SANTA CRUZ BIOTECHNOLOGY, INC.

WWOX (H-126): sc-366157

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

WWOX (WW domain containing oxidoreductase) protein is a candidate tumor suppressor consisting of two WW domains that influence protein-protein interactions, and a short chain dehydrogenase (SDR) domain, that influences sex-steroid metabolism. Modulation of the WWOX gene influences esophageal squamous cell carcinogenesis and tumorigenicity of breast cancer cell lines MDA-MB-435 and T47D. The murine homolog WOX1 localizes in the mitochondria, and contains a mitochondrial targeting sequence mapping within the SDR domain. JNK1 can physically associate with WOX1 and sequester WOX1-dependent apoptosis.

REFERENCES

1. Bednarek, A.K., Keck-Waggoner, C.L., Daniel, R.L., Laflin, K.J., Bergsagel, P.L., Kiguchi, K., Brenner, A.J. and Aldaz, C.M. 2001. WWOX, the FRA16D gene, behaves as a suppressor of tumor growth. Cancer Res. 61: 8068-8073.
2. Chang, N.S., Pratt, N., Heath, J., Schultz, L., Sleve, D., Carey, G.B. and Zevotek, N. 2001. Hyaluronidase induction of a WW domain-containing oxidoreductase that enhances tumor necrosis factor cytotoxicity. J. Biol. Chem. 276: 3361-3370.
3. Kuroki, T., Trapasso, F., Shiraishi, T., Alder, H., Mimori, K., Mori, M. and Croce, C.M. 2002. Genetic alterations of the tumor suppressor gene WWOX in esophageal squamous cell carcinoma. Cancer Res. 62: 2258-2260.
4. Ludes-Meyers, J.H., Bednarek, A.K., Popescu, N.C., Bedford, M. and Aldaz, C.M. 2003. WWOX, the common chromosomal fragile site, FRA16D, cancer gene. Cytogenet Genome Res. 100: 101-110.
5. Chang, N.S., Doherty, J. and Ensign, A. 2003. JNK1 physically interacts with WW domain-containing oxidoreductase (WOX1) and inhibits WOX1-mediated apoptosis. J. Biol. Chem. 278: 9195-9202.

CHROMOSOMAL LOCATION

Genetic locus: WWOX (human) mapping to 16q23.1; Wwox (mouse) mapping to 8 E1.

SOURCE

WWOX (H-126) is a rabbit polyclonal antibody raised against amino acids 1-126 mapping at the N-terminus of WWOX 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.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

WWOX (H-126) is recommended for detection of WWOX 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

WWOX (H-126) is also recommended for detection of WWOX in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for WWOX siRNA (h): sc-44193, WWOX siRNA (m): sc-155368, WWOX shRNA Plasmid (h): sc-44193-SH, WWOX shRNA Plasmid (m): sc-155368-SH, WWOX shRNA (h) Lentiviral Particles: sc-44193-V and WWOX shRNA (m) Lentiviral Particles: sc-155368-V.

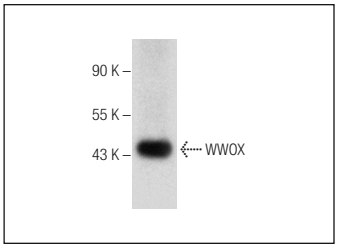
Molecular Weight of WWOX: 46 kDa.

Positive Controls: mouse ovary extract: sc-2404.

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.

DATA



WWOX (H-126): sc-366157. Western blot analysis of WWOX expression in mouse ovary tissue extract.

RESEARCH USE

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