SANTA CRUZ BIOTECHNOLOGY, INC.

MDMX (C-18): sc-14740



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.

REFERENCES

- Riemenschneider, M.J., et al. 1999. Amplification and overexpression of the MDM4 (MDMX) gene from 1q32 in a subset of malignant gliomas without TP53 mutation or MDM2 amplification. Cancer Res. 59: 6091-6096.
- 2. Ongkeko, W.M., et al. 1999. MDM2 and MDMX bind and stabilize the p53-related protein p73. Curr. Biol. 9: 829-832.

CHROMOSOMAL LOCATION

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

SOURCE

MDMX (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near 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.

Blocking peptide available for competition studies, sc-14740 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MDMX (C-18) 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 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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 (C-18) 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.

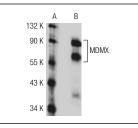
Molecular Weight of MDMX: 80 kDa.

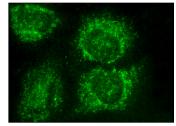
Positive Controls: MDMX (h): 293T Lysate: sc-111488, MCF7 whole cell lysate: sc-2206 or HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA





MDMX (C-18): sc-14740. Western blot analysis of MDMX expression in non-transfected: sc-117752 (A) and human MDMX transfected: sc-111488 (B) 293T whole cell lysates. MDMX (C-18): sc-14740. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization.

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.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try MDMX (G-10): sc-74467 or MDMX (D-2): sc-365902, our highly recommended monoclonal alternatives to MDMX (C-18). Also, for AC, HRP,

FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **MDMX (G-10): sc-74467**.