

Phospho-Ser392 p53 Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1021

Specification

Phospho-Ser392 p53 Antibody - Product Information

Application WB
Primary Accession P04637
Reactivity Rat
Predicted Human
Host Rabbit
Clonality polyclonal
Calculated MW 53 KDa

Phospho-Ser392 p53 Antibody - Additional Information

Gene ID 7157
Gene Name 7P53

Other Names

Cellular tumor antigen p53, Antigen NY-CO-13, Phosphoprotein p53, Tumor suppressor p53, TP53, P53

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser392 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phosphoand dephosphopeptide affinity columns.

Antibody Specificity

Specific for the \sim 53k p53 protein phosphorylated at Ser392. The immunolabeling is completely eliminated by λ -phosphatase treatment.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser392 p53 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

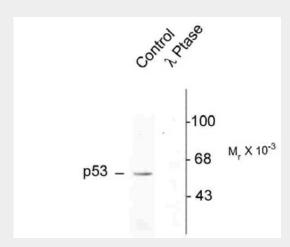


Phospho-Ser392 p53 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Phospho-Ser392 p53 Antibody - Images



Western blot of rat brain nuclear fraction lysate showing specific immunolabeling of the \sim 53k p53 phosphorylated at Ser392 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ -Ptase). The blot is identical to the control except that it was incubated in λ -Ptase (1200 units for 30 min) before being exposed to the phospho Ser392 p53 antibody. The immunolabeling is completely eliminated by treatment with λ -Ptase.

Phospho-Ser392 p53 Antibody - Background

p53 has a well established role in blocking the proliferative action of damaged cells and acting in essence as an anticancer agent (Sharpless and DePinho, 2002; Yin et al., 1992). It has been called the guardian of the genome (Lane, 1992). Phosphorylation of Ser392 in p53 is associated with formation of human tumors (Saito et al., 2003; Pise-Masison et al., 1998; Kim et al., 2004). In addition, p53 has been linked to effects of aging and oxidative stress (Sharpless and DePinho, 2002). An increase in p53 has also been linked to deficits in LTP and learning and memory (Jiang et al., 1998).

Phospho-Ser392 p53 Antibody - References

Jiang YH, Armstrong D, Albrecht U, Atkins CM, Noebels JL, Eichele G, Sweatt JD, Beaudet AL (1998) Mutation of the angelman ubiquitin ligase in mice causes increased cytoplasmic p53 and deficits of contextual learning and long-term potentiation. Neuron 21:799-811.

Kim YY, Park BJ, Kim DJ, Kim WH, Kim S, Oh KS, Lim JY, Kim J, Park C, Park SI (2004) Modification of serine 392 is a critical event in the regulation of p53 nuclear export and stability. FEBS Lett 572:92-98.

Lane DP (1992) p53, guardian of the genome. Nature (London) 358:15-16.

Pise-Masison CA, Radonovich M, Sakaguchi K, Appella E, Brady JN (1998) Phosphorylation of p53: a





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Saito S, Yamaguchi H, Higashimoto Y, Chao C, Xu Y, Fornace AJ, Jr., Appella E, Anderson CW (2003) Phosphorylation site interdependence of human p53 post-translational modifications in response to stress. J Biol Chem 278:37536-37544.

Sharpless NE, DePinho RA (2002) p53: Good cop/bad cop. Cell 110:9-12.

Yin Y, Tainsky MA, Bischoff FZ, Strong LC, Wahl GM (1992) Wild-type p53 restores cell cycle control and inhibits gene amplification in cells with mutant p53 alleles. Cell 70:937-948.