

Basic Information

Product Name	Anti-TXNRD1 Antibody (Clone#OTI3E1)
Gene Name	TXNRD1
Source	Mouse
Clonality	Monoclonal
Isotype	IgG1
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Immunogen	Full length human recombinant protein of human TXNRD1 (NP_003321) produced in E.coli.
Concentration	500 ug/ml
Purification	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Dilution Ratios	Western blot (WB):1:500~2000

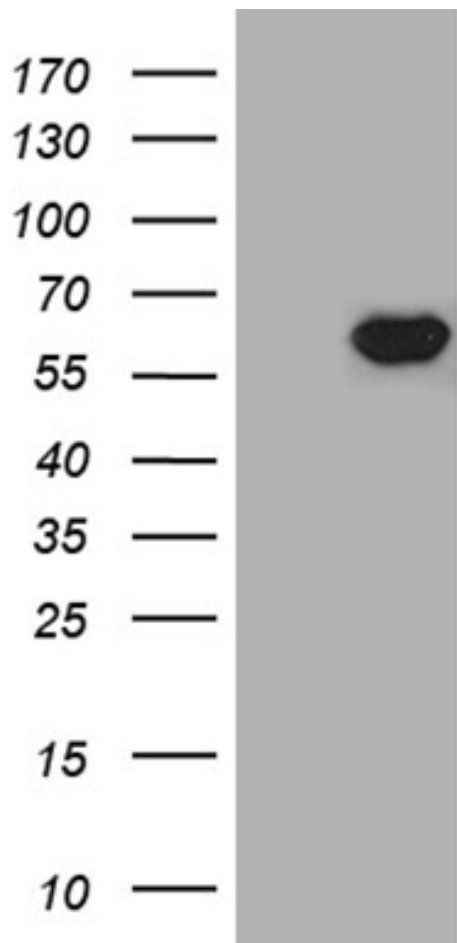
Storage

Stable for 12 months from date of receipt. Store at -20°C as received.

Background Information

The protein encoded by this gene belongs to the pyridine nucleotide-disulfide oxidoreductase family, and is a member of the thioredoxin (Trx) system. Three thioredoxin reductase (TrxR) isozymes are found in mammals. TrxRs are selenocysteine-containing flavoenzymes, which reduce thioredoxins, as well as other substrates, and play a key role in redox homeostasis. This gene encodes an ubiquitously expressed, cytosolic form of TrxR, which functions as a homodimer containing FAD, and selenocysteine (Sec) at the active site. Sec is encoded by UGA codon that normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, the Sec insertion sequence (SECIS) element, which is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. Alternative splicing, primarily at the 5' end, results in transcript variants encoding same or different isoforms, including a glutaredoxin-containing isoform that is predominantly expressed in testis.

Selected Validation Data



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY TXNRD1 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TXNRD1 (1:2000).