Datasheet for ABIN5707630

anti-p53 antibody

2 Images

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Overview

Quantity:	100 µg
Target:	p53 (TP53)
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Recombinant human protein was used as the immunogen for this recombinant p53 antibody.
Clone:	TP53-2092R
Isotype:	IgG kappa
No Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Cross-Reactivity (Details):	Not suitable for mouse
Purification:	Purified
Purity:	Protein A affinity chromatography

Target Details

Target:	p53 (TP53)
Alternative Name:	p53 / TP53 (TP53 Products)

Target Details

Background:	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 5 1000 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 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.
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:	The stated application concentrations are suggested starting points. Titration of the recombinant p53 antibody may be required due to differences in protocols and secondary/substrate sensitivity. 1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.\. WB: 0.5-1 µg/mL,Immunohistochemistry (FFPE): 1-2 µg/mL for 30 min at RT,Prediluted IHC only format: incubate for 30 min at RT (1)
Restrictions:	For Research Use only

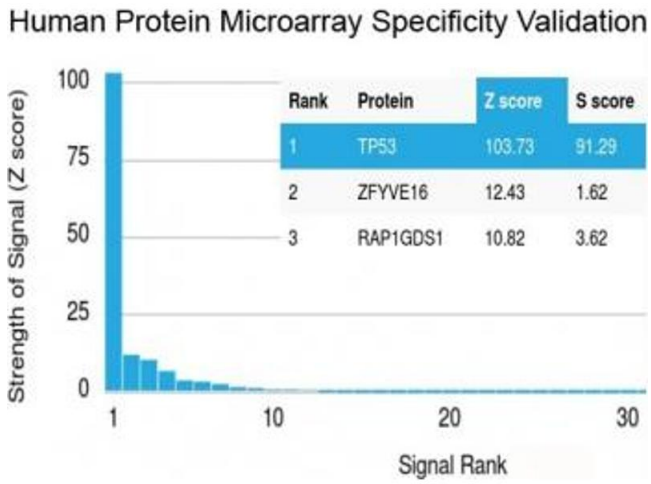
Handling

Buffer:	1 mg/mL in 1X PBS, BSA free, sodium azide free
Preservative:	Azide free
Storage:	4 °C,-20 °C

Handling

Storage Comment:	Store the recombinant p53 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

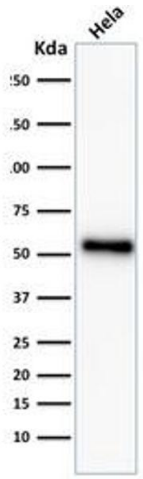
Images



Microarray

Image 1. Protein array validation of the recombinant p53 antibody: Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant p53 antibody (clone TP53/2092R). These results demonstrate the foremost specificity of the TP53/2092R mAb.

Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



Western Blotting

Image 2. Western blot testing of human HeLa cell lysate with recombinant p53 antibody (clone TP53/2092R).