**BACKGROUND**

p53 is the most commonly mutated gene in human cancer identified to date. Expression of p53 leads to inhibition of cell growth by preventing progression of cells from G1 to S phase of the cell cycle. Most importantly, p53 functions to cause arrest of cells in the G1 phase of the cell cycle following any exposure of cells to DNA-damaging agents. The MDM2 (murine double minute-2) protein was initially identified as an oncogene in a murine transformation system. MDM2 functions to bind p53 and block p53-mediated transactivation of cotransfected reporter constructs. The MDM2 gene is amplified in a high percentage of human sarcomas that retain wt p53 and tumor cells that overexpress MDM2 can tolerate high levels of p53 expression. These findings argue that MDM2 overexpression represents at least one mechanism by which p53 function can be abrogated during tumorigenesis.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: MDM2 (human) mapping to 12q15; Mdm2 (mouse) mapping to 10 D2.

**SOURCE**

MDM2 (SMP14) is a mouse monoclonal antibody raised against amino acids 154-167 of MDM2 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 ChIP application, sc-965 X, 200 µg/0.1 ml.

MDM2 (SMP14) is available conjugated to agarose (sc-965 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-965 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-965 PE), fluorescein (sc-965 FITC), Alexa Fluor® 488 (sc-965 AF488), Alexa Fluor® 546 (sc-965 AF546), Alexa Fluor® 594 (sc-965 AF594) or Alexa Fluor® 647 (sc-965 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-965 AF680) or Alexa Fluor® 790 (sc-965 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, MDM2 (SMP14) is available conjugated to biotin (sc-965 B), 200 µg/ml, for WB, IHC(P) and ELISA.

**STORAGE**

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

**APPLICATIONS**

MDM2 (SMP14) is recommended for detection of MDM2, MDM2 p60 cleavage product and p53-MDM2 complexes 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:100-1:500).


MDM2 (SMP14) X TransCruz antibody is recommended for ChIP assays.

Molecular Weight of MDM2/MDM2 cleavage product: 90/60 kDa.

Positive Controls: U-2 OS cell lysate: sc-2295, A-673 cell lysate: sc-2414 or RAW 264.7 whole cell lysate: sc-2211.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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