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TP53 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant TP53.
Catalog # AT4310a

Product Information

Application	WB, IHC, IF, IP, E
Primary Accession	P04637
Other Accession	BC003596
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	2C3
Calculated MW	43653

Additional Information

Gene ID	7157
Other Names	Cellular tumor antigen p53, Antigen NY-CO-13, Phosphoprotein p53, Tumor suppressor p53, TP53, P53
Target/Specificity	TP53 (AAH03596, 94 a.a. ~ 201 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 IP~~N/A E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	TP53 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

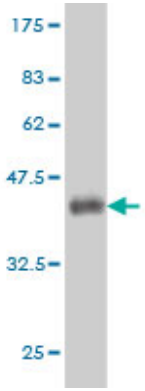
This gene encodes tumor protein p53, which responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low level in normal cells and at a high level in a variety of transformed cell 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.

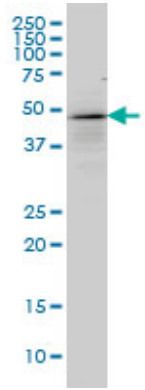
References

Hepatocellular carcinoma and the underlying mechanisms. Oyagbemi AA, et al. Afr Health Sci, 2010 Mar. PMID 20811532.PTEN tumor suppressor plays less prognostic role than P53 tumor suppressor in diffuse large B-cell lymphoma. Liu YY, et al. Leuk Lymphoma, 2010 Sep. PMID 20807096.BRAF Mutation Is Rare in Advanced-Stage Low-Grade Ovarian Serous Carcinomas. Wong KK, et al. Am J Pathol, 2010 Aug 27. PMID 20802181.Role of p53 and p21 polymorphisms in the risk of cervical cancer among Chinese women. Jiang P, et al. Acta Biochim Biophys Sin (Shanghai), 2010 Sep. PMID 20732856.Association of Glutathione S-Transferase, EPHX, and p53 codon 72 Gene Polymorphisms with Adult Acute Myeloid Leukemia. Chauhan PS, et al. DNA Cell Biol, 2010 Aug 23. PMID 20731606.

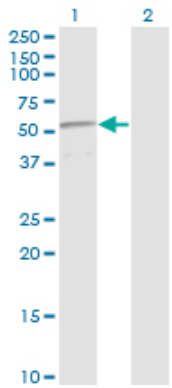
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.62 KDa) .



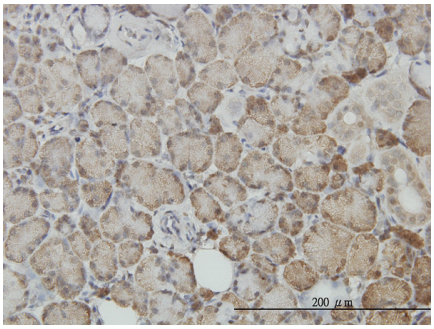
TP53 monoclonal antibody (M01), clone 2C3 Western Blot analysis of TP53 expression in A-431 ((Cat # AT4310a)

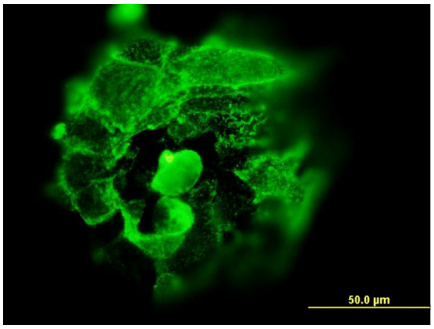


Western Blot analysis of TP53 expression in transfected 293T cell line by TP53 monoclonal antibody (M01), clone 2C3.

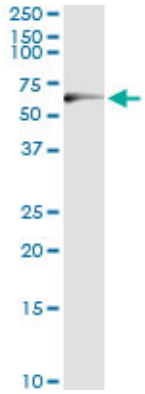
Lane 1: TP53 transfected lysate(43.7 KDa).
Lane 2: Non-transfected lysate.

Immunoperoxidase of monoclonal antibody to TP53 on formalin-fixed paraffin-embedded human salivary gland. [antibody concentration 3 ug/ml]

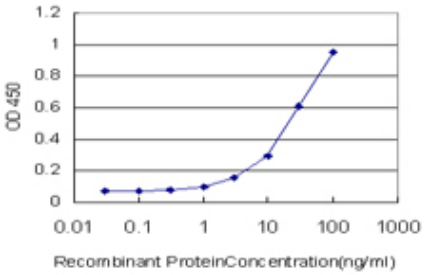




Immunofluorescence of monoclonal antibody to TP53 on A-431 cell. [antibody concentration 10 ug/ml]



Immunoprecipitation of TP53 transfected lysate using anti-TP53 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with TP53 MaxPab rabbit polyclonal antibody.



Detection limit for recombinant GST tagged TP53 is approximately 1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.