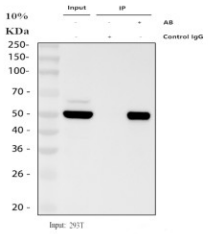
p53 Antibody for IP / Tumor Protein p53 Immunoprecipitation Antibody (R31441)

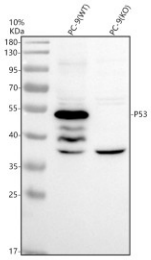
Catalog No.	Formulation	Size
R31441	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

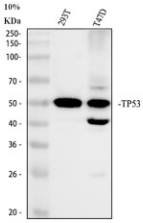
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P04637
Localization	Nuclear
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunoprecipitation: 2ug per 500ug of lysate
Limitations	This p53 Antibody for IP / Tumor Protein p53 Immunoprecipitation Antibody is available for research use only.



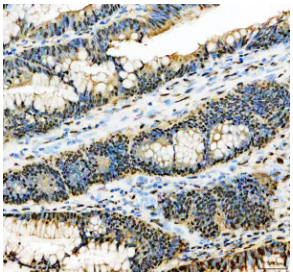
p53 Antibody for IP Human 293T Cell Immunoprecipitation. Immunoprecipitation of p53/TP53 was performed from human 293T whole cell lysate using p53 Antibody for IP, also called Tumor Protein p53 Immunoprecipitation Antibody. Lane 1 contains 30 ug of input lysate; lane 2 contains material immunoprecipitated with rabbit control IgG; lane 3 contains material immunoprecipitated with 2 ug of anti-TP53 antibody from 500 ug of lysate. Western blot detection was performed with anti-TP53 antibody at 0.5 ug/ml and a light chain-specific HRP secondary antibody. A strong band at approximately 53 kDa is present in the input and TP53 immunoprecipitate but absent from the control IgG lane, demonstrating successful enrichment of p53 from human 293T cells.



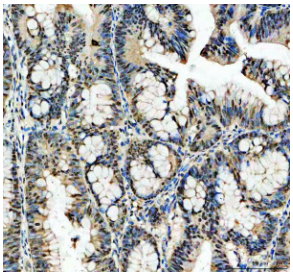
p53 Antibody for IP Human PC-9 TP53 Knockout Validation WB. Western blot analysis of human PC-9 wild-type and TP53 knockout cell lysates was performed with p53 Antibody for IP, also called Tumor Protein p53 Immunoprecipitation Antibody. Lane 1: PC-9 wild-type cell lysate; Lane 2: PC-9 TP53 knockout cell lysate. Samples were loaded at 30 ug per lane, and the antibody was used at 0.5 ug/ml overnight at 4oC. A strong p53 band is detected at approximately 53 kDa in wild-type cells and is absent from the TP53 knockout cells, supporting specific recognition of endogenous p53.



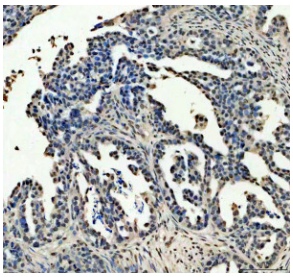
p53 Antibody for IP Human 293T and T47D Cell WB. Western blot analysis of human 293T and T47D whole cell lysates was performed with p53 Antibody for IP, also called Tumor Protein p53 Immunoprecipitation Antibody. Lane 1: 293T cell lysate; Lane 2: T47D cell lysate. Samples were loaded at 30 ug per lane, and the antibody was used at 0.5 ug/ml overnight at 4oC. A strong p53 band is detected at approximately 53 kDa in both cell lysates. This p53 Antibody demonstrates detection of endogenous TP53 in human cells and complements its validated use for immunoprecipitation.



p53 Antibody for IP Human Colon Cancer IHC. Immunohistochemistry staining of FFPE human colon cancer tissue was performed with p53 Antibody for IP, also called Tumor Protein p53 Immunoprecipitation Antibody. Heat-induced epitope retrieval was performed in EDTA buffer, pH 8.0. The antibody was used at 2 ug/ml overnight at 4oC, followed by an HRP-conjugated secondary antibody and DAB detection. Positive nuclear staining is observed in populations of colonic epithelial cells. This p53 Antibody demonstrates detection of endogenous TP53 in human colon cancer tissue and complements its validated use for immunoprecipitation.



p53 Antibody for IP Human Colon Cancer Glandular Epithelium IHC. Immunohistochemistry staining of FFPE human colon cancer tissue was performed with p53 Antibody for IP, also called Tumor Protein p53 Immunoprecipitation Antibody. Heat-induced epitope retrieval was performed in EDTA buffer, pH 8.0. The antibody was used at 2 ug/ml overnight at 4oC, followed by an HRP-conjugated secondary antibody and DAB detection. Positive nuclear staining is observed in populations of malignant glandular epithelial cells. This p53 Antibody demonstrates detection of endogenous TP53 in human colon cancer and complements its validated use for immunoprecipitation.



p53 Antibody for IP Human Ovarian Cancer IHC. Immunohistochemistry staining of FFPE human ovarian cancer tissue was performed with p53 Antibody for IP, also called Tumor Protein p53 Immunoprecipitation Antibody. Heat-induced epitope retrieval was performed in EDTA buffer, pH 8.0. The antibody was used at 2 ug/ml overnight at 4oC, followed by an HRP-conjugated secondary antibody and DAB detection. Positive nuclear staining is observed in populations of tumor epithelial cells. This p53 Antibody demonstrates detection of endogenous TP53 in human ovarian cancer and complements its validated use for immunoprecipitation.

Description

p53 Antibody for IP / Tumor Protein p53 Immunoprecipitation Antibody targets p53, a transcription factor encoded by the TP53 gene and a central tumor suppressor involved in cellular responses to DNA damage and other forms of stress. p53 integrates multiple signaling pathways and can regulate cell cycle arrest, DNA repair, senescence and apoptosis. These functions help prevent the propagation of cells containing genomic damage and have made p53 one of the most extensively investigated proteins in cancer biology.

Under normal cellular conditions, p53 abundance and activity are tightly regulated through interactions with proteins such

as MDM2 and through post-translational modifications including phosphorylation, acetylation and ubiquitination. Following DNA damage or other stress signals, p53 can become stabilized and transcriptionally active, leading to regulation of genes such as CDKN1A/p21 and other targets involved in cell cycle control and cell survival. Disruption of these regulatory mechanisms can contribute to loss of normal tumor suppressor activity.

Immunoprecipitation provides an approach for isolating and enriching p53 from complex protein samples. A p53 Antibody for IP can be used to capture the target protein for subsequent analysis and may support studies examining p53-associated proteins and regulatory complexes. Because p53 function is influenced by interactions with numerous cellular proteins, immunoprecipitation-based experiments can be particularly useful for investigating mechanisms that control TP53 stability, localization, transcriptional activity and degradation.

TP53 alterations are extremely common in human cancer, and both wild-type and mutant forms of p53 are studied to understand tumor development, progression and therapeutic response. Immunoprecipitation of p53 can complement expression-based approaches by enabling investigation of protein interactions, modification states and molecular complexes associated with different cellular conditions. A Tumor Protein p53 Immunoprecipitation Antibody is therefore useful for research into the molecular regulation of this important tumor suppressor.

NSJ Bioreagents offers p53 antibodies for investigating TP53 expression, function and regulation. A p53 Antibody for IP can support studies of p53 protein interactions, tumor suppressor signaling, DNA damage responses, cell cycle regulation and molecular mechanisms associated with cancer biology.

Researchers studying p53 expression and TP53 signaling can explore our Protein Microarray Validated p53 Antibody page for additional reagents targeting this key tumor suppressor in cancer, DNA damage response and cell cycle research.

Application Notes

Titration of the p53 Antibody for p53 Antibody for IP / Tumor Protein p53 Immunoprecipitation Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 74-393) was used as the immunogen for this p53 Antibody.

Storage

After reconstitution, the p53 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

p53 Antibody for IP, Tumor Protein p53 Immunoprecipitation antibody, p53 Immunoprecipitation antibody, TP53 Antibody for IP, TP53 Immunoprecipitation antibody, Tumor Protein p53 antibody, Cellular Tumor Antigen p53 antibody, TP53 antibody

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