



P53 Mouse Monoclonal Antibody

E10-20338

Background: p53 responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low level in normal cells and at a high level in a variety of transformed cell lines, where it's believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing transcription activation, DNA-binding, and oligomerization domains. It is postulated to bind to a p53-binding site and activate expression of downstream genes that inhibit growth and/or invasion, and thus function as a tumor suppressor. Mutants of p53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and hence cause the loss of tumor suppressor activity. Alterations of this gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome. Multiple p53 variants due to alternative promoters and multiple alternative splicing have been found. These variants encode distinct isoforms, which can regulate p53 transcriptional activity.

Catalog Number: E10-20338

Amount: 100 μ g/100 μ l

Clone Number: 4A8

Species: Mouse IgG1

MW: 43.7kDa

Aliases: LFS1, TRP53, TP53

Entrez Gene: 7157

Immunogen: Purified recombinant fragment of human p53 expressed in E. Coli.

Storage: Store at 4 $^{\circ}$ C for long term storage, store at

Formulation: Ascitic fluid containing 0.03% sodium azide.

Species Reactivities: Human

Tested Applications: WB,IHC,ELISA. Not yet tested in other applications. Determining optimal working dilutions by titration test.

Application notes: WB.1/500 - 1/2000.IHC.1/200 - 1/1000.ELISA. Propose dilution 1/10000.

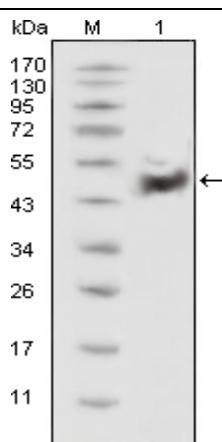


Figure 1. Western blot analysis using p53 mouse mAb against HEK293 cell lysate(1).

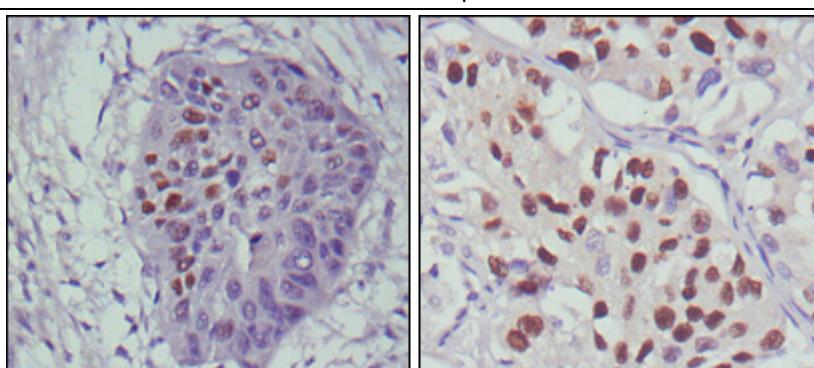


Figure 2. Immunohistochemical analysis of paraffin-embedded human esophageal cancer (left) and lung cancer (right), showing nuclear localization using p53 mouse mAb with DAB staining.