

Datasheet for ABIN6940783

anti-p53 antibody**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	p53 (TP53)
Reactivity:	Human, Mouse, Rat, Monkey, Dog, Hamster
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	ELISA, Coating (Coat)

Product Details

Immunogen:	SV40-transformed Mouse B4 cells
Clone:	PAb122
Isotype:	IgG2b kappa
Purification:	Purified by Protein A/G

Target Details

Target:	p53 (TP53)
Alternative Name:	TP53 (TP53 Products)
Background:	The specificity of this monoclonal antibody to its intended target was validated by HuProt™ Array, containing more than 19,000, full-length human proteins. PAb122 binds to the C-terminus (aa370-378) of both wild type and mutated p53. When microinjected into nuclei, PAb122 blocked re-entry into the S-phase of the cell cycle. Mutation and/or allelic loss of p53 is one of

Target Details

the causes of a variety of mesenchymal and epithelial tumors. If it occurs in the germ line, such tumors run in families. p53 Binds to a DNA consensus sequence, the p53 response element, and it regulates normal cell growth cycle events by activating transcription of genes, involved either in progression through the cycle, or causing arrest in G1 when the genome is damaged. 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. p53 Is the most commonly mutated gene in spontaneously occurring human cancers. 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.

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 or A431 cells. Breast or Colon carcinoma.
Known Application: ELISA (For coating, order Ab without BSA)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.

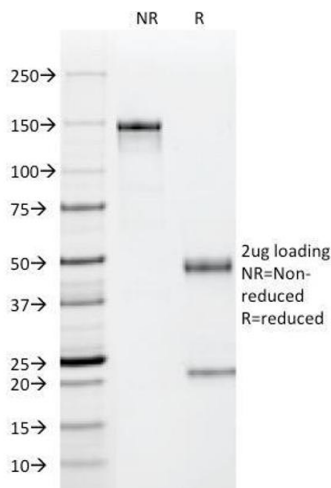
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

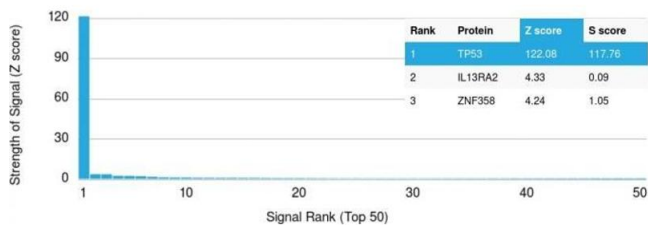
Storage:	4 °C,-80 °C
Storage Comment:	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.
Expiry Date:	24 months

Images



SDS-PAGE

Image 1. SDS-PAGE Analysis Purified p53 Mouse Monoclonal Antibody (PAb122). 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 (PAb122). 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 HuProt™ array. Z-scores are described in units of standard deviations (SDs) 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 SDs) 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.