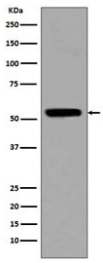
p53 (Acetyl Lys370) Antibody / Acetyl-p53 K370 Antibody [clone DEO-20] (RQ5059)

Catalog No.	Formulation	Size
RQ5059	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	DEO-20
Purity	Affinity purified
UniProt	P04637
Applications	Western blot: 1:500-1:2000
Limitations	This p53 (Acetyl Lys370) Antibody / Acetyl-p53 K370 Antibody is available for research use only.



p53 (Acetyl Lys370) Antibody TSA-Treated HeLa Cell WB. Western blot analysis of human HeLa cell lysate treated with Trichostatin A (TSA) was performed with p53 (Acetyl Lys370) Antibody, also called Acetyl-p53 K370 Antibody. A specific band is detected at approximately 53 kDa, consistent with the predicted molecular weight of p53. This p53 (Acetyl Lys370) Antibody demonstrates detection of Lys370-acetylated TP53 following histone deacetylase inhibition and supports studies of acetylation-dependent p53 regulation.

Description

p53 (Acetyl Lys370) Antibody / Acetyl-p53 K370 Antibody recognizes p53 when acetylated at lysine 370. 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 regulated by post-translational modifications, including phosphorylation, ubiquitination and acetylation, which can influence p53 stability, localization, protein interactions and transcriptional activity.

Acetylation is an important component of p53 regulation. Multiple lysine residues within the C-terminal region of p53 can undergo reversible acetylation in response to cellular signals. Lys370 is one of these regulatory sites, and its acetylation participates in the complex control of p53-dependent transcription. Modification of C-terminal lysines can alter interactions between p53 and regulatory proteins and contribute to the selection or activation of downstream transcriptional responses.

p53 acetylation is closely integrated with pathways controlling DNA damage responses, cell cycle arrest, senescence and apoptosis. Acetyltransferases and deacetylases dynamically regulate the modification state of p53, allowing its activity to change according to cellular conditions. Analysis of individual acetylation sites such as Lys370 can therefore provide information that measurement of total p53 expression alone cannot provide. A p53 (Acetyl Lys370) Antibody is useful for investigating this modification-specific component of TP53 regulation.

Dysregulation of the p53 pathway is a central feature of cancer biology. Because post-translational modification can influence p53 function independently of changes in total protein abundance, acetyl-p53 research can help characterize mechanisms controlling tumor suppressor activity under normal and disease-associated conditions. Lys370 acetylation is consequently relevant to studies of transcriptional regulation, chromatin-associated signaling, cellular stress and cancer-related p53 pathways.

NSJ Bioreagents offers modification-specific antibodies for investigating regulatory states of the p53 pathway. An Acetyl-p53 K370 Antibody can support research into TP53 acetylation, DNA damage responses, transcriptional regulation, apoptosis 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

Optimal dilution of the p53 (Acetyl Lys370) Antibody / Acetyl-p53 K370 Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human p53 (surrounding acetylated K370) was used as the immunogen for the p53 (Acetyl Lys370) Antibody.

Storage

Store the p53 (Acetyl Lys370) Antibody at -20oC.

Alternate Names

p53 (Acetyl Lys370) antibody, Acetyl-p53 K370 antibody, Acetyl-p53 Lys370 antibody, p53 Acetyl K370 antibody, p53 Acetyl Lys370 antibody, TP53 Acetyl K370 antibody, TP53 Acetyl Lys370 antibody

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