OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC329025

TXNRD3 (NM_052883) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TXNRD3 (NM_052883) Human Untagged Clone
Symbol:	TXNRD3
Synonyms:	TGR; TR2; TR2IT1; TRXR3; TXNRD3IT1; TXNRD3NB; TXNRD3NT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

Fully Sequenced ORF: >NCBI ORF sequence for NM_052883, the custom clone sequence may differ by one or more nucleotides

CTGGAGCGGTCGCCGCCGCAGTCGCCCGGGCCGGGAAAGGCGGGCGATGCCCCCAACCGCCGCTCGGGCC
ATGTCCGAGGGGCGCGCGTGTTGTCGCCGCCGGGGCGCCGTGCCCGCCTGTCGTCCCCCGGGCCCAGCCG
CTCGTCCGAGGCCCGCGAGGAGCTGCGCCGCCACCTCGTGGGCCTCATCGAGCGCAGCCGGGTGGTGATC
TTCAGCAAGAGCTACTGTCCCCATAGTACTCGGGTGAAAGAACTCTTTTCTTCTTTGGGAGTCGAATGTA
ATGTCTTGGAACTTGATCAAGTTGATGATGGGGCCAGGGTTCAAGAAGTGCTGTCAGAAATCACTAATCA
GAAAACTGTGCCCAATATTTTCGTGAATAAAGTGCATGTAGGTGGATGTGACCAAACTTTCCAGGCATAT
CAGAGTGGTTTGTTACAGAAGCTCCTTCAGGAAGATTTGGCATATGATTATGATCTCATCATCATCGGTG
GTGGTTCTGGAGGCCTTTCATGTGCGAAGGAAGCTGCCATTTTGGGAAAGAAAGTTATGGTGCTAGACTT
TGTTGTCCCGTCACCTCAGGGCACATCCTGGGGTCTTGGTGGCACTTGTGTAAATGTAGGTTGTATTCCT
AAGAAATTGATGCATCAGGCTGCCCTTTTGGGGCAGGCATTATGTGACTCAAGGAAATTTGGCTGGGAAT
ATAATCAACAAGTGAGGCACAACTGGGAGACAATGACAAAAGCGATTCAGAACCACATCAGCTCTCTAAA
CTGGGGCTACAGGTTGTCTCTGAGGGAAAAGGCTGTGGCCTATGTCAATTCCTATGGAGAATTTGTTGAA
CATCATAAAATAAAGGCAACCAATAAAAAAGGACAGGAGACTTATTATACTGCTGCACAGTTTGTCATAG
CAACGGGTGAAAGGCCACGGTATTTAGGAATCCAAGGAGATAAAGAATACTGTATTACTAGTGATGACCT
TTTTTCTCTGCCTTATTGCCCTGGCAAAACATTAGTGGTGGGTGCCTCTTATGTTGCCCTGGAGTGTGCA
GGGTTTCTGGCTGGCTTTGGCCTAGATGTCACAGTTATGGTACGCTCAATCCTTCTCCGTGGCTTCGACC
AAGAAATGGCAGAAAAAGTGGGTTCCTACATGGAGCAGCATGGTGTGAAGTTCCTACGGAAATTCATACC
TGTGATGGTTCAACAGTTGGAGAAAGGTTCACCTGGAAAGCTGAAAGTGTTGGCTAAATCCACTGAAGGA
ACAGAAACAATTGAAGGAGTCTATAACACAGTTTTGTTAGCTATTGGTCGTGACTCCTGTACAAGGAAAA
TAGGCTTGGAGAAGATTGGTGTCAAAATTAATGAGAAGAGTGGAAAAATACCTGTAAATGATGTGGAACA
GACCAATGTGCCATATGTCTATGCTGTTGGTGATATTTTGGAGGATAAGCCAGAGCTCACTCCTGTCGCC
ATACAGTCAGGCAAGCTGCTAGCTCAGAGACTTTTTGGGGCCTCTTTAGAAAAGTGTGATTATATTAATG
TTCCGACTACAGTGTTTACTCCTCTGGAGTATGGTTGCTGTGGATTATCTGAAGAGAAAGCTATTGAAGT
ATATAAAAAAGAGAATCTAGAAATATATCATACTTTGTTCTGGCCTCTTGAATGGACAGTAGCTGGCAGA
GAGAACAACACTTGTTACGCAAAGATAATCTGCAATAAATTCGACCATGATCGGGTGATAGGATTTCATA
TTCTTGGACCAAACGCCGGTGAGGTTACCCAAGGATTTGCAGCTGCAATGAAATGTGGGCTCACAAAACA
GCTACTTGATGACACCATTGGAATTCACCCCACATGTGGGGAGGTGTTCACGACTTTGGAAATCACAAAG
TCGTCAGGACTAGACATCACTCAGAAAGGCTGCTGAGGCTAG

Restriction Sites: Please inquire

ACCN: NM_052883

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info The expression of this clone is not guaranteed due to the nature of selenoproteins.

OTI Annotation:	This clone encodes a selenoprotein containing the rare amino acid selenocysteine (Sec). Sec is encoded by UGA codon, which normally signals translational termination. Expression of this clone is not guaranteed due to the nature of selenoproteins.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_052883.1, NP_443115.1
RefSeq Size:	2919 bp
Locus ID:	114112
UniProt ID:	Q86VQ6
Cytogenetics:	3q21.3
Gene 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 homoeostasis. This gene encodes the third TrxR, which unlike the other two isozymes, contains an additional N-terminal glutaredoxin (Grx) domain, and shows highest expression in testis. The Grx domain allows this isozyme to participate in both Trx and glutathione systems. 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 have been found for this gene. Experimental evidence suggests the use of a non-AUG (CUG) codon as a translation initiation codon (PMID:20018845). [provided by RefSeq, Aug 2017] Transcript Variant: This variant (1) represents the predominant transcript, and encodes the longer isoform (1). A non-AUG (CUG) codon is used as translation initiation codon.