

Mouse p53 Monoclonal Antibody | anti-p53 antibody

p53

CATALOG # AAA59231	HOST Mouse	REACTIVITY Paraffin, Frozen; Human, Cat, Cattle, Horse, Sheep	APPLICATIONS Immunohistochemistry
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PRODUCT SYNONYMS

p53; Monoclonal Antibody; anti-p53 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Paraffin, Frozen; Human, Cat, Cattle, Horse, Sheep
Clonality	Monoclonal
Isotype	IgG2b/K
Clone Number	DO7
Form/Format	Anti-p53 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.
Applicable Applications for anti-p53 antibody	IHC (Immunohistochemistry)
Immunogen	Recombinant human wild-type p53 protein.
Localization	Nuclear
Control	Lung, Breast, Ovarian, Prostate, Colon Carcinoma
Application	Breast Cancer, Colon & Gastrointestinal Cancer, Endometrial & Genital Cancer, Liver Cancer
Intended Use	This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections, and cell preparations. Interpretation of results should be performed by a qualified medical professional.
Precautions	1. For professional users only. Results should be interpreted by a qualified medical professional. 2. This product contains <0.1% sodium azide (NaN₃) as a preservative. Ensure proper handling procedures are used with this reagent. 3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents. 4. Dispose of unused solution with copious amounts of water. 5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately. 6. Avoid contact with eyes. If contact occurs, flush with large quantities of water. 7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar). 8. For additional safety information refer to Safety Data Sheet for this product. 9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and AMDL" (see References in this document).
Specimen Preparation	Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Frozen sections and cell preparations: The antibody can be used on acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol	1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides. 2. Air dry for 2 hours at 58°C. 3. Deparaffinize, dehydrate, and rehydrate tissues. 4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate or EDTA. 5. Any of three heating methods may be used: a. TintoRetriever Pressure Cooker or Equivalent Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature. b. TintoRetriever PT Module or Water Bath Method Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99°C. Incubate for 30-60 minutes. c. Conventional Steamer Method Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes. 6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes. 7. For manual IHC, perform antibody incubation at ambient temperature. For automated IHC methods, perform antibody incubation according to instrument manufacturer's instructions. 8. Wash slides with ImmunoDNA washer or DI water. 9. Continue IHC protocol. Wash slides between each step with ImmunoDNA washer solution.
Product Limitations	Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.
Preparation and Storage	Store at 2-8°C.

IMAGES

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain/Coverslip	Varies	Varies	Varies

IHC (Immunohistochemistry)
Abbreviated Immunohistochemical Protocol

ADDITIONAL INFORMATION

Related Product Information for anti-p53 antibody	p53 (also known as tumor protein 53 [TP53]) is a transcription factor that regulates the cell cycle and, hence, functions as a tumor suppressor. p53 has been described as the “guardian of the genome”, referring to its role in conserving stability by preventing genome mutation. p53 has many anti-cancer mechanisms. It can activate DNA repair proteins when DNA has sustained damage; it can also hold the cell cycle at the G1/S regulation point on DNA damage recognition. It can initiate apoptosis, programmed cell death, if DNA damage proves to be irreparable. p53 is central to many of the cell’s anti-cancer mechanisms. It can induce growth arrest, apoptosis and cell senescence. Mutations involving p53 have been found in a wide variety of malignant tumors, including Breast, Ovarian, Bladder, Colon, Lung, and Melanoma.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	23491729
NCBI GeneID	7157
NCBI Accession #	BAC16799.1
NCBI GenBank Nucleotide #	AB082923.1
UniProt Accession #	P04637; Q15086; Q15087; Q15088; Q16535; Q16807; Q16808; Q16809; Q16810; Q16811; Q16848; Q2XN98; Q0PKT5; Q0ZAJ9; Q0ZAK0; Q0ZAK1; Q19RW5; Q19RW6; Q1HGV0; Q1HGV1; Q1HGV2
Molecular Weight	43,653 Da

NCBI Official Full Name	P53
NCBI Official Synonym Full Names	tumor protein p53
NCBI Official Symbol	TP53
NCBI Official Synonym Symbols	P53; LFS1; TRP53; FLJ92943
NCBI Protein Information	cellular tumor antigen p53; antigen NY-CO-13; OTTHUMP00000221333; OTTHUMP00000221334; OTTHUMP00000221336; OTTHUMP00000221337; OTTHUMP00000221340; phosphoprotein p53; p53 tumor suppressor; transformation-related protein 53
UniProt Protein Name	Cellular tumor antigen p53
UniProt Gene Name	TP53
UniProt Synonym Gene Names	P53
UniProt Entry Name	P53_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/p53-antibody-clone-do7-immunohistochemistry-elisa/59231>