ([Wei et al. 2012](#)).

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## Histology Positive Control Tissue

Normal human colon or breast carcinoma

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## References

1. Vojtesek, B. *et al.* (1995) Conformational changes in p53 analysed using new antibodies to the core DNA binding domain of the protein. [Oncogene. 10 \(2\): 389-93.](#)
2. Palecek, E. *et al.* (2001) Binding of p53 and its core domain to supercoiled DNA. [Eur J Biochem. 268: 573-81.](#)
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. [Clin Cancer Res. 7: 2802-8.](#)
4. Wei, J. *et al.* (2012) Pathogenic bacterium *Helicobacter pylori* alters the expression profile of p53 protein isoforms and p53 response to cellular stresses. [Proc Natl Acad Sci U S A. 109: E2543-50.](#)
5. Warnock, L.J. *et al.* (2011) Aurora A mediates cross-talk between N- and C-terminal

post-translational modifications of p53. [Cancer Biol Ther. 12: 1059-68.](#)

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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/MCA1704>  
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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 IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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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