Technical Data Sheet

Purified Mouse Anti-p53

Product Information

Material Number:	610184
Size:	150 μg
Concentration:	250 μg/ml
Clone:	80/p53
Immunogen:	Monkey p53 aa. 195-393
Isotype:	Mouse IgG2b, ĸ
Reactivity:	QC Testing: Human
	Tested in Development: Dog
Target MW:	53 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium
	azide.

Description

The p53 protein is critical to regulation of normal cell growth and is a suppressor of tumor cell proliferation. Inactivation of p53 by a number of mechanisms, such as missense mutations or interaction with oncogenic viral or cellular proteins, can result in tumor progression. Mutations and/or allelic loss of the *p53* gene is associated with a wide variety of human tumors. Known to have a role in transcriptional regulation, p53 suppresses various promoters containing TATA elements in an apparently sequence-independent fashion. p53 also binds to DNA in a sequence-specific manner via recognition of a 20 bp consensus-binding site. This interaction stimulates the expression of genes downstream of the p53 binding site. A number of genes that contain p53-binding sites have been identified, including MDM2, GADD45, and muscle creatine kinase. It is thought that MDM2 is a feedback regulator of p53. In addition, a p53-inducible gene, *Cip1*, has been identified and shown to suppress tumor cell growth in culture.





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Western blot analysis of p53 on A431 lysate. Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of p53.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

Application Notes

A	Application						
	Western blot	Routinely Tested					
	Immunoprecipitation	Tested During Development					
	Immunofluorescence	Tested During Development					
	Immunohistochemistry	Not Recommended					

A431

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Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols 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.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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Mercer WE. Cell cycle regulation and the p53 tumor suppressor protein. Crit Rev Eukaryot Gene Expr. 1992; 2(3):251-263.(Biology)

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