10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-TXNRD2 Antibody

Catalog # AP59800

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9NNW7
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56507

Additional Information

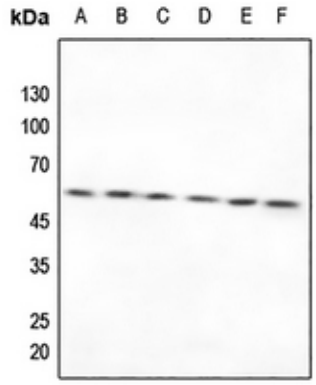
Gene ID	10587
Other Names	KIAA1652; TRXR2; Thioredoxin reductase 2 mitochondrial; Selenoprotein Z; SelZ; TR-beta; Thioredoxin reductase TR3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human TXNRD2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

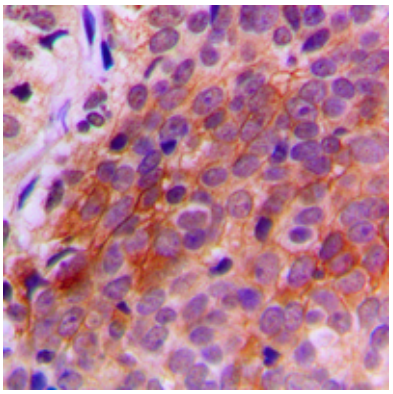
Name	TXNRD2 (HGNC:18155)
Synonyms	KIAA1652, TRXR2
Function	Involved in the control of reactive oxygen species levels and the regulation of mitochondrial redox homeostasis (PubMed:24601690). Maintains thioredoxin in a reduced state. May play a role in redox- regulated cell signaling.
Cellular Location	Mitochondrion.
Tissue Location	Highly expressed in the prostate, ovary, liver, testis, uterus, colon and small intestine. Intermediate levels in brain, skeletal muscle, heart and spleen. Low levels in placenta, pancreas, thymus and peripheral blood leukocytes. According to PubMed:10608886, high levels in kidney, whereas according to PubMed:9923614, levels are low. High expression is observed in the adrenal

cortex (PubMed:24601690).

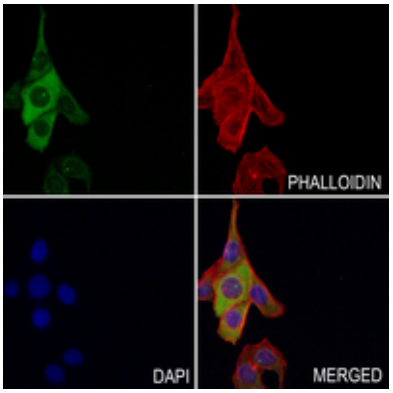
Images



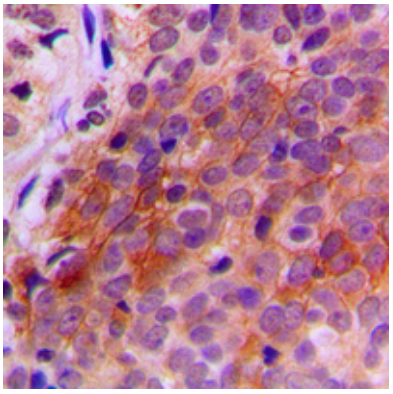
Western blot analysis of TXNRD2 expression in HEK293T (A), HGC27 (B), mouse lung (C), mouse liver (D), rat lung (E), rat liver (F) whole cell lysates. (Predicted band size: 56 kD; Observed band size: 56 kD)



Immunohistochemical analysis of TXNRD2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of TXNRD2 staining in hepG cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Immunohistochemical analysis of TXNRD2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.