

MDMX (H-130): sc-28222

BACKGROUND

The MDM2 protein is the primary regulator of p53 protein stability. MDMX is an MDM2-related protein that inhibits MDM2-mediated degradation of p53 via distinct associations with MDM2. The gene that encodes MDMX (also designated MDM4) is a target for amplification in malignant gliomas. ARF interacts with MDMX to sequester MDMX within the nucleolus. This sequestration of MDMX by ARF results in an increase in p53 transactivation. In addition, expression of MDMX can reverse MDM2-targeted degradation of p53 while maintaining suppression of p53 transactivation. Like MDM2, MDMX also binds p73 and stabilizes the level of p73. Therefore, in striking contrast to p53, the half-life of p73 is increased by binding to MDM2.

CHROMOSOMAL LOCATION

Genetic locus: MDM4 (human) mapping to 1q32.1; Mdm4 (mouse) mapping to 1 E4.

SOURCE

MDMX (H-130) is a rabbit polyclonal antibody raised against amino acids 361-490 mapping at the C-terminus of MDMX 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.

APPLICATIONS

MDMX (H-130) is recommended for detection of MDMX 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MDMX (H-130) is also recommended for detection of MDMX in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MDMX siRNA (h): sc-37448, MDMX siRNA (m): sc-37449, MDMX shRNA Plasmid (h): sc-37448-SH, MDMX shRNA Plasmid (m): sc-37449-SH, MDMX shRNA (h) Lentiviral Particles: sc-37448-V and MDMX shRNA (m) Lentiviral Particles: sc-37449-V.

Molecular Weight of MDMX: 80 kDa.

Positive Controls: U-2 OS cell lysate: sc-2295, Hep G2 cell lysate: sc-2227 or MDMX (h): 293T Lysate: sc-111488.

STORAGE

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

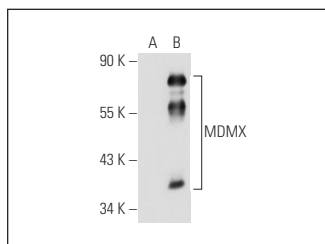
RESEARCH USE

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

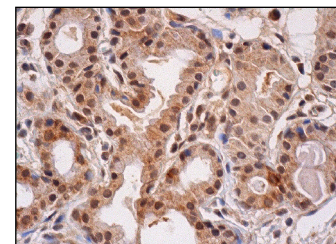
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



MDMX (H-130): sc-28222. Western blot analysis of MDMX expression in non-transfected: sc-117752 (A) and human MDMX transfected: sc-111488 (B) 293T whole cell lysates.



MDMX (H-130): sc-28222. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Geatrell, J.C., et al. 2009. Apoptosis gene profiling reveals spatio-temporal regulated expression of the p53/MDM2 pathway during lens development. *Exp. Eye Res.* 86: 1137-1151.
- Niida, H., et al. 2010. Cooperative functions of Chk1 and Chk2 reduce tumour susceptibility *in vivo*. *EMBO J.* 29: 3558-3570.
- Lee, J.H. and Lu, H. 2011. 14-3-3γ inhibition of MDMX-mediated p21 turnover independent of p53. *J. Biol. Chem.* 286: 5136-5142.
- Kazmi, S.J., et al. 2013. Transgenic mice overexpressing neuregulin-1 model neurofibroma-malignant peripheral nerve sheath tumor progression and implicate specific chromosomal copy number variations in tumorigenesis. *Am. J. Pathol.* 182: 646-667.

PROTOCOLS

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



Try **MDMX (G-10): sc-74467** or **MDMX (D-2): sc-365902**, our highly recommended monoclonal alternatives to MDMX (H-130). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **MDMX (G-10): sc-74467**.