

Datasheet for ABIN6940777

Recombinant anti-p53 antibody



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4 Images

Overview

Quantity:	100 µg
Target:	p53 (TP53)
Reactivity:	Human, Monkey, Dog, Hamster, Chicken
Host:	Mouse
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Staining Methods (StM)

Product Details

Immunogen:	Recombinant human wild-type p53 protein
Clone:	RBP53-12
Isotype:	IgG1 kappa
Specificity:	This MAb reacts with an N-terminal epitope (aa 16-25) of both wild type and mutated p53. Mutation and/or allelic loss of p53 is one of the causes of a variety of mesenchymal and epithelial tumors. If it occurs in the germ line, such tumors run in families. In most transformed and tumor cells the concentration of p53 is increased 51000 fold over the minute concentrations (1000 Molecules cell) in normal cells, principally due to the increased half-life (4 h) compared to that of the wild-type (20 min). p53 Localizes in the nucleus, but is detectable at the plasma membrane during mitosis and when certain mutations modulate cytoplasmic/nuclear distribution. Mutations arise with an average frequency of 70 % but

Product Details

incidence varies from zero in carcinoid lung tumors to 97 % in primary melanomas. High concentrations of p53 protein are transiently expressed in human epidermis and superficial dermal fibroblasts following mild ultraviolet irradiation. Positive nuclear staining with p53 antibody has been reported to be a negative prognostic factor in breast carcinoma, lung carcinoma, colorectal, and urothelial carcinoma. Anti-p53 positivity has also been used to differentiate uterine serous carcinoma from endometrioid carcinoma as well as to detect intratubular germ cell neoplasia.

No Cross-Reactivity: Mouse (Murine), Rat (Rattus)

Purification: Purified by Protein A/G

Target Details

Target: p53 (TP53)

Alternative Name: TP53 ([TP53 Products](#))

Molecular Weight: 53kDa

Gene ID: 7157

UniProt: [P04637](#)

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: Positive Control: MDA-MB-231 cells. HeLa cell lysate. Breast or colon carcinoma.
Known Application: Western Blot (0.5-1 µg/mL), Immunohistochemistry (Formalin-fixed) (0.5-1 µg/mL for 30 minutes at RT) (Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

Handling

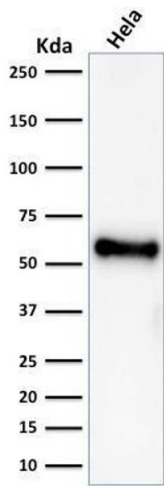
Concentration: 200 µg/mL

Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

Handling

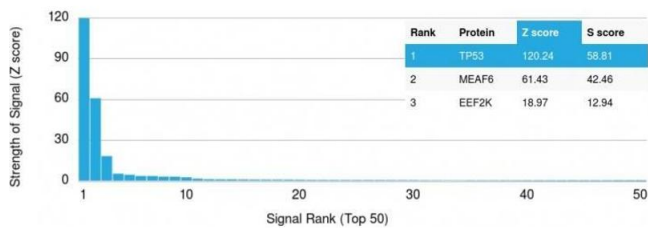
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-80 °C
Storage Comment:	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.
Expiry Date:	24 months

Images



Western Blotting

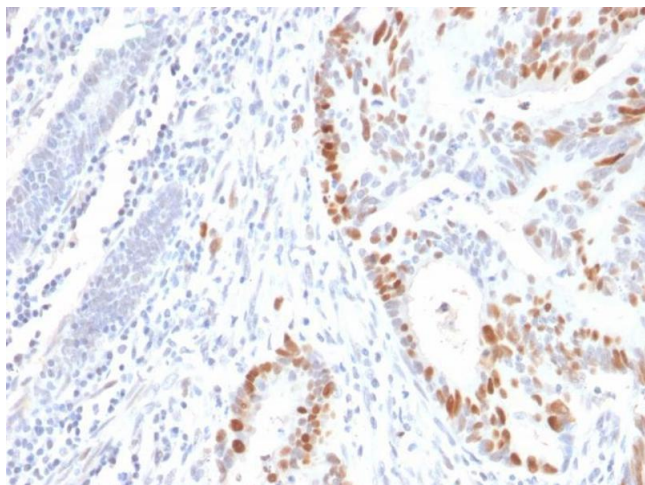
Image 1. Western Blot Analysis of HeLa cell lysate using p53 Mouse Recombinant Monoclonal Antibody (rBP53-12).



Protein Array

Image 2. Analysis of Protein Array containing more than 19,000 full-length human proteins using p53 Recombinant Mouse Monoclonal Antibody (rBP53-12). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A

MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Immunohistochemistry

Image 3. Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with p53 Mouse Recombinant Monoclonal Antibody (rBP53-12).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6940777.