**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. MDM2 is an E3 ubiquitin ligase that is upregulated in the presence of active p53, where it 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) 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 11 B3.

**SOURCE**

p53 (FL-393) is a rabbit polyclonal antibody raised against amino acids 1-393 mapping at the C-terminus of p53 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG 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-6243 X, 200 µg/0.1 ml.

p53 (FL-393) is available conjugated to agarose (sc-6243 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-6243 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-6243 PE), fluorescein (sc-6243 FITC), Alexa Fluor® 488 (sc-6243 AF488) or Alexa Fluor® 647 (sc-6243 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

p53 (FL-393) is available conjugated to either TRITC (sc-6243 TRITC, 200 µg/ml) or Alexa Fluor® 405 (sc-6243 AF405), 100 µg/2 ml, for IF, IHC(P) and FCM.

p53 (FL-393) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of p53: 53 kDa.

**APPLICATIONS**

p53 (FL-393) 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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


p53 (FL-393) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

**STORAGE**

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

**DATA**

![Chicken anti-rabbit IgG-HRP: sc-2963. Western blot analysis of p53 expression in mouse LacZ whole cell lysate. Antibody tested: p53 (FL-393): sc-6243.](image)


**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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

Try p53 (DO-1): sc-126 or p53 (Pab 240): sc-99, our highly recommended monoclonal alternatives to p53 (FL-393). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see p53 (DO-1): sc-126.