**BACKGROUND**

p53, a DNA-binding, oligomerization domain and transcription activation domain-containing tumor suppressor, upregulates growth arrest and apoptosis-related genes in response to stress signals, thereby influencing programmed cell death, cell differentiation and cell cycle control mechanisms. p53 localizes to the nucleus, yet can be chaperoned to the cytoplasm by the negative regulator MDM2, an E3 ubiquitin ligase that is upregulated in the presence of active p53, where MDM2 polyubiquitinates p53 for proteasome targeting. p53 fluctuates between latent and active (DNA-binding) conformations and is differentially activated through posttranslational modifications including phosphorylation and acetylation. Mutations in the DNA-binding domain (DBD) of p53, amino acids 110-286, can compromise energetically favorable association with cis elements and are implicated in several human cancers.

**CHROMOSOMAL LOCATION**

Genetic locus: TP53 (human) mapping to 17p13.1; Trp53 (mouse) mapping to 11B3.

**SOURCE**

p53 (D-11) is a mouse monoclonal antibody raised against amino acids 1-393 representing full length p53 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

p53 (D-11) is recommended for detection of p53 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of p53: 53 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, A549 cell lysate: sc-2413 or p53 (m): 293T Lysate: sc-125766.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**DATA**

p53 (D-11): sc-17846. Western blot analysis of p53 expression in non-transfected: sc-117752 (A) and mouse p53 transfected: sc-125766 (B) 293T whole cell lysates.


**SELECT PRODUCT CITATIONS**


See p53 (D0-1): sc-126 for p53 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.