Datasheet for ABIN1386190

anti-p53 antibody (AA 1-393)

4 Images | 4 Publications

Go to Product page

Overview

Quantity:	100 µL
Target:	p53 (TP53)
Binding Specificity:	AA 1-393
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This p53 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	Full length human p53 protein
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Dog,Cow,Sheep,Pig,Horse
Purification:	Purified by Protein A.

Target Details

Target:	p53 (TP53)

Target Details

Alternative Name:	p53 (TP53 Products)
Background:	Synonyms: LFS1, p53, p53 Cellular Tumor Antigen, p53 Tumor Suppressor, Phosphoprotein p53, TP53, Transformation related protein 53, TRP53, Tumor protein p53, Tumour Protein p53. Background: p53, a DNA-binding, oligomerization domain- and transcription activation domain-containing tumor suppressor, upregulates growth arrest and apoptosis-related genes in response to stress signals, thereby influencing programmed cell death, cell differentiation, and cell cycle control mechanisms. p53 localizes to the nucleus, yet can be chaperoned to the cytoplasm by the negative regulator, MDM2. MDM2 is an E3 ubiquitin ligase that is upregulated in the presence of active p53, where it poly-ubiquitinates p53 for proteasome targeting. p53 fluctuates between latent and active DNA-binding conformations and is differentially activated through posttranslational modifications, including phosphorylation and acetylation. Mutations in the DNA-binding domain (DBD) of p53, amino acids 110-286, can compromise energetically-favorable association with cis elements and are implicated in several human cancers.
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 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200
	ICC 1:100-500

Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
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:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

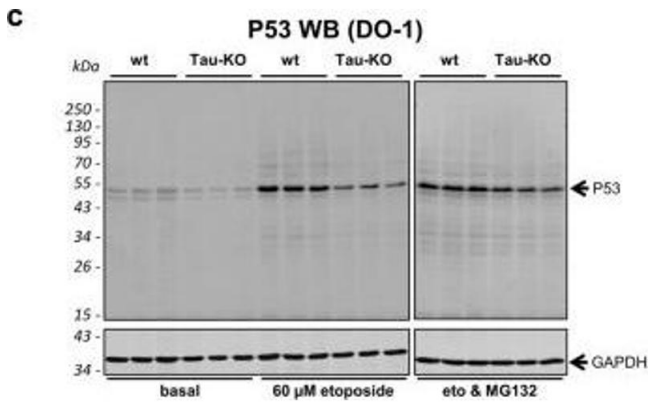
Product cited in:

Sola, Magrin, Pedrioli, Pinton, Salvadè, Papin, Paganetti: "Tau affects P53 function and cell fate during the DNA damage response." in: **Communications biology**, Vol. 3, Issue 1, pp. 245, (2021) (PubMed).

Zhang, Zhao, Zhang, Hao, Yu, Min, Li, Ma, Chen, Yi, Tang, Meng, Liu, Wang, Shen, Zhang: " Decrease in male mouse fertility by hydrogen sulfide and/or ammonia can Be inheritable." in: **Chemosphere**, Vol. 194, pp. 147-157, (2018) (PubMed).

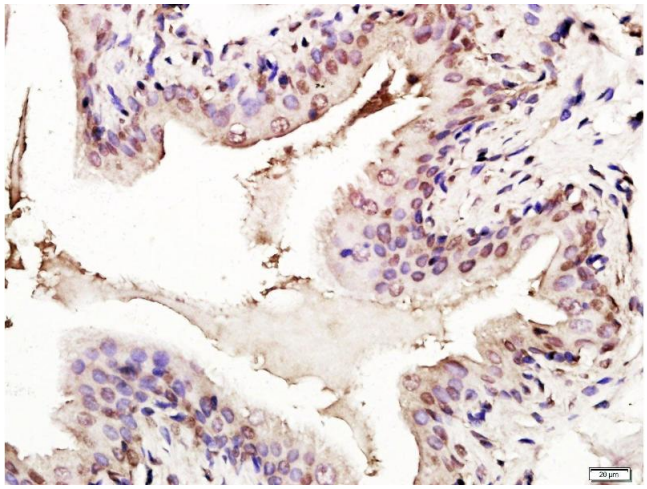
Zeng, Feng, Lin, Ma, Liu: "Effects of microRNA-211 on proliferation and apoptosis of lens epithelial cells by targetingSIRT1gene in diabetic cataract mice." in: **Bioscience reports**, Vol. 37, Issue 4, (2017) (PubMed).

Qin, Xiong, Liu, Yao, Zhou, Hua, Wang: "Effects of irreversible electroporation on cervical cancer cell lines in vitro." in: **Molecular medicine reports**, Vol. 14, Issue 3, pp. 2187-93, (2016) (PubMed).



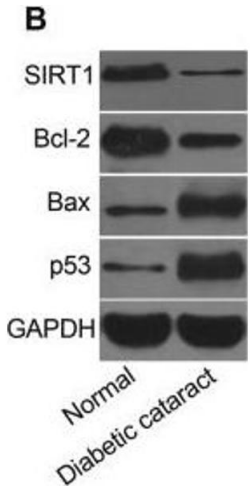
Western Blotting

Image 1. Role of P53 and MDM2 modifications for P53 function and stability.a, b Parental (wt) or 232P (Tau-KO) cells treated 30 min without (basal) or with 60µM etoposide and recovered for 6h in the absence (eto) or presence of 10 µg/mL KU-55933 and/or 5 µg/mL nutlin-3. a Mean intensity±sem of single-cell nuclear P53 or MDM2 (DAPI mask, ImageJ) shown as fold of basal conditions, n>100 cells/condition distributed over five images. b Percent clCasp3-positive cells shown as mean±SD of five images (basal) or 15 images (treatments), n>500 cells/condition. Non-parametric independent samples test and Kruskal-Wallis pairwise comparison between cell lines (in bold) or for treatment for each cell line (in vertical). c Western bot analysis of P53 in parental (wt) or 232P (Tau-KO) cells at basal conditions, after 30 min 60µM etoposide and 4h recovery without or with 10µM MG132. GAPDH served as loading control. d Parental (wt) or 232P (Tau-KO) cells pre-treated for 30 min with 60µM etoposide followed by 4h with 10µM MG132, were incubated with 25µM of cycloheximide (CHX) for the indicated chase times. Single-cell nuclear P53 or nuclear MDM2 (DAPI mask, ImageJ) shown as fold of wt cells at basal conditions. Mean intensity±sem of n>100 cells/condition distributed over five images. Independent measures ordinary two-way ANOVA, source of variation for cell lines (bold), multiple Bonferroni pairwise comparisons of treatment for each line (in italic). e Parental (wt) or (Tau-KO) 232P cells treated for 30 min with 60µM etoposide and 6h recovery analyzed with a 90 kDa MDM2 rabbit antibody (green and middle panel with GAPDH as loading control) or a 60 and 90 kDa MDM2 mouse antibody (red and bottom panel). - figure provided by CiteAb. Source: PMID32427887



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Paraformaldehyde-fixed, paraffin embedded rat bladder tissue, Antigen retrieval by boiling in sodium citrate buffer(pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with Rabbit Anti-p53 (FL-393) Polyclonal Antibody, Unconjugated at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining



Western Blotting

Image 3. Expression of miR-211 and mRNA and protein expressions of SIRT1, Bcl-2, Bax, and p53 in lens tissues of mice(A) miR-211 expression and mRNA and protein expressions of SIRT1, Bcl-2, Bax, and p53 in mice lens, (B) strip chart of SIRT1, Bcl-2, Bax, and p53 proteins, (C) expressions of SIRT1, Bcl-2, Bax, and p53 proteins in mice lens, *, P<0.05 compared with the normal group. - figure provided by CiteAb. Source: PMID28679650

Please check the product details page for more images. Overall 4 images are available for ABIN1386190.