

p53. Mouse Clone BP53-12 Monoclonal Antibody, Human only

BACKGROUND

p53 is a 53 kDa transcription factor that can inhibit cell cycle progression or induce apoptosis in response to stress or DNA damage. Disruption of the p53 signalling pathway through various mechanisms is the most common alteration in human cancer occurring in over half of all tumors. The p53 protein is short lived and expressed at low levels in normal cells but accumulates and/or is activated in cells that have undergone genotoxic damage or oncogene activation. Many tumor derived and transformed cell lines express elevated levels of mutant p53 protein. Other genes also implicated in the downstream effects as a result of p53 activation are: p21WAF1, GADD45, 14-3-3, bax, Fas/APO1, KILLER/ DR5, Tsp1, IGF-BP3 and others.

ORDERING INFORMATION

CATALOG NUMBER
X1495M

SIZE
100 µg

FORM
Purified

HOST/CLONE
Mouse Clone BP53-12

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
1 mg/ml

ISOTYPE
IgG2a

APPLICATIONS
Western Blotting
Immunoprecipitation
Paraffin Section Staining

IMMUNOGEN

Hybridoma produced by the fusion of splenocytes from immunized with full length wild-type human p53 protein and mouse myeloma cells.

SPECIES REACTIVITY

Human only

COMMENTS

This antibody can be used for Western blotting (0.5-1 µg/ml), immunohistochemistry on formalin/paraffin embedded tissues (1-2 µg/ml) and immunoprecipitation (2 µg/mg of protein lysate). Antibody reacts with mutant as well as wild-type p53 protein. Optimal concentration should be evaluated by serial dilutions.

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

POSITIVE CONTROL

MCF-7 cell line

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

REFERENCES

1. Zeng, X., et al. "UV but not gamma irradiation accelerates p53-induced apoptosis of teratocarcinoma cells by repressing MDM2 transcription." *Cancer Res.* 2000, 60, 6184-6188
2. Hussain, S.P., et al. "p53 tumor suppressor gene: at the crossroads of molecular carcinogenesis, molecular epidemiology and human risk assessment." *Ann. N.Y. Acad. Sci.* 2000, 919, 79-85
3. Hellin, A.C., et al. "Roles of Nuclear Factor-kappaB, p53 and p21/WAF1 in Daunomycin-induced cell cycle arrest and apoptosis." *J. Pharmacol. Exp. Ther.* 2000, 295, 870-878
4. Barkte, J., et al. "Immunohistochemical analysis of the p53 oncoprotein on paraffin sections using a series of novel monoclonal antibodies."

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