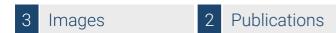


Datasheet for ABIN6263970

anti-p53 antibody (N-Term)





Overview

Overview	
Quantity:	100 μL
Target:	p53 (TP53)
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)
Product Details	
Immunogen:	A synthesized peptide derived from human p53, corresponding to a region within N-terminal amino acids.
Isotype:	IgG
Specificity:	P53 Antibody detects endogenous levels of total p53.
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink TM Coupling Resin (Thermo Fisher Scientific).
Target Details	
Target:	p53 (TP53)
Alternative Name:	TP53 (TP53 Products)

Background:

Description: Acts as a tumor suppressor in many tumor types, induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division by controlling a set of genes required for this process. One of the activated genes is an inhibitor of cyclin-dependent kinases. Apoptosis induction seems to be mediated either by stimulation of BAX and FAS antigen expression, or by repression of Bcl-2 expression. In cooperation with mitochondrial PPIF is involved in activating oxidative stress-induced necrosis, the function is largely independent of transcription. Induces the transcription of long intergenic non-coding RNA p21 (lincRNA-p21) and lincRNA-Mkln1. LincRNA-p21 participates in TP53-dependent transcriptional repression leading to apoptosis and seem to have to effect on cell-cycle regulation. Implicated in Notch signaling cross-over. Prevents CDK7 kinase activity when associated to CAK complex in response to DNA damage, thus stopping cell cycle progression. Isoform 2 enhances the transactivation activity of isoform 1 from some but not all TP53-inducible promoters. Isoform 4 suppresses transactivation activity and impairs growth suppression mediated by isoform 1. Isoform 7 inhibits isoform 1-mediated apoptosis. Regulates the circadian clock by repressing CLOCK-ARNTL/BMAL1-mediated transcriptional activation of PER2 (PubMed:24051492). Gene: TP53

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:	WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 %

Handling

	glycerol.
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:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

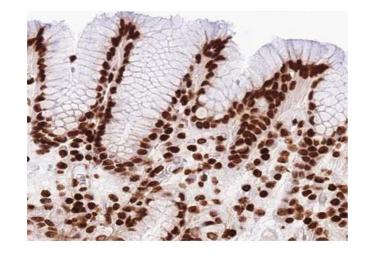
Publications

Product cited in:

Lu, Zhou, Hao, Li, Wang, Shu, Du, Zhu, Zhang, Yin: "The mTOR promotes oxidative stress-induced apoptosis of mesangial cells in diabetic nephropathy." in: **Molecular and cellular endocrinology**, Vol. 473, pp. 31-43, (2018) (PubMed).

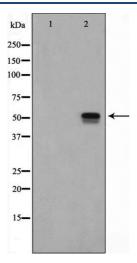
Qin, Wu, Sang: "Sulfur dioxide and benzo(a) pyrene trigger apoptotic and anti-apoptotic signals at different post-exposure times in mouse liver." in: **Chemosphere**, Vol. 139, pp. 318-25, (2016) (PubMed).

Images



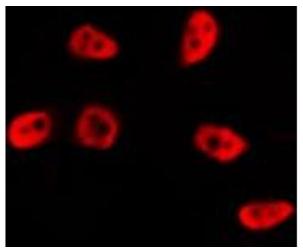
Immunohistochemistry

Image 1. ABIN6267040 at 1/100 staining human Stomach carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



Western Blotting

Image 2. Western blot analysis on MDA-MB-435 cell lysate using p53 Antibody. The lane on the left is treated with the antigen-specific peptide.



Immunofluorescence (fixed cells)

Image 3. ABIN6267040 staining A431 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25¡ãC. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37¡ãC. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibod