## SANTA CRUZ BIOTECHNOLOGY, INC.

# WWOX (P-20): sc-20529



## 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., et al. 2001. WWOX, the FRA16D gene, behaves as a suppressor of tumor growth. Cancer Res. 61: 8068-8073.
- Kuroki, T., et al. 2002. Genetic alterations of the tumor suppressor gene WWOX in esophageal squamous cell carcinoma. Cancer Res. 62: 2258-2260.

### CHROMOSOMAL LOCATION

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

#### SOURCE

WWOX (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WWOX of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-20529 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

WWOX (P-20) 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 (P-20) is also recommended for detection of WWOX in additional species, including equine, canine and bovine.

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.

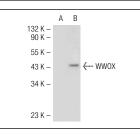
Molecular Weight of WWOX: 46 kDa.

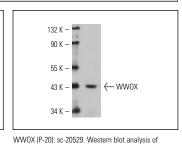
Positive Controls: WWOX (m): 293T Lysate: sc-124659 or mouse ovary extract: sc-2404.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA





WW0X (P-20): sc-20529. Western blot analysis of WW0X expression in non-transfected: sc-117752 (A) and mouse WW0X transfected: sc-124659 (B) 293T whole cell lysates.

WW0X expression in mouse ovary tissue extract.

#### SELECT PRODUCT CITATIONS

- Chen, S.T., et al. 2005. Light-induced retinal damage involves tyrosine 33 phosphorylation, mitochondrial and nuclear translocation of WW domaincontaining oxidoreductase *in vivo*. Neuroscience 130: 397-407.
- Płuciennik, E., et al. 2013. The WWOX tumor suppressor gene in endometrial adenocarcinoma. Int. J. Mol. Med. 32: 1458-1464.
- 3. Nowakowska, M., et al. 2014. Diverse effect of WWOX overexpression in HT29 and SW480 colon cancer cell lines. Tumour Biol. 35: 9291-9301.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

# MONOS Satisfation Guaranteed

Try WWOX (C-7): sc-374449 or WWOX (A-5): sc-373846, our highly recommended monoclonal alternatives to WWOX (P-20).