Datasheet for ABIN3042524

anti-p53 antibody (AA 74-393)

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Overview

Quantity:	100 µg
Target:	p53 (TP53)
Binding Specificity:	AA 74-393
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-P53/TP53 Antibody Picoband®
Immunogen:	E.coli-derived human P53 recombinant protein (Position: A74-D393). Human P53 shares 83% and 85% amino acid (aa) sequences identity with mouse and rat P53, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-P53/TP53 Antibody Picoband® (ABIN3042524). Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification:	Immunogen affinity purified.

Target Details

Target:	p53 (TP53)
Alternative Name:	TP53 (TP53 Products)
Background:	Synonyms: Cellular tumor antigen p53,Antigen NY-CO-13,Phosphoprotein p53,Tumor suppressor p53,TP53,P53, Tissue Specificity: Ubiquitous. Isoforms are expressed in a wide range of normal tissues but in a tissue-dependent manner. Isoform 2 is expressed in most normal tissues but is not detected in brain, lung, prostate, muscle, fetal brain, spinal cord and fetal liver. Isoform 3 is expressed in most normal tissues but is not detected in lung, spleen, testis, fetal brain, spinal cord and fetal liver. Isoform 7 is expressed in most normal tissues but is not detected in prostate, uterus, skeletal muscle and breast. Isoform 8 is detected only in colon, bone marrow, testis, fetal brain and intestine. Isoform 9 is expressed in most normal tissues but is not detected in brain, heart, lung, fetal liver, salivary gland, breast or intestine. . Background: The p53 tumor antigen is found in increased amounts in a wide variety of transformed cells. The protein is also detectable in many actively proliferating, nontransformed cells, but it is undetectable or present at low levels in resting cells. This protein induces cell cycle arrest or apoptosis in response to sublethal or severe DNA damage, respectively, by differential transcription of target genes and through transcription-independent apoptotic functions. The p53 protein contains 393 amino acids. Human p53 tumour antigen is Locatedto band 17p13. p53 mutations are common in pancreatic cancer and are absent in chronic pancreatitis. Sequence Similarities: Belongs to the p53 family.
Molecular Weight:	53 kDa
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:	Western blot, 0.1-0.5 µg/mL, Human Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/mL, Human

Application Details

	Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human 1. Isobe, M., Emanuel, B. S., Givol, D., Oren, M., Croce, C. M. : Localization of gene for human p53 tumour antigen to band 17p13. Nature 320: 84-85, 1986. 2. Casey, G., Yamanaka, Y., Freiss, H., Kobrin, M. S., Lopez, M. E., Buchler, M., Beger, H. G., Korc, M. : p53 mutations are common in pancreatic cancer and are absent in chronic pancreatitis. Cancer Lett. 69: 151-160, 1993.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.01 mg 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.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

Product cited in:	Liu, Kuang, Wu, Jin, Sun: "A novel polysaccharide from Sargassum integerrimum induces apoptosis in A549 cells and prevents angiogensis in vitro and in vivo." in: **Scientific reports**, Vol. 6, pp. 26722, (2018) (PubMed). Feng, Yan, Zhou, Liang, Liang, Zhao, Dong, Ling: "Piwil2 is reactivated by HPV oncoproteins and initiates cell reprogramming via epigenetic regulation during cervical cancer tumorigenesis." in:

Publications

Oncotarget, Vol. 7, Issue 40, pp. 64575-64588, (2018) (PubMed).

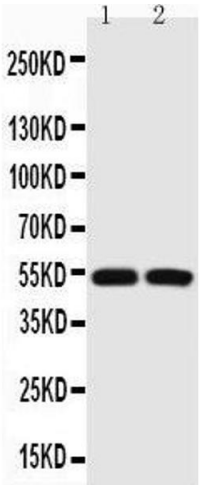
Duan, Di: "Acetazolamide Suppresses Multi-Drug Resistance-Related Protein 1 and P-Glycoprotein Expression by Inhibiting Aquaporins Expression in a Mesial Temporal Epilepsy Rat Model." in: **Medical science monitor : international medical journal of experimental and clinical research**, Vol. 23, pp. 5818-5825, (2018) (PubMed).

Liu, Wang, Kuang, Cao, Bao, Liu, Liu, Sun: "The natural compound GL22, isolated from Ganoderma mushrooms, suppresses tumor growth by altering lipid metabolism and triggering cell death." in: **Cell death & disease**, Vol. 9, Issue 6, pp. 689, (2018) (PubMed).

Lv, Zheng, Zhou, Jia, Wang, Liu, Zhao, Ji, Li, Cao: "Antiproliferative and Apoptosis-inducing Effect of exo-Protoporphyrin IX based Sonodynamic Therapy on Human Oral Squamous Cell Carcinoma." in: **Scientific reports**, Vol. 7, pp. 40967, (2017) (PubMed).

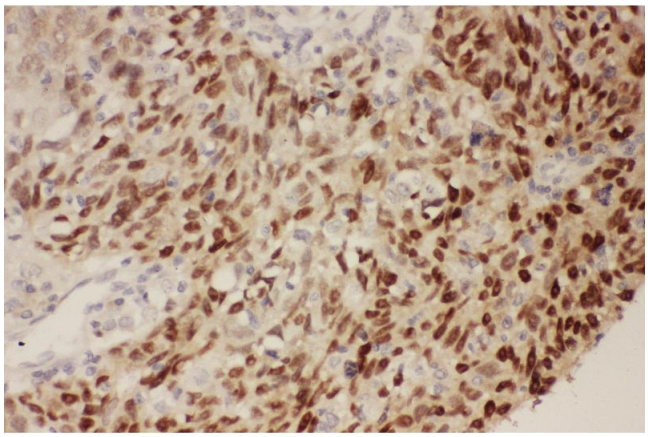
There are more publications referencing this product on: Product page

Images



Western Blotting

Image 1. Anti-P53 Picoband antibody, All lanes: Anti-P53 at 0.5ug/ml Lane 1: HEPG2 Whole Cell Lysate at 40ug Lane 2: COLO320 Whole Cell Lysate at 40ug Predicted bind size: 53KD Observed bind size: 53KD



Immunohistochemistry

Image 2. Anti-P53 Picoband antibody, IHC(P): Human Lung Cancer Tissue