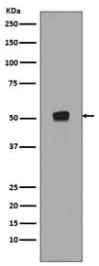
p53 (pS376) Antibody / Phospho-p53 Ser376 Antibody [clone DGA-20] (RQ5064)

Catalog No.	Formulation	Size
RQ5064	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	DGA-20
Purity	Affinity purified
UniProt	P04637
Applications	Western blot: 1:500-1:2000
Limitations	This p53 (pS376) Antibody / Phospho-p53 Ser376 Antibody is available for research use only.



p53 (pS376) Antibody Calyculin A and Okadaic Acid-Treated HEK293 Cell WB. Western blot analysis of human HEK293 cell lysate treated with Calyculin A and okadaic acid was performed with p53 (pS376) Antibody, also called Phospho-p53 Ser376 Antibody. A specific band is detected at approximately 53 kDa, consistent with the predicted molecular weight of p53. This p53 (pS376) Antibody demonstrates detection of Ser376-phosphorylated TP53 following phosphatase inhibition and supports studies of phosphorylation-dependent p53 regulation.

Description

p53 (pS376) Antibody / Phospho-p53 Ser376 Antibody recognizes p53 when phosphorylated at serine 376. p53, encoded by the TP53 gene, is a major tumor suppressor and transcription factor that coordinates cellular responses to DNA damage and other forms of cellular stress. Its activity is regulated through multiple post-translational modifications, including phosphorylation, acetylation and ubiquitination, which can influence p53 stability, localization, protein interactions and transcriptional activity.

Ser376 is located within the C-terminal regulatory region of p53, an area containing several sites subject to dynamic phosphorylation and other modifications. Regulation of Ser376 has been studied in the context of DNA damage responses and interactions between p53 and regulatory proteins. Importantly, the phosphorylation state of this site can change following cellular stress, making Ser376 useful for examining a specific regulatory state of TP53 rather than simply measuring total p53 abundance.

Post-translational modification of the p53 C-terminal region can influence DNA binding, protein-protein interactions and transcriptional regulation. Ser376 is particularly notable because DNA damage-associated signaling has been reported to promote dephosphorylation of this residue in some experimental systems, illustrating that p53 regulation can involve both phosphorylation and dephosphorylation. A p53 (pS376) Antibody provides a site-specific reagent for investigating the phosphorylated Ser376 population and changes in this modification under different cellular conditions.

Altered p53 signaling is central to cancer biology, and analysis of individual phosphorylation sites can provide information that total p53 measurements cannot. Studying Ser376 phosphorylation can support investigation of stress-responsive signaling, DNA damage pathways and mechanisms controlling p53 tumor suppressor activity. Phosphorylation-specific antibodies are particularly useful for comparing modification states across experimental treatments or cellular conditions.

NSJ Bioreagents offers phosphorylation-specific antibodies for investigating regulatory states of the p53 pathway. A Phospho-p53 Ser376 Antibody can support research into TP53 phosphorylation, DNA damage responses, cellular stress signaling and mechanisms regulating 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

Optimal dilution of the p53 (pS376) Antibody / Phospho-p53 Ser376 Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human p53 (surrounding pS376) was used as the immunogen for the p53 (pS376) Antibody.

Storage

Store the p53 (pS376) Antibody at -20oC.

Alternate Names

p53 (pS376) antibody, Phospho-p53 Ser376 antibody, Phospho-p53 S376 antibody, p53 phospho Ser376 antibody, TP53 phospho Ser376 antibody, TP53 pS376 antibody, Tumor Protein p53 phospho Ser376 antibody

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