Anti-WWOX Antibody [PSH15-43] - BSA and Azide free

HA751558

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Monkey
Applications:	WB, IF-Cell, IP
Molecular Wt:	Predicted band size: 47 kDa
Clone number:	PSH15-43

Description: WW domain-containing oxidoreductase is an enzyme that in humans is encoded by the WWOX gene. WW domain-containing proteins are found in all eukaryotes and play an important role in the regulation of a wide variety of cellular functions such as protein degradation, transcription, and RNA splicing. This gene encodes a protein which contains 2 WW domains and a short-chain dehydrogenase/reductase domain (SRD). The highest normal expression of this gene is detected in hormonally regulated tissues such as testis, ovary, and prostate. This expression pattern and the presence of an SRD domain suggest a role for this gene in steroid metabolism. The encoded protein is more than 90% identical to the mouse protein, which is an essential mediator of tumor necrosis factor-alpha-induced apoptosis, suggesting a similar, important role in apoptosis for the human protein. In addition, there is evidence that this gene behaves as a suppressor of tumor growth. Alternative splicing of this gene generates transcript variants that encode different isoforms. WWOX is also known as human accelerated region 6. It may, therefore, have played a key role in differentiating humans from apes.

Immunogen: Recombinant protein within human WWOX aa 1-414.

Positive control: MCF7 cell lysate, HepG2 cell lysate, HeLa cell lysate, NIH/3T3 cell lysate, C6 cell lysate, COS-1 cell lysate, Rat brain tissue lysate, NIH/3T3.

Subcellular location: Cytoplasm, Nucleus, Mitochondrion, Golgi apparatus, Lysosome.

Database links: SwissProt: Q9NZC7 Human | Q91WL8 Mouse
Entrez Gene: 292041 Rat

Recommended Dilutions:

WB	1:10,000
IF-Cell	1:100
IP	1-2μg/sample

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

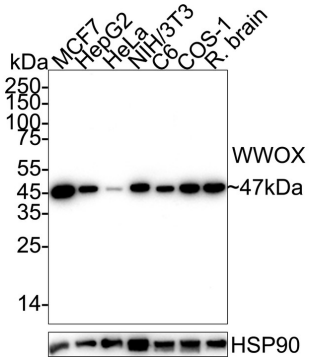

Fig1: Western blot analysis of WWOX on different lysates with Rabbit anti-WWOX antibody (HA751558) at 1/10,000 dilution.

Lane 1: MCF7 cell lysate (20 µg/Lane)
Lane 2: HepG2 cell lysate (20 µg/Lane)
Lane 3: HeLa cell lysate (20 µg/Lane)
Lane 4: NIH/3T3 cell lysate (20 µg/Lane)
Lane 5: C6 cell lysate (20 µg/Lane)
Lane 6: COS-1 cell lysate (20 µg/Lane)
Lane 7: Rat brain tissue lysate (30 µg/Lane)

Predicted band size: 47 kDa
Observed band size: 47 kDa

Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751558) at 1/10,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

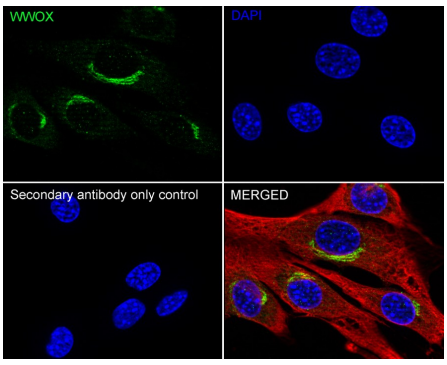

Fig2: Immunocytochemistry analysis of NIH/3T3 cells labeling WWOX with Rabbit anti-WWOX antibody (HA751558) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-WWOX antibody (HA751558) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

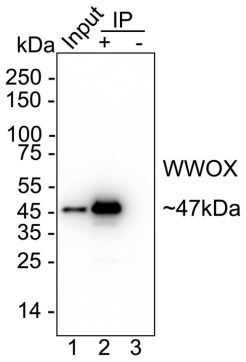

Fig3: WWOX was immunoprecipitated from 0.2 mg MCF7 cell lysate with HA751558 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA751558 at 1/10,000 dilution. HRP Conjugated Anti-Rabbit IgG for IP Nano-secondary antibody at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: MCF7 cell lysate (input)
Lane 2: HA751558 IP in MCF7 cell lysate
Lane 3: Rabbit IgG instead of HA751558 in MCF7 cell lysate

Blocking/Dilution buffer: primary antibody dilution (K1803)
Exposure time: 3 seconds; ECL: K1801

Background References

1. Hsu CY et al. WWOX and Its Binding Proteins in Neurodegeneration. Cells. 2021 Jul
2. Baryła I et al. WWOX and metabolic regulation in normal and pathological conditions. J Mol Med (Berl). 2022 Dec