

WWOX Antibody

✓ 100 µl
(10 western blots)

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rev. 02/16/10

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #51741
Swiss-Prot Acc. #Q9NZC7

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, (Mk)	46 kDa	Rabbit**

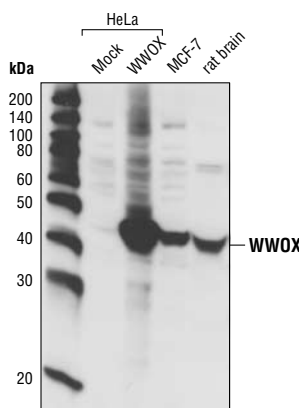
Background: The *WWOX* (WW domain-containing oxidoreductase) gene encodes a protein with two WW domains followed by a short-chain dehydrogenase domain that was identified from a genomic region 16q23 of high instability, FRA16D (1,2). The mouse homolog, termed *Wox1*, was found to enhance TNF α -mediated apoptosis (3). The *WWOX* gene is disrupted in a many cancer types by deletions or translocation which has revealed a tumor suppressor function (4-7). In contrast, high levels of *WWOX* have been shown in shown in premetastatic cancers, including breast and prostate (8-10). Stress stimuli can induce tyrosine phosphorylation within the first WW domain (Tyr33), followed by nuclear translocation and binding to and stabilizing the p53 tumor suppressor protein (11). *WWOX* and p53 can induce apoptosis in a synergistic manner. Tyrosine phosphorylation and nuclear translocation of *WWOX* has been implicated in the progression of cancers to metastatic states (10).

Specificity/Sensitivity: *WWOX* Antibody detects endogenous levels of total *WWOX* protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Thr103 of *WWOX*. Antibodies were purified by peptide affinity chromatography.

Background References:

- (1) Bednarek, A.K. et al. (2000) *Cancer Res.* 60, 2140–2145.
- (2) Ried, K. et al. (2000) *Hum. Mol. Genet.* 9, 1651–1663.
- (3) Chang, N.S. et al. (2001) *J. Biol. Chem.* 276, 3361–3370.
- (4) Ramos, D. and Aldaz, C.M. (2006) *Adv. Exp. Med. Biol.* 587, 149–159.
- (5) Paige, A.J. et al. (2001) *Proc. Natl. Acad. Sci. USA* 98, 11417–11422.
- (6) Bednarek, A.K. et al. (2001) *Cancer Res.* 61, 8068–8073.
- (7) Aqeilan, R.I. et al. (2007) *Proc. Natl. Acad. Sci. USA* 104, 3949–3954.
- (8) Driouch, K. et al. (2002) *Oncogene* 21, 1832–1840.
- (9) Watanabe, A. et al. (2003) *Cancer Res.* 63, 8629–8633.
- (10) Chang, N.S. et al. (2005) *Oncogene* 24, 714–723.
- (11) Chang, N.S. et al. (2005) *J. Biol. Chem.* 280, 43100–43108.



Western blot analysis of extracts from HeLa cells, mock transfected or transfected with mouse *WWOX*, and from MCF-7 and rat brain using *WWOX* Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.