SANTA CRUZ BIOTECHNOLOGY, INC.

MDMX (h): 293T Lysate: sc-111488

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

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4. Jackson, M.W., et al. 2001. MDMX binding to ARF affects MDM2 protein stability and p53 transactivation. J. Biol. Chem. 276: 25336-25341.
5. Wang, X., et al. 2001. MDM2 and MDMX can interact differently with ARF and members of the p53 family. FEBS Lett. 490: 202-208.
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7. Marine, J.C., et al. 2007. MDMX: from bench to bedside. J. Cell Sci. 120: 371-378.
8. Singh, R.K., et al. 2007. Hetero-oligomerization with MDMX rescues the ubiquitin/Nedd8 ligase activity of RING finger mutants of MDM2. J. Biol. Chem. 282: 10901-10907.
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CHROMOSOMAL LOCATION

Genetic locus: MDM4 (human) mapping to 1q32.1.

PRODUCT

MDMX (h): 293T Lysate represents a lysate of human MDMX transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

MDMX (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MDMX antibodies. Recommended use: 10-20 µl per lane.

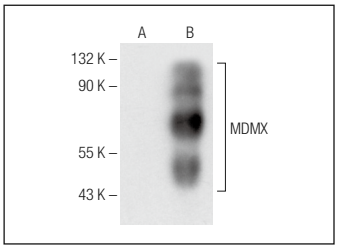
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MDMX (A-11): sc-374147 is recommended as a positive control antibody for Western Blot analysis of enhanced human MDMX expression in MDMX transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



MDMX (A-11): sc-374147. Western blot analysis of MDMX expression in non-transfected: sc-117752 (**A**) and human MDMX transfected: sc-111488 (**B**) 293T whole cell lysates.

RESEARCH USE

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