**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 poly-ubiquitinates 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, amino acids 110-286) of p53 can compromise energetically favorable association with cis elements and are implicated in several human cancers.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

p53 (Pab 1801) is a mouse monoclonal antibody raised against amino acids 32-79 mapping near the N-terminus of p53 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98 X, 200 µg/0.1 ml.

p53 (Pab 1801) is available conjugated to agarose (sc-98 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-98 PE), Alexa Fluor® 488 (sc-98 AF488), Alexa Fluor® 546 (sc-98 AF546), Alexa Fluor® 594 (sc-98 AF594) or Alexa Fluor® 647 (sc-98 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-98 AF680) or Alexa Fluor® 790 (sc-98 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, p53 (Pab 1801) is available conjugated to Alexa Fluor® 405 (sc-98 AF405, 200 µg/ml), for IF, IHC(P) and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**STORAGE**

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

**APPLICATIONS**

p53 (Pab 1801) is recommended for detection of p53 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).


p53 (Pab 1801) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of p53: 53 kDa.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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