Datasheet for ABIN6940775

anti-p53 antibody

3 Images

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Overview

Quantity:	100 µg
Target:	p53 (TP53)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Staining Methods (StM)

Product Details

Immunogen:	Human p53-galactosidase fusion protein
Clone:	PAb1801
Isotype:	IgG1 kappa
Specificity:	The specificity of this monoclonal antibody to its intended target was validated by HuProtTM Array, containing more than 19,000, full-length human proteins. This MAb reacts with an N-terminal epitope (aa32-79) 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

Product Details

	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.
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. Breast or Colon carcinoma. Known Application: Flow Cytometry (0.5-1 µg/million cells), Immunofluorescence (1-2 µg/mL), 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

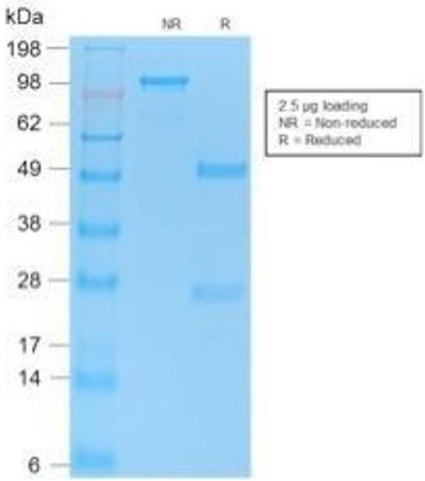
Handling

Concentration:	200 µg/mL
Buffer:	10 mM PBS with 0.05 % BSA & 0.05 % azide.
Preservative:	Sodium azide

Handling

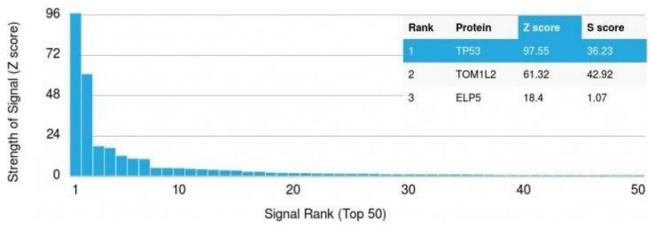
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-80 °C
Storage Comment:	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.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

Images



SDS-PAGE

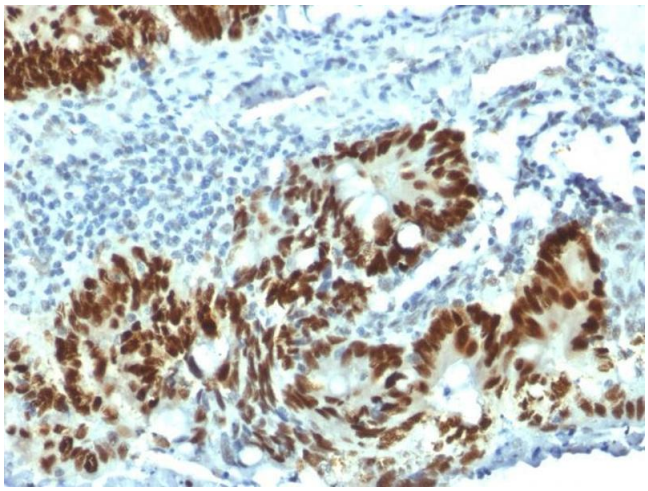
Image 1. SDS-PAGE Analysis Purified p53 Mouse Monoclonal Antibody (PAb1801). Confirmation of Purity and Integrity of Antibody.



Protein Array

Image 2. Analysis of Protein Array containing more than 19,000 full-length human proteins using p53 Mouse Monoclonal Antibody (PAb1801) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM 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 HuProtTM 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 Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody

has an S-score of at least 2.5. For example, if a Monoclonal Antibody 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 Monoclonal Antibody to protein X is equal to 29.



Immunohistochemistry

Image 3. Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with p53 Mouse Monoclonal Antibody (PAb1801).

