Datasheet for ABIN2855525

anti-p53 antibody

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Overview

Quantity:	100 µL
Target:	p53 (TP53)
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), Chromatin Immunoprecipitation (ChIP)

Product Details

Immunogen:	Recombinant protein encompassing a sequence within the center region of human p53. The exact sequence is proprietary.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Zebrafish (Danio rerio)
Characteristics:	Rabbit Polyclonal antibody to p53 (tumor protein p53) p53 antibody
Purification:	Purified by antigen-affinity chromatography.
Grade:	KO Validated

Target Details

Target:	p53 (TP53)
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:	Positive Control: HCT116 cells with 30uM cisplatin treatment for 24hr Validation: KO/KD, Orthogonal
Restrictions:	For Research Use only

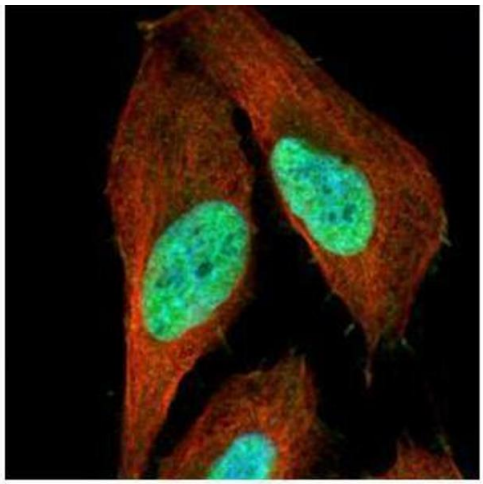
Handling

Format:	Liquid
Concentration:	1.28 mg/mL
Buffer:	1XPBS pH 7, 20 % Glycerol, 0.025 % ProClin 300
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: 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

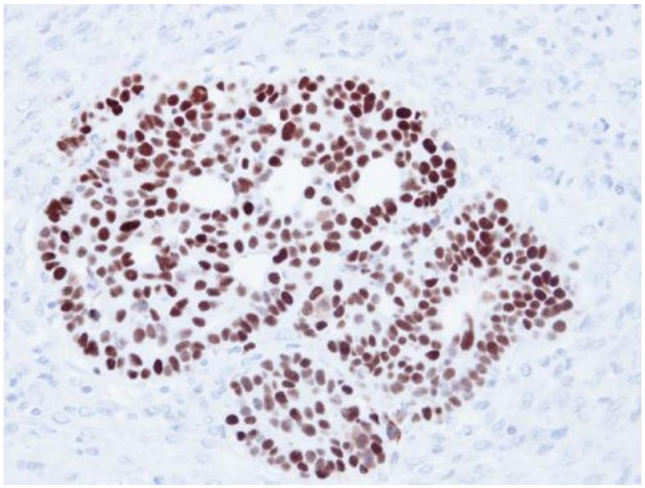
Product cited in:	Chen, Lin, Liang, Villalobos, Villaflores, Lou, Lai, Hsiao: "UVB Irradiation Induced Cell Damage and Early Onset of Junbb Expression in Zebrafish." in: **Animals : an open access journal from MDPI**, Vol. 10, Issue 6, (2020) (PubMed).

Images



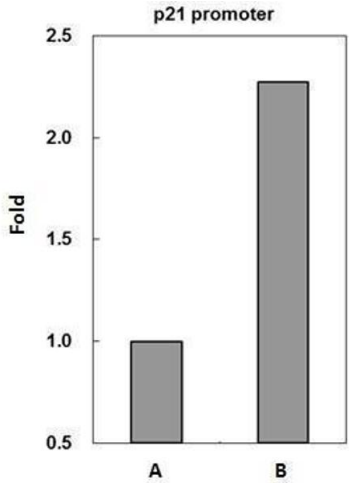
Immunofluorescence

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.



Immunohistochemistry

Image 2. IHC-P Image Immunohistochemical analysis of paraffin-embedded Cal27 xenograft, using p53, antibody at 1:500 dilution.



Chromatin Immunoprecipitation

Image 3. ChIP Image p53 antibody immunoprecipitates p53 protein-DNA complex in ChIP experiments. ChIP Sample: HCT116 whole cell lysate/extract treated with CPT 500nM for 6hr A. 5 µg preimmune rabbit IgG B. 5 µg of p53 antibody , The precipitated DNA was detected by PCR with primer set targeting to p21 promoter.

Please check the product details page for more images. Overall 8 images are available for ABIN2855525.