Product Datasheet

p53 Antibody

Catalog No: #21085

Package Size: #21085-1 50ul #21085-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	p53 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB,IHC,IF,ELISA
Species Reactivity	Human;Mouse;Rat;Monkey
Specificity	The antibody detects endogenous level of total p53 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.13~17 (P-L-S-Q-E) derived from Human p53.
Conjugates	Unconjugated
Target Name	p53
Other Names	Tumor suppressor p53; Phosphoprotein p53; Antigen NY-CO-13; TP53;
Accession No.	Swiss-Prot: P04637NCBI Protein: NP_000537.3
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

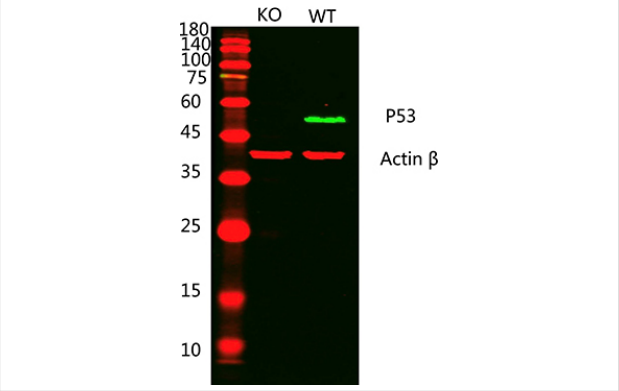
Application Details

Western Blot: 1:500 - 1:2000.

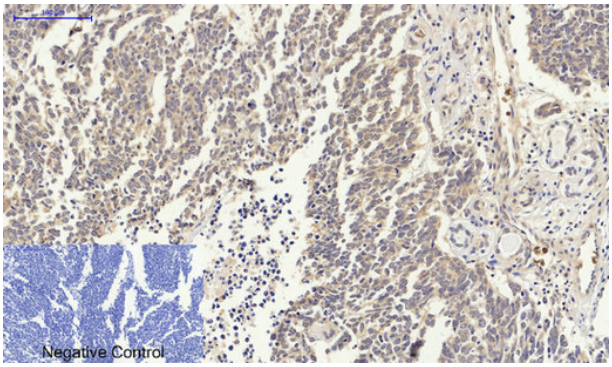
Immunohistochemistry: 1:100 - 1:300.

Immunofluorescence: 1:200 - 1:1000

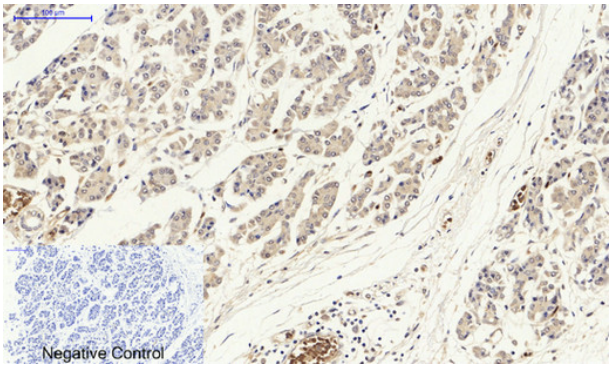
Images



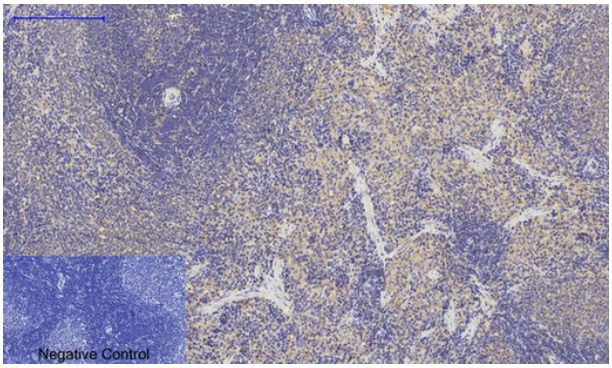
Western blot analysis of lysates from 1)p53 knockout A431 cell , 2)A431 cells, (Green) primary antibody was diluted at 1:1000, 4°over night, Dylight 800 secondary antibody was diluted at 1:10000, 37° 1hour. (Red) Actin β Monoclonal Antibody(5B7) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody was diluted at 1:10000, 37° 1hour.



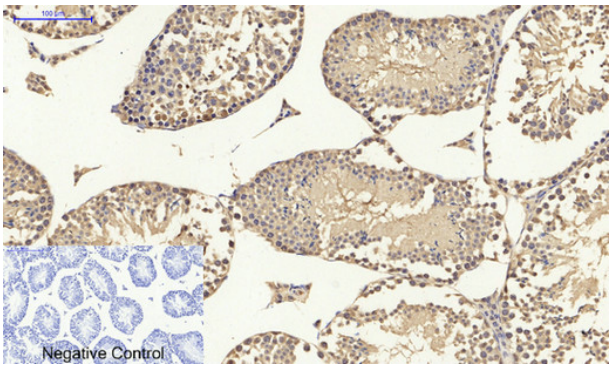
Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



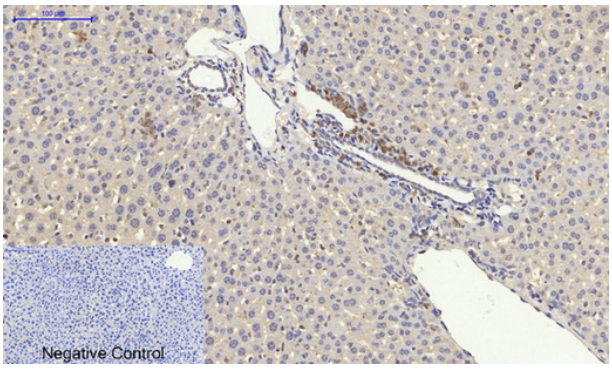
Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



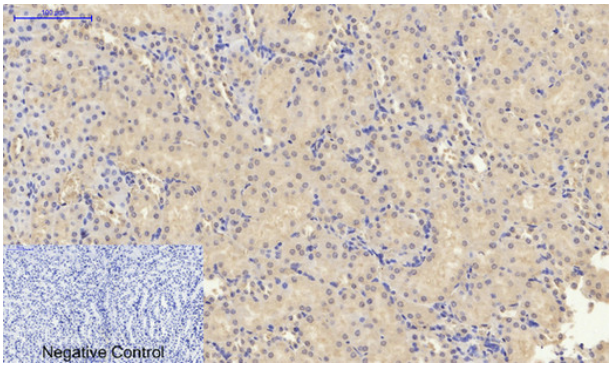
Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



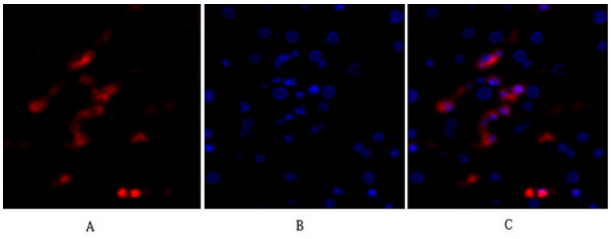
Immunohistochemical analysis of paraffin-embedded Mouse-testis tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



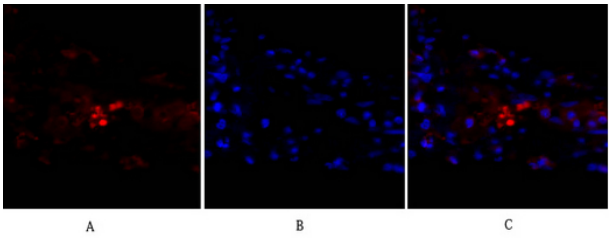
Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



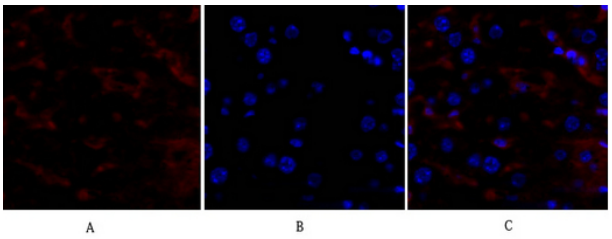
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of human-liver tissue. 1,p53 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of human-lung tissue. 1,p53 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of mouse-liver tissue. 1,p53 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

Background

p53 is a nuclear protein which plays an essential role in the regulation of cell cycle specifically in the transition from G0 to G1. It is found in very low levels in normal cells however in a variety of transformed cell lines in high amounts and believed to contribute to transformation and malignancy. The open reading frame of p53 is 393 amino acids long, with the central region (consisting of amino acids from about 100 to 300) containing the DNA-binding domain. This proteolysis-resistant core is flanked by a C-terminal end mediating oligomerization and an N-terminal end containing a strong transcription activation signal. p53 binds as a tetramer to a PBS (p53-Binding Site) and activates the expression of downstream genes that inhibit growth and/or invasion. p53 binds as a tetramer to a p53-binding site (PBS) and to activate the expression of adjacent genes that inhibit growth and/or invasion. Deletion of one or both p53 alleles reduces the expression of tetramers, resulting in decreased expression of the growth inhibitory

genes
Lin T, et al. (2005) Nat Cell Biol; 7(2): 165-71.
Vega FM, et al. (2004) Mol Cell Biol; 24(23): 10366-80.
Li J, et al. (2004) J Biol Chem; 279(40): 41275-9.
Wang J, et al. (2004) J Biol Chem; 279(38): 39584-92.

Published Papers

el at., CK2-mediated CCDC106 phosphorylation is required for p53 degradation In cancer progression. In J Exp CIIn Cancer Res on 2019 Mar 18 by NIng Y, Wang C, et al..PMID: 30885251, , (2019)

PMID:30885251

el at., PTEN expression in U251 glioma cells enhances their sensitivity to ionizing radiation by suppressing DNA repair capacity. In Eur Rev Med Pharmacol Sci on 2019 Dec by Li HL, Wang CY, et al..PMID:31841199, , (2019)

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el at., H. pylori infection-induced MSC differentiation into CAFs promotes epithelial-mesenchymal transition in gastric epithelial cells.In Int J Mol Med on 2013 Dec by Zhang Q, Wang M,et al..PMID:24145921, , (2013)

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el at., Xanthatin Induces Cell Cycle Arrest at G2/M Checkpoint and Apoptosis via Disrupting NF-ι-• B Pathway in A549 Non-Small-Cell Lung Cancer Cells.In Molecules on 2012 Mar 26 by Lei Zhang, Junshan Ruan,et al..PMID:22450683, , (2012)

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el at., Effect of the Tumor Suppressor Gene ING4 on the Proliferation of MCF-7 Human Breast Cancer Cells.In Oncol Lett on 2012 Sep by Qinjun Wei, Wei He,et al..PMID:22970041, , (2012)

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el at., Cell cycle arrest and apoptosis of OVCAR-3 and MCF-7 cells induced by co-immobilized TNF-δO plus IFN-ηΊ¬ on polystyrene and the role of p53 activation. In Biomaterials on 2012 Sep by Yan-Qing Guan, Zhibin Li, et al..PMID: 22682938, , (2012)

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el at., Xanthatin induces G2/M cell cycle arrest and apoptosis in human gastric carcinoma MKN-45 cells. In Planta Med on 2012 Jun by Lei Zhang, Li Tao, et al..PMID:22532019, , (2012)

PMID:22532019

el at., Solanesol protects human hepatic L02 cells from ethanol-induced oxidative injury via upregulation of HO-1 and Hsp70.In Toxicol In Vitro on 2015 Apr by Xiangyang Yao, Qin Bai et al..PMID:25645596, , (2015)

PMID:25645596

Note: This product is for in vitro research use only and is not intended for use in humans or animals.