

Product datasheet for **SC204777**

TXNRD2 (NM_006440) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones
Product Name: TXNRD2 (NM_006440) Human 3' UTR Clone
Vector: pMirTarget (PS100062)
Symbol: TXNRD2
Synonyms: GCCD5; SELZ; TR; TR-BETA; TR3; TRXR2
ACCN: NM_006440
Insert Size: 381 bp
Insert Sequence: >SC204777 3'UTR clone of NM_006440

The sequence shown below is from the reference sequence of NM_006440. The complete sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

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GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
GACCCACGGTGACAGGCTGCTGAGGGTAAAGCGCCATCCCTGCAGGCCAGGGCACACGGTGCGCCCGCC
GCCAGCTCCTCGGAGGCCAGACCCAGGATGGCTGCAGGCCAGGTTTGGGGGGCCTCAACCTCTCCTGG
AGCGCCTGTGAGATGGTCAGCGTGGAGCGCAAGTCTGGACAGGTGGCCCGTGTGCCCCACAGGGATGG
CTCAGGGGACTGTCCACCTCACCCCTGCACCTCTCAGCCTCTGCCCGCGGCACCCCCCAGGCTCC
TGGTGCCAGATGATGACGACCTGGGTGAAACCTACCCTGTGGGCACCCATGTCCGAGCCCCCTGGCAT
TTCTGCAATGCAAATAAAGAGGGTACTTTTTCTGAA
ACGCGTAAGCGGCCGCGCATCTAGATTCAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA
CGAGATTCGATTCCACCGCCCTTCTATGAAAGG
```

Restriction Sites: SgfI-MluI

OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences, e.g., single nucleotide polymorphisms (SNPs).

Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.

RefSeq: [NM_006440.5](#)



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Summary:

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 a mitochondrial form important for scavenging reactive oxygen species in mitochondria. It 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. Alternatively spliced transcript variants encoding different isoforms, including a few localized in the cytosol and some lacking the C-terminal Sec residue, have been found for this gene. [provided by RefSeq, Jun 2017]

Locus ID:

10587

MW:

13.4