Datasheet: VMA00019

Description:	MOUSE ANTI p53
Specificity:	p53
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	DO-1
Isotype:	IgG2a
Quantity:	100 µl

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
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
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 product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.
(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: African green monkey , Bovine, Cat, Horse
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
Preparation	Mouse monoclonal antibody purified by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN_3)
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Recombinant human p53
External Database Links	**UniProt:** P04637 Related reagents **Entrez Gene:** 7157 TP53 Related reagents
Synonyms	P53
Specificity	**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. The antibody binds to both wild type and mutant forms of the p53 protein found in various malignancies (Kern *et al.* 1992). The p53 protein 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 *et al.* 2003) and thus functions as a tumor suppressor, involved in preventing cancer. Mutations in the p53 gene are found in about half the cases of human cancer (Joerger and Fersht 2007). Mouse anti Human p53 antibody recognizes an epitope at the N-terminal end of p53 between amino acids 20-25, common to isoforms 1-3 of p53 and detects a band of ~53 kDa on HEK293 cell lysates by western blotting under reducing conditions.
Histology Positive Control Tissue	Colon or breast carcinoma
Western Blotting	Anti p53 antibody detects a band of approximately 53 kDa in HEK293 cell lysates.
References	1. Vojtčsek, 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. 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.
4. Carvalho, T. *et al.* (2009) Immunohistochemical evaluation of vascular urinary bladder tumors from cows with enzootic hematuria. Vet Pathol. 46 (2): 211-21.
5. Bergman, L.M. *et al.* (2009) CtBPs promote cell survival through the maintenance of mitotic fidelity. Mol Cell Biol. 29 (16): 4539-51.
6. 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 (10): 2616-23.
7. 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.
8. Novello, C. *et al.* (2014) p53-dependent activation of microRNA-34a in response to etoposide-induced DNA damage in osteosarcoma cell lines not impaired by dominant negative p53 expression. PLoS One. 9 (12): e114757.

Storage	Store undiluted at -20°C, avoiding repeated freeze thaw cycles.
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: Antibody (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 (H/L) (STAR207...) 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
'M380358:210510'

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