

Product datasheet for **AM06330SU-N**

p53 (TP53) Mouse Monoclonal Antibody [Clone ID: 4A8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	4A8
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/10000. Western Blot: 1/500 - 1/2000. Immunohistochemistry on Paraffin Sections: 1/200 - 1/1000.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human p53 expressed in E. Coli.
Specificity:	Recognizes p53
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% Sodium Azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	43.7 kDa
Gene Name:	tumor protein p53
Database Link:	Entrez Gene 7157 Human P04637



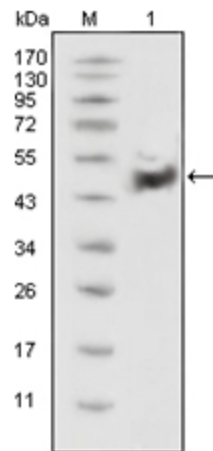
[View online »](#)

Background:

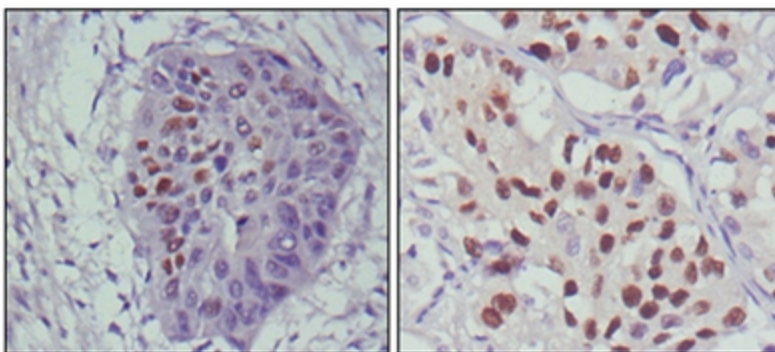
p53 responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low level in normal cells and at a high level in a variety of transformed cell lines, where it's believed to contribute 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.

Synonyms:

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

Product images:

Western blot analysis using p53 antibody Cat.-No AM06330SU-N against HEK293 cell lysate (Lane 1).



Immunohistochemical analysis of paraffin-embedded human esophageal cancer (left) and lung cancer (right), showing nuclear localization using p53 antibody Cat.-No AM06330SU-N with DAB staining.