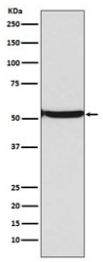
p53 (Acetyl Lys382) Antibody / Acetyl-p53 K382 Antibody [clone EAE-20] (RQ5060)

Catalog No.	Formulation	Size
RQ5060	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	EAE-20
Purity	Affinity purified
UniProt	P04637
Applications	Western Blot : 1:500-1:2000
Limitations	This p53 (Acetyl Lys382) Antibody / Acetyl-p53 K382 Antibody is available for research use only.



p53 (Acetyl Lys382) Antibody Etoposide and TSA-Treated Jurkat Cell WB. Western blot analysis of human Jurkat cell lysate treated with etoposide and Trichostatin A (TSA) was performed with p53 (Acetyl Lys382) Antibody, also called Acetyl-p53 K382 Antibody. A specific band is detected at approximately 53 kDa, consistent with the predicted molecular weight of p53. This p53 (Acetyl Lys382) Antibody demonstrates detection of Lys382-acetylated TP53 following DNA damage and deacetylase inhibition and supports studies of acetylation-dependent p53 regulation.

Description

p53 (Acetyl Lys382) Antibody / Acetyl-p53 K382 Antibody recognizes p53 when acetylated at lysine 382. 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. p53 activity is regulated by numerous post-translational modifications, including phosphorylation, ubiquitination and acetylation, which influence protein stability, interactions, localization and transcriptional activity.

Acetylation of p53 occurs at several lysine residues and represents an important mechanism controlling its tumor suppressor functions. Lys382 is located within the C-terminal regulatory region of p53 and is a well-studied acetylation site. Acetylation at Lys382 can increase following DNA damage and other cellular stresses and is associated with regulation of p53 transcriptional activity. Acetyltransferases including p300 and CBP contribute to modification of C-terminal p53 lysines, while deacetylases help regulate the duration and magnitude of these signals.

Acetyl-p53 Lys382 is investigated in pathways governing cell cycle arrest, DNA repair, senescence and apoptosis. Because acetylation status can change independently of total p53 abundance, measurement of Lys382-acetylated p53 provides a means of examining a specific regulatory state of the protein. A p53 (Acetyl Lys382) Antibody can therefore complement total p53 measurements when studying activation of TP53-dependent stress responses.

Altered p53 regulation is a central feature of cancer biology, and post-translational modifications can influence p53 activity even in the absence of changes in total protein expression. Lys382 acetylation is consequently studied in cancer models as well as research involving DNA damage, cellular stress, transcriptional regulation and interactions between acetyltransferase and deacetylase pathways.

NSJ Bioreagents offers modification-specific antibodies for investigating regulatory states of the p53 pathway. An Acetyl-p53 K382 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 Lys382) Antibody / Acetyl-p53 K382 Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human p53 (surrounding acetylated K382) was used as the immunogen for the p53 (Acetyl Lys382) Antibody.

Storage

Store the p53 (Acetyl Lys382) Antibody at -20oC.

Alternate Names

p53 (Acetyl Lys382) antibody, Acetyl-p53 K382 antibody, Acetyl-p53 Lys382 antibody, p53 Acetyl K382 antibody, p53 Acetyl Lys382 antibody, TP53 Acetyl K382 antibody, TP53 Acetyl Lys382 antibody

Copyright © NSJ Bioreagents. All rights reserved.