

# Datasheet for ABIN967419

# anti-p53 antibody (AA 14-289)





Go to Product page

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Quantity:	0.1 mg
Target:	p53 (TP53)
Binding Specificity:	AA 14-289
Reactivity:	Human, Mouse, Rat, Monkey, Cow, Hamster, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunoprecipitation (IP), Immunohistochemistry (Frozen Sections) (IHC (fro))

### **Product Details**

Brand:	BD Pharmingen™
Immunogen:	Human p53 aa. 14-289
Clone:	PAb 240
Isotype:	lgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus), Hamster, Monkey, Cow (Bovine), Chicken
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**

Restrictions:

Target:	p53 (TP53)
Alternative Name:	p53 (TP53 Products)
Background:	P53 is a nuclear phosphoprotein which acts as a tumor suppressor by providing a cell cycle
	checkpoint for DNA damage during S-phase. Mutations in wildtype p53 can indirectly alter the
	DNA binding and transcription factor activity of p53. By altering expression of genes normally
	regulated by p53, these mutations can result in both a loss of tumor suppressor function and a
	gain of oncogenic function. The majority of mutations in the p53 gene are missense mutations
	which alter the identity of an amino acid. These mutations may alter the conformation and thu
	increase the stability of the mutant p53 protein. p53 is expressed in all vertebrate species
	examined. p53 may be overexpressed in transformed cell lines, where it forms complexes with
	viral oncogenes including SV40 large T antigen and the adenovirus protein, E1B. p53 migrates
	at ~53 kDa on SDS-PAGE.
	PAb 240 reacts with a conformational epitope between amino acids 156 and 214 of native p53
	As such, Pab 240 recognizes only certain mutant forms of p53, as determined by
	immunoprecipitation. It detects both mutant and wildtype p53 in western blot analysis and
	immunohistochemistry of frozen tissue sections. It is thought that p53 mutations exert a
	common conformational change which results in expression of the Pab 240-specific epitope of
	mutant p53 molecules. A recombinant fusion protein of p53 sequence including amino acids
	14-289 was used as immunogen.
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:	SV40-transformed COS-7 monkey kidney cells (ATCC CRL-1651) or other SV40-transformed
11 222	cell lines are suggested as positive controls.

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:

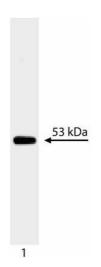
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Moore, Teresky, Levine, Seiberg: "p53 mutations are not selected for in simian virus 40 T-antigen-induced tumors from transgenic mice." in: **Journal of virology**, Vol. 66, Issue 2, pp. 641-9, (1992) (PubMed).

Walker, Dearing, Lane, Varley: "Expression of p53 protein in infiltrating and in-situ breast carcinomas." in: **The Journal of pathology**, Vol. 165, Issue 3, pp. 203-11, (1992) (PubMed).

Bártek, Bártková, Vojt?sek, Stasková, Lukás, Rejthar, Kovarík, Midgley, Gannon, Lane: "Aberrant expression of the p53 oncoprotein is a common feature of a wide spectrum of human malignancies." in: **Oncogene**, Vol. 6, Issue 9, pp. 1699-703, (1991) (PubMed).

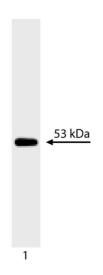


#### **Western Blotting**

**Image 1.** Western blot analysis of p53. Lysate from SV40-transformed COS-7 cells were probed with anti-p53 (ABIN967419). p53 is identified as a band of 53 kDa.

#### Image 2.





# **Western Blotting**

Image 3.