

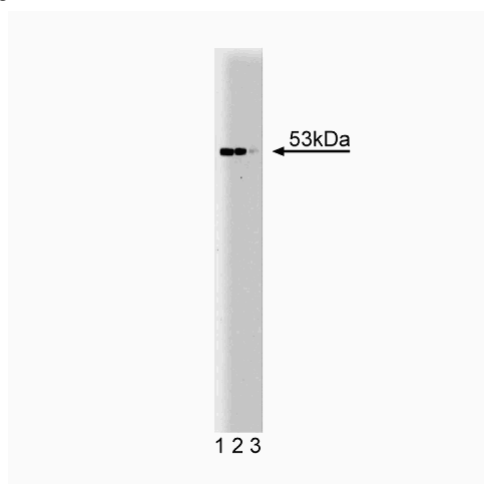
Technical Data Sheet

Purified Mouse Anti-p53**Product Information**

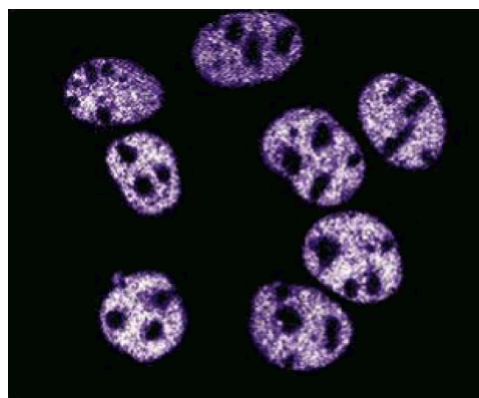
Material Number:	610183
Size:	50 µg
Concentration:	250 µg/ml
Clone:	80/p53
Immunogen:	Monkey p53 aa. 195-393
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human Tested in Development: Dog
Target MW:	53 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

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.



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



A431

Preparation and Storage

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

Store undiluted at -20°C.

Application Notes**Application**

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

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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/pharming/en/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)
- Natsugoe S, Nakashima S, Matsumoto M. Expression of p21WAF1/Cip1 in the p53-dependent pathway is related to prognosis in patients with advanced esophageal carcinoma. *Clin Cancer Res.* 1999; 5(9):2445-2449.(Clone-specific: Immunohistochemistry)
- Saitoh H, Pizzi MD, Wang J. Perturbation of SUMOlation enzyme Ubc9 by distinct domain within nucleoporin RanBP2/Nup358. *J Biol Chem.* 2002; 277(7):4755-4763.(Clone-specific: Immunofluorescence)
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