Datasheet for ABIN969336

anti-p53 antibody

2 Images | 2 Publications

Go to Product page

Overview

Quantity:	100 µL
Target:	p53 (TP53)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Purpose:	p53 Antibody
Immunogen:	Purified recombinant fragment of human p53 expressed in E. Coli.
Clone:	4A8
Isotype:	IgG1
Purification:	Ascitic fluid

Target Details

Target:	p53 (TP53)
Alternative Name:	p53 (TP53 Products)
Background:	P53 responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low

Target Details

	level in normal cells and at a high level in a variety of transformed cell lines, where it's believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing transcription activation, DNA-binding, and oligomerization domains. It is postulated to bind to a p53-binding site and activate expression of downstream genes that inhibit growth and/or invasion, and thus function as a tumor suppressor. Mutants of p53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and hence cause the loss of tumor suppressor activity. Alterations of this gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome. Multiple p53 variants due to alternative promoters and multiple alternative splicing have been found. These variants encode distinct isoforms, which can regulate p53 transcriptional activity.
Molecular Weight:	43.7 kDa
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:	ELISA: 1/10000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Ascitic fluid containing 0.03 % sodium 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.
Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

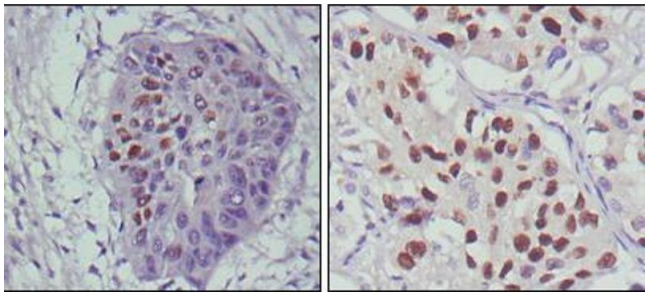
Publications

Product cited in:

Sengpiel, König, Rades, Noack, Duchrow, Schild, Ludwig, Homann: "p53 Mutations in carcinoma of the esophagus and gastroesophageal junction." in: **Cancer investigation**, Vol. 27, Issue 1, pp. 96-104, (2009) (PubMed).

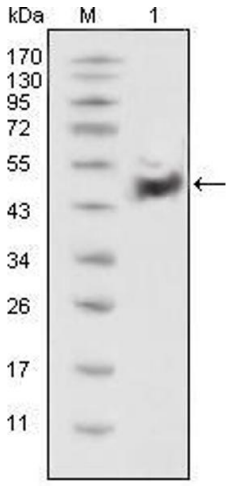
Ecke, Schlechte, Hübsch, Lenk, Schiemenz, Rudolph, Miller: "TP53 mutation in prostate needle biopsies--comparison with patients follow-up." in: **Anticancer research**, Vol. 27, Issue 6B, pp. 4143-8, (2008) (PubMed).

Images



Immunohistochemistry

Image 1. Immunohistochemical analysis of paraffin-embedded human esophageal cancer (left) and lung cancer (right), showing nuclear localization using p53 mouse mAb with DAB staining.



Western Blotting

Image 2. Western blot analysis using p53 mouse mAb against HEK293 cell lysate(1).