Datasheet for ABIN967458

anti-p53 antibody

3 Images | 6 Publications

Go to Product page

Overview

Quantity:	0.1 mg
Target:	p53 (TP53)
Reactivity:	Human, Monkey, Cow
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunohistochemistry (Formalin-fixed Sections) (IHC (f)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Intracellular Staining (ICS)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Human Recombinant p53 protein
Clone:	DO
Isotype:	IgG2b
Cross-Reactivity:	Monkey, Cow (Bovine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	p53 (TP53)
Alternative Name:	p53 (TP53 Products)
Background:	P53 is a 53 kD nuclear phosphoprotein that acts as a tumor suppressor protein, and is involved in inhibiting cell proliferation when DNA damage occurs. The gene for p53 is the most commonly mutated gene yet identified in human cancers. Missense mutations occur in tumors of the colon, lung, breast, ovary, bladder and several other organs. The mutant p53 is overexpressed in a variety of transformed cells and wildtype p53 forms specific complexes with several viral oncogenes including SV40 large T, E1B from adenovirus, and E6 from human papilloma virus. Wildtype p53 plays a role as a checkpoint protein for DNA damage during the G1/S-phase of the cell cycle. However, it is still unclear, whether point mutated forms of p53 are simple null mutants and/or dominant negatively acting proteins. The DO-7 antibody recognizes human wildtype and mutant p53. It cross-reacts with bovine p53 but does not cross-react with mouse or rat p53. DO-7 recognizes an epitope between amino acids 1-45 of known forms of human p53. Human recombinant p53 protein was used as immunogen. Wildtype 53 proteins have a very short half-life and are usually not detectable with monoclonal antibodies (mAbs) in normal tissues.
Molecular Weight:	53 kDa
Pathways:	p53 Signaling, MAPK Signaling, PI3K-Akt Signaling, Apoptosis, AMPK Signaling, Chromatin Binding, ER-Nucleus Signaling, Positive Regulation of Endopeptidase Activity, Hepatitis C, Protein targeting to Nucleus, Autophagy, Warburg Effect

Application Details

Application Notes:	Positive control cell lines include SK-BR-3 breast carcinoma cells (ATCC HTB-30), A431 epidermal carcinoma cells (ATCC CRL-1555) and CEM human leukemia cells (ATCC CCL-119). MCF-7 breast carcinoma cells (ATCC HTB-22) are suggested as a negative control. Positive immunostaining is seen in a high proportion of breast and colon carcinomas. p53 staining is not typically detected in normal skin, brain, kidney, lung, stomach, or breast tissue.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

Product cited in:

Baas, Mulder, Offerhaus, Vogelstein, Hamilton: "An evaluation of six antibodies for immunohistochemistry of mutant p53 gene product in archival colorectal neoplasms." in: **The Journal of pathology**, Vol. 172, Issue 1, pp. 5-12, (1994) (PubMed).

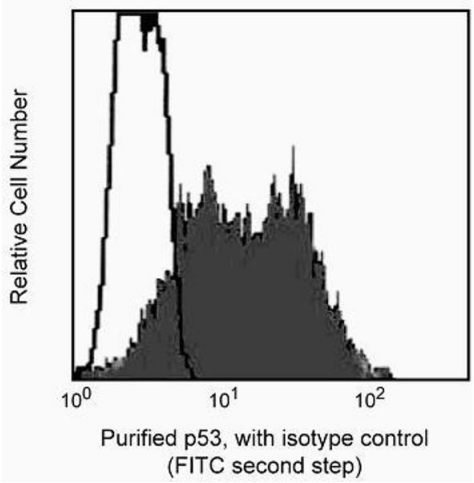
Cripps, Purdie, Carder, White, Komine, Bird, Wyllie: "A study of stabilisation of p53 protein versus point mutation in colorectal carcinoma." in: **Oncogene**, Vol. 9, Issue 9, pp. 2739-43, (1994) (PubMed).

Jacquemier, Molès, Penault-Llorca, Adélaide, Torrente, Viens, Birnbaum, Theillet: "p53 immunohistochemical analysis in breast cancer with four monoclonal antibodies: comparison of staining and PCR-SSCP results." in: **British journal of cancer**, Vol. 69, Issue 5, pp. 846-52, (1994) (PubMed).

Lambkin, Mothersill, Kelehan: "Variations in immunohistochemical detection of p53 protein overexpression in cervical carcinomas with different antibodies and methods of detection." in: **The Journal of pathology**, Vol. 172, Issue 1, pp. 13-8, (1994) (PubMed).

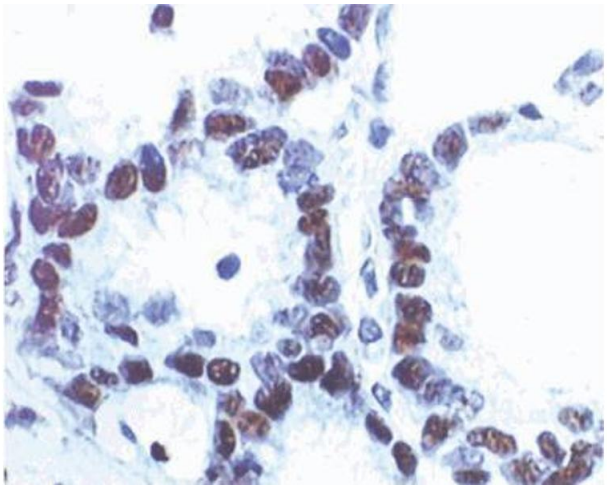
Vojt?sek, Bártek, Midgley, Lane: "An immunochemical analysis of the human nuclear phosphoprotein p53. New monoclonal antibodies and epitope mapping using recombinant p53. " in: **Journal of immunological methods**, Vol. 151, Issue 1-2, pp. 237-44, (1992) (PubMed).

There are more publications referencing this product on: Product page



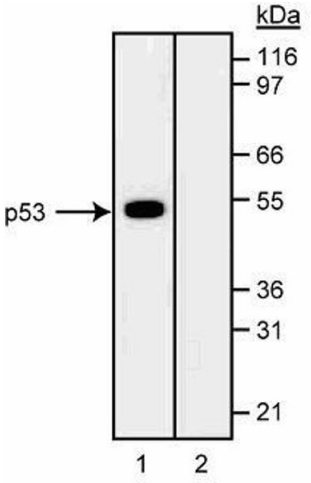
Flow Cytometry

Image 1. Profile of permeabilized CEM human leukemia cells analyzed on a FACScan™ (BDIS, San Jose, CA). Cells were stained with anti-human p53 (clone DO-7) or a mouse IgG2b isotype control followed by FITC-conjugated second step.



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Anti-human p53, ABIN967458. Formalin-fixed, paraffin-embedded tissue section of human breast carcinoma stained with anti-human p53 (clone DO-7) using a DAB chromogen and Hematoxylin counterstain.



Western Blotting

Image 3. Western blot analysis of p53 in CEM human leukemia cell lysates. Lane 1, clone DO-7 (ABIN967458). Lane 2, a mouse IgG2b isotype control.

 Copyright antibodies-online. All rights reserved.