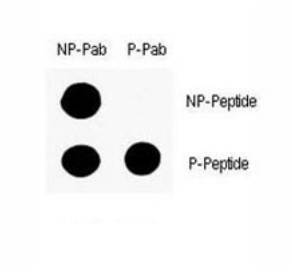
p53 (pS9) Antibody / Phospho-p53 Ser9 Antibody (F48434)

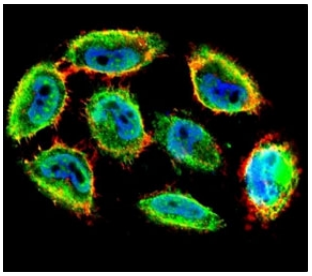
Catalog No.	Formulation	Size
F48434-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48434-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P04637
Applications	Dot blot: 1:500 Immunofluorescence: 1:10-1:50
Limitations	This p53 (pS9) Antibody / Phospho-p53 Ser9 Antibody is available for research use only.



p53 (pS9) Antibody Phosphopeptide Specificity Dot Blot. Dot blot analysis was performed with p53 (pS9) Antibody, also called Phospho-p53 Ser9 Antibody. Phosphorylated and non-phosphorylated p53 peptides were spotted at 50 ng per dot and tested with phospho-specific (P-Pab) and non-phospho-specific (NP-Pab) antibodies. The phospho-specific antibody recognizes the phosphorylated peptide without detectable reactivity against the corresponding non-phosphorylated peptide. This p53 (pS9) Antibody demonstrates phosphorylation-specific recognition of p53 at Ser9.



p53 (pS9) Antibody Human A2058 Melanoma Cell IF. Immunofluorescence analysis of human A2058 melanoma cells was performed with p53 (pS9) Antibody, also called Phospho-p53 Ser9 Antibody, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments were labeled with Alexa Fluor 555 Phalloidin (red), and nuclei were counterstained with DAPI (blue). This p53 (pS9) Antibody demonstrates detection of Ser9-phosphorylated TP53 in human A2058 melanoma cells and supports studies of phosphorylation-dependent p53 regulation.

Description

p53 (pS9) Antibody / Phospho-p53 Ser9 Antibody recognizes p53 when phosphorylated at serine 9. 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. The activity of p53 is regulated by numerous post-translational modifications, including phosphorylation, acetylation and ubiquitination, which can influence protein stability, localization, interactions and transcriptional activity.

Ser9 is located within the N-terminal region of p53, which contains regulatory elements involved in transcriptional activation and interactions with proteins controlling p53 stability and function. Phosphorylation within this region contributes to the complex post-translational regulation of p53 and can change in response to cellular signaling and stress. Site-specific analysis of Ser9 provides a means of investigating this particular regulatory state independently of total p53 abundance.

Phosphorylation of p53 is dynamic and occurs at multiple residues in response to different cellular conditions. These modifications can help coordinate p53-dependent processes including cell cycle regulation, DNA damage responses and apoptosis. A p53 (pS9) Antibody can therefore complement antibodies recognizing total p53 or other phosphorylation sites when examining the signaling events that regulate TP53 activity.

Altered p53 signaling is a central feature of cancer biology, and changes in phosphorylation can influence the cellular response to stress even when total p53 levels remain unchanged. Analysis of Ser9 phosphorylation may therefore be useful for studying signaling pathways that converge on p53 and for examining modification-specific changes in normal and malignant cells. Phospho-p53 research provides a broader view of TP53 regulation than total protein measurements alone.

NSJ Bioreagents offers phosphorylation-specific antibodies for investigating regulatory states of the p53 pathway. A Phospho-p53 Ser9 Antibody can support research into TP53 phosphorylation, cellular stress responses, DNA damage signaling and mechanisms controlling p53 tumor suppressor activity.

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 (pS9) Antibody / Phospho-p53 Ser9 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This p53 (pS9) Antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS9 of human p53.

Storage

Aliquot the p53 (pS9) Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

p53 (pS9) antibody, Phospho-p53 Ser9 antibody, Phospho-p53 S9 antibody, p53 phospho Ser9 antibody, TP53 phospho Ser9 antibody, TP53 pS9 antibody, Tumor Protein p53 phospho Ser9 antibody

Copyright © NSJ Bioreagents. All rights reserved.