Product Datasheet

p53(Ab-15) Antibody

Catalog No: #21085

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

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

Description

Product Name	p53(Ab-15) 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.
Target Name	p53
Other Names	Tumor suppressor p53; Phosphoprotein p53; Antigen NY-CO-13; TP53;
Accession No.	Swiss-Prot: P04637NCBI Protein: NP_000537.3
Uniprot	P04637
GeneID	7157;
Concentration	1.0mg/ml
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

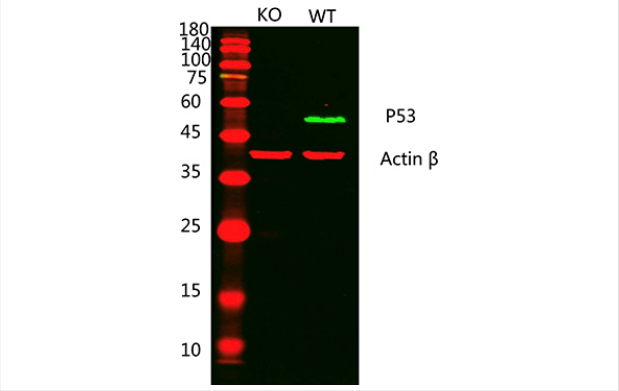
Application Details

Western Blot: 1:500 - 1:2000.

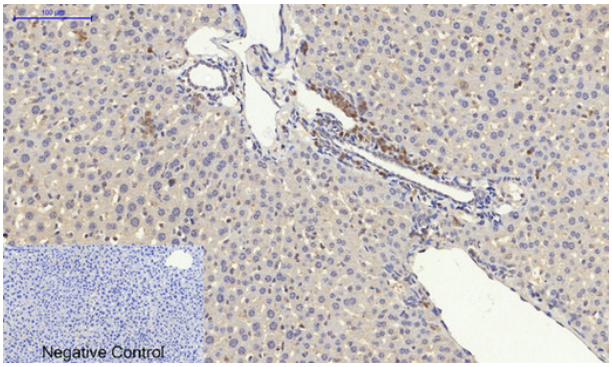
Immunohistochemistry: 1:100 - 1:300.

Immunofluorescence: 1:200 - 1:1000

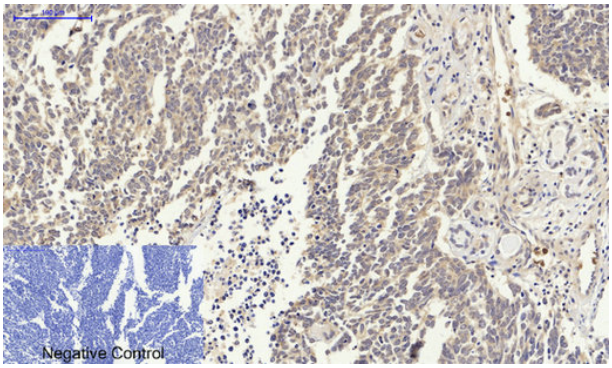
Images



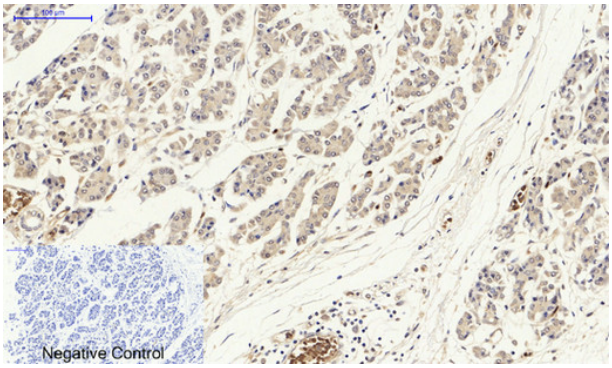
Western blot analysis of lysates from 1)p53 knockout A431 cell , 2)A431 cells, (Green) primary antibody was diluted at 1:1000, 4°over night, Dylight 800 secondary antibody was diluted at 1:10000, 37° 1hour. (Red) Actin β Monoclonal Antibody(5B7) antibody was diluted at 1:5000 as loading control, 4° over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



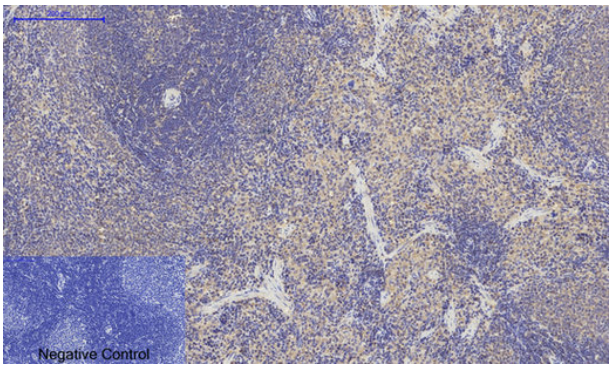
Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by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



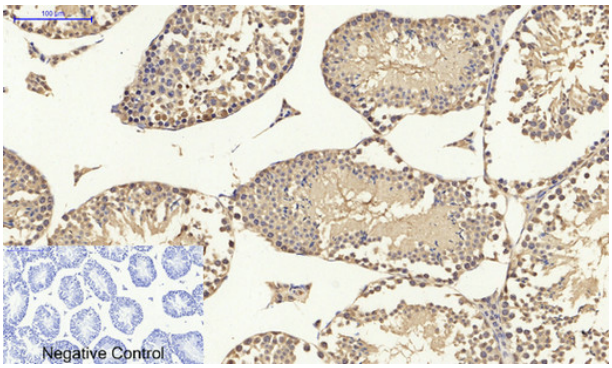
Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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



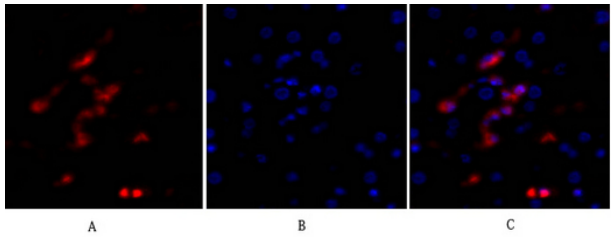
Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was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



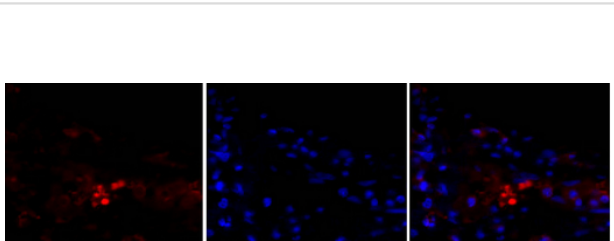
Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary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



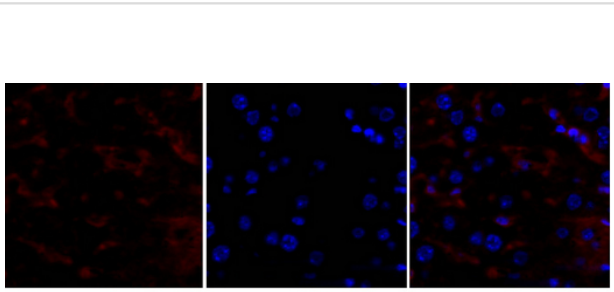
Immunohistochemical analysis of paraffin-embedded Mouse-testis tissue. 1,p53 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by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



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

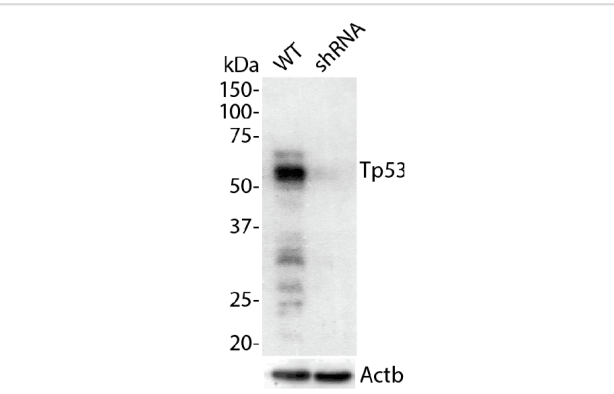


Figure legend: Western blot showing p53 (protein code: Tp53) expression in wild-type (WT) and Tp53 shRNA knockdown rat PC-12 cells. Beta-actin (Actb) served as the loading control.Conclusion: Since this antibody detects endogenous p53 protein in WT but not in shRNA knockdown cell lysate, this antibody is highly specific. Note: The lower band may represent the physiologically degraded p53 protein. Nonetheless, as long as these bands disappear in shRNA KD cell lysates, this antibody is still specific. This phenomenon occurs most often in polyclonal Abs, further emphasizing the importance of using KD to validate antibodies.

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.

Note: This product is for in vitro research use only