

WVOX (A-5): sc-373846

BACKGROUND

WVOX (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 WVOX 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.

CHROMOSOMAL LOCATION

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

SOURCE

WVOX (A-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 71-111 within an internal region of WVOX of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-373846 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

WVOX (A-5) is recommended for detection of WVOX of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

WVOX (A-5) is also recommended for detection of WVOX in additional species, including canine and bovine.

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

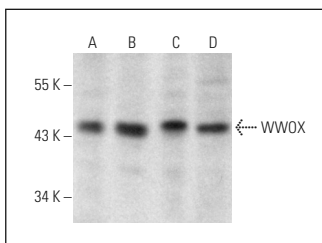
Molecular Weight of WVOX: 46 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, MCF7 whole cell lysate: sc-2206 or Sol8 cell lysate: sc-2249.

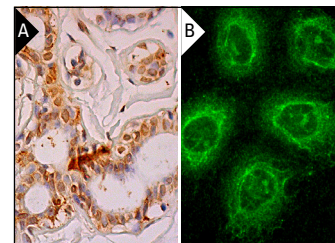
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



WVOX (A-5): sc-373846. Western blot analysis of WVOX expression in Hep G2 (A), MCF7 (B), Sol8 (C) and RIN-m5F (D) whole cell lysates.



WVOX (A-5): sc-373846. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing cytoplasmic and nuclear staining of glandular cells (A). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (B).

SELECT PRODUCT CITATIONS

1. Chang, R., et al. 2018. Loss of WVOX drives metastasis in triple-negative breast cancer by JAK2/Stat3 axis. *Nat. Commun.* 9: 3486.

RESEARCH USE

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

PROTOCOLS

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