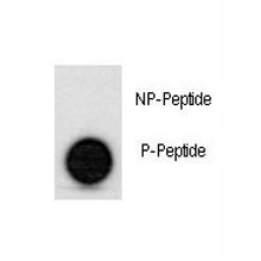
p53 (pS315) Antibody / Phospho-p53 Ser315 Antibody (F48432)

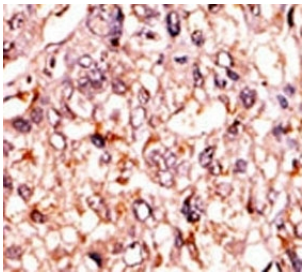
Catalog No.	Formulation	Size
F48432-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48432-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Primate
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P04637
Applications	Dot blot: 1:500 IHC (Paraffin): 1:50-1:100
Limitations	This p53 (pS315) Antibody / Phospho-p53 Ser315 Antibody is available for research use only.



p53 (pS315) Antibody Phosphopeptide Specificity Dot Blot. Dot blot analysis was performed with p53 (pS315) Antibody, also called Phospho-p53 Ser315 Antibody. Phosphorylated and non-phosphorylated p53 peptides were spotted at 50 ng per dot. Strong signal is observed with the phosphopeptide, while the corresponding non-phosphorylated peptide shows no detectable signal. This p53 (pS315) Antibody demonstrates phosphorylation-specific recognition of p53 at Ser315.



p53 (pS315) Antibody Human Hepatocarcinoma IHC. Immunohistochemistry staining of FFPE human hepatocarcinoma tissue was performed with p53 (pS315) Antibody, also called Phospho-p53 Ser315 Antibody. Positive staining is observed in the tumor tissue, demonstrating detection of phosphorylated p53. This p53 (pS315) Antibody supports investigation of Ser315-specific TP53 phosphorylation in hepatocellular cancer and tumor suppressor signaling.

Description

p53 (pS315) Antibody / Phospho-p53 Ser315 Antibody recognizes p53 when phosphorylated at serine 315. p53, encoded by the TP53 gene, is a major tumor suppressor and transcription factor that coordinates cellular responses to DNA damage, oncogenic signaling and other forms of cellular stress. Its activity is extensively controlled by post-translational modifications, including phosphorylation, acetylation and ubiquitination, which influence p53 stability, localization, protein interactions and transcriptional activity.

Ser315 is a regulatory phosphorylation site within the C-terminal region of p53. Phosphorylation at this residue has been associated with cell cycle-dependent regulation of p53 and can influence its stability and transcriptional functions. Multiple kinases have been implicated in Ser315 phosphorylation under different cellular conditions, illustrating the integration of p53 with signaling pathways controlling proliferation, stress responses and cell cycle progression.

Phosphorylation of p53 is highly dynamic and can vary according to cell type, cell cycle stage and cellular stress. Analysis of individual phosphorylation sites can therefore provide information about specific regulatory states that cannot be obtained by measuring total p53 alone. A p53 (pS315) Antibody can support studies examining site-specific TP53 phosphorylation in relation to cell cycle regulation, DNA damage signaling and changes in tumor suppressor activity.

Dysregulation of p53 signaling is a major feature of human cancer, and phosphorylation-dependent control contributes to the complex regulation of this pathway. Studying Ser315 phosphorylation can help characterize interactions between p53 and kinase signaling networks and investigate how post-translational modification affects p53 responses in normal and malignant cells. Phospho-p53 research is therefore relevant to cancer biology, cell cycle control, cellular stress and DNA damage response pathways.

NSJ Bioreagents offers phosphorylation-specific antibodies for investigating regulatory states of the p53 pathway. A Phospho-p53 Ser315 Antibody can support research into TP53 phosphorylation, cell cycle regulation, DNA damage responses and mechanisms controlling p53 tumor suppressor signaling.

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 (pS315) Antibody / Phospho-p53 Ser315 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This p53 (pS315) Antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS315 of human p53.

Storage

Aliquot the p53 (pS315) Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

p53 (pS315) antibody, Phospho-p53 Ser315 antibody, Phospho-p53 S315 antibody, p53 phospho Ser315 antibody, TP53 phospho Ser315 antibody, TP53 pS315 antibody, Tumor Protein p53 phospho Ser315 antibody

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