Datasheet for ABIN2854816

anti-p53 antibody (N-Term)

6 Images | 1 Publication

Go to Product page

Overview

Quantity:	100 µL
Target:	p53 (TP53)
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunoprecipitation (IP), Immunocytochemistry (ICC)

Product Details

Immunogen:	Carrier-protein conjugated synthetic peptide encompassing a sequence within the N-terminus region of human p53. The exact sequence is proprietary.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Characteristics:	Rabbit Polyclonal antibody to p53 (tumor protein p53) p53 antibody [N1], N-term
Purification:	Purified by antigen-affinity chromatography.

Target Details

Target:	p53 (TP53)

Target Details

Alternative Name:	tumor protein p53 (TP53 Products)
Background:	This gene encodes tumor protein p53, which 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 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. Cellular Localization: Cytoplasm , Nucleus , Endoplasmic reticulum
Molecular Weight:	44 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:	WB: 1:500-1:3000. ICC/IF: 1:100-1:1000. IHC-P: 1:100-1:1000. IP: 1:100-1:500. Optimal dilutions/concentrations should be determined by the researcher. Not tested in other applications.
Comment:	Validation: Orthogonal
Restrictions:	For Research Use only

Handling

Format:	Liquid

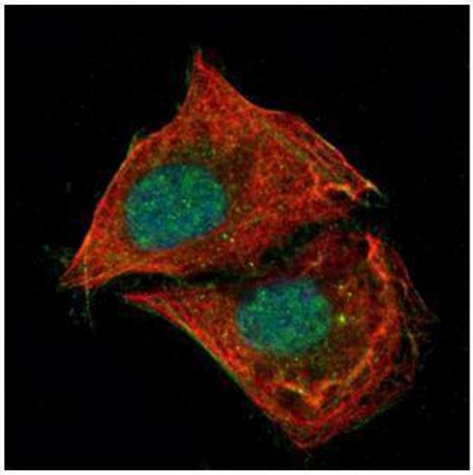
Handling

Concentration:	1 mg/mL
Buffer:	0.1M Tris-Glycine (pH 7), 10 % Glycerol, 0.01 % Thimerosal
Preservative:	Thimerosal (Merthiolate)
Precaution of Use:	This product contains Thimerosal (Merthiolate): a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Publications

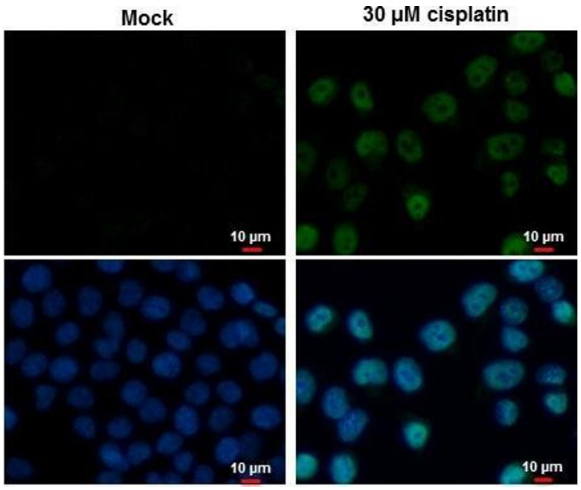
Product cited in:	Wu, Yen, Kou, Wu: "Luteolin and Apigenin Attenuate 4-Hydroxy-2-Nonenal-Mediated Cell Death through Modulation of UPR, Nrf2-ARE and MAPK Pathways in PC12 Cells." in: **PLoS ONE**, Vol. 10, Issue 6, pp. e0130599, (2016) (PubMed).

Validation report #104426 for Immunohistochemistry (IHC)



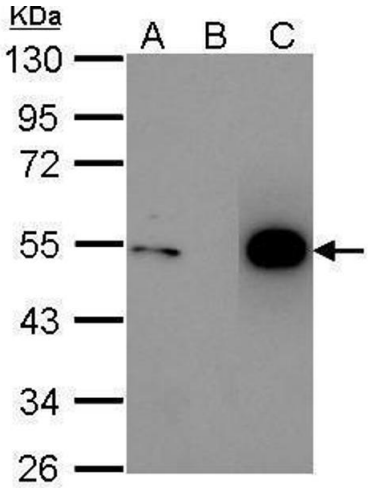
Immunofluorescence

Image 1. ICC/IF Image Confocal immunofluorescence analysis (Olympus FV10i) of paraformaldehyde-fixed U2OS, using p53, antibody (Green) at 1:500 dilution. Alpha-tubulin filaments were labeled with (Red) at 1:2000.



Immunofluorescence

Image 2. ICC/IF Image p53 antibody [N1], N-term detects p53 protein at nucleus by immunofluorescent analysis. Samples: HCT 116 cells mock (left) and treated with 30 µM Cisplatin for 24 hrs (right) were fixed in 4% paraformaldehyde at RT for 15 min. Green: p53 protein stained by p53 antibody [N1], N-term , diluted at 1:500. Blue: Hoechst 33342 staining. Scale bar = 10 µm.



Immunoprecipitation

Image 3. IP Image Immunoprecipitation of p53 protein. HCT116 lysates with 30uM cisplatin treatment for 24 hours were subjected to immunoprecipitation using (B) normal rabbit IgG or (C) 2.5 ug of anti-p53 antibody, (A) Input, 20ug of HCT116 lysates. The precipitated protein was detected by antibody diluted at 1:10000. EasyBlot anti-Rabbit IgG Kit was used in Western blot.

Please check the product details page for more images. Overall 6 images are available for ABIN2854816.