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ProductInformation

Anti-phospho-p53 (phosphoserine 392)
Developed in Rabbit,
Affinity Isolated Antibody

Product Number **P8982**

Product Description

Anti-phospho-p53 (phosphoserine 392) is developed in rabbit using a synthetic phospho-Ser392 peptide corresponding to residues around Ser392 of human p53, conjugated to KLH, as immunogen. The antibody is affinity-purified using the protein A and peptide affinity chromatography.

Anti-phospho-p53 (phosphoserine 392) detects p53 phosphorylated at phosphoserine 392. It does not react with nonphosphorylated p53. The antibody reacts with human and mouse phosphorylated p53 and may be used for immunoblotting.

The tumor-suppressor protein p53 exhibits sequence specific DNA-binding, directly interacts with various cellular and viral proteins, and induces cell cycle arrest in response to DNA damage.[1,2] In response to signals generated by a variety of genotoxic stresses, e.g, UV irradiation or DNA damage, p53 is expressed and undergoes post-translational modification that results in its accumulation in the nucleus.[3] Activation of p53 leads to cell cycle arrest and in some cases to apoptosis, resulting in the inability of genetically damaged cells to proliferate. Thus, the p53-dependent pathways help to maintain genomic stability by eliminating damaged cells. p53 is phosphorylated at Ser392 *in vivo*[4,5] and by casein kinase II *in vitro.*[5] Phosphorylation at Ser392 has been reported to alter the growth suppressor function[5], DNA binding[4] and transcriptional activation[6,7] of p53. Phosphorylation at Ser392 is also altered in human tumors.[8]

Reagents

Anti-phospho-p53 (phosphoserine 392) is supplied as an affinity-isolated antibody in 10 mM sodium HEPES, pH 7.5, containing 150 mM sodium chloride, 100 µg/ml bovine serum albumin and 50% glycerol.

Storage/Stability

Store at 0° to –20°C. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Recommended working dilution is 1:1,000 for immunoblotting using p53 fusion proteins with CKII phosphorylation or an extract from hydroxyurea-treated MvlLu cells and chemiluminescent detection. For immunoblotting, incubate membrane with diluted antibody in 5% bovine serum albumin (BSA), 1X Tris buffered saline and 0.1% Tween-20 at 2-8°C with gentle shaking, overnight.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working dilution by titration test.

References

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