**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 wildtype 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.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

MDM2 (D-7) is a mouse monoclonal antibody raised against amino acids 100-320 of MDM2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MDM2 (D-7) is available conjugated to agarose (sc-13161 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-13161 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to fluorescein (sc-13161 FITC), 200 µg/ml, for IF, IHC(P) and FCM. In addition, MDM2 (D-7) is available conjugated to TRITC (sc-13161 TRITC, 200 µg/ml), for IF, IHC(P) and FCM.

**APPLICATIONS**

MDM2 (D-7) is recommended for detection of MDM2 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), immunohistochemistry (including paraffin-embedded sections) (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 MDM2: 90 kDa.

Molecular Weight of MDM2 cleavage product: 60 kDa.

**STORAGE**

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

**DATA**

MDM2 (D-7) HRP: sc-13161 HRP. Direct western blot analysis of MDM2 expression in 293T (A), U-2 OS (B), A-673 (C) and RAW 264.7 (D) whole cell lysates.

MDM2 (D-7) sc-13161. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing nuclear and cytoplasmic staining of glandular cells.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

See MDM2 (SMP14): sc-965 for MDM2 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.