

Datasheet

TP53 monoclonal antibody, clone BP53-12 (FITC)

Catalog Number: MAB4528

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against recombinant TP53.

Clone Name: BP53-12

Immunogen: Recombinant protein corresponding to full length human TP53.

Host: Mouse

Theoretical MW (kDa): 50

Reactivity: Human, Non-Human Primates

Applications: Flow Cyt, IF
(See our web site product page for detailed applications information)

Protocols: See our web site at <http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Specificity: This antibody recognizes defined epitope (aa 16-25) on human p53, a 50 KDa tumour suppressor found in increased amounts in a wide variety of transformed cells.

Form: Liquid

Conjugation: FITC

Concentration: 1 mg/mL

Isotype: IgG2a

Recommend Usage: The optimal working dilution should be determined by the end user.

Storage Buffer: In PBS, pH 7.2 (0.09% sodium azide)

Storage Instruction: Store in the dark at 4°C. Do not freeze.

Avoid prolonged exposure to light.

Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 7157

Gene Symbol: TP53

Gene Alias: FLJ92943, LFS1, TRP53, p53

Gene Summary: This gene encodes tumor protein p53, which responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low level in normal cells and at a high level in a variety of transformed cell lines, where it's believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing transcription activation, DNA-binding, and oligomerization domains. It is postulated to bind to a p53-binding site and activate expression of downstream genes that inhibit growth and/or invasion, and thus function as a tumor suppressor. Mutants of p53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and hence cause the loss of tumor suppressor activity. Alterations of this gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome. Multiple p53 variants due to alternative promoters and multiple alternative splicing have been found. These variants encode distinct isoforms, which can regulate p53 transcriptional activity. [provided by RefSeq]

References:

1. Epitope analysis of the human p53 tumour suppressor protein. Dolezalova H, Vojtesek B, Kovarik J. *Folia Biol (Praha)*. 1997;43(1):49-51.
2. p53 protein alterations in human testicular cancer including pre-invasive intratubular germ-cell neoplasia. Bartkova J, Bartek J, Lukas J, Vojtesek B, Staskova Z, Rejthar A, Kovarik J, Midgley CA, Lane DP. *Int J Cancer*. 1991 Sep 9;49(2):196-202.
3. Aberrant expression of the p53 oncoprotein is a common feature of a wide spectrum of human malignancies. Bartek J, Bartkova J, Vojtesek B, Staskova Z, Lukas J, Rejthar A, Kovarik J, Midgley CA, Gannon JV, Lane DP. *Oncogene*. 1991 Sep;6(9):1699-703.