

Datasheet for ABIN7555869

TXNRD1 Protein (AA 1-649) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	TXNRD1
Protein Characteristics:	AA 1-649
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TXNRD1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat TXNRD1 Protein expressed in mammalian cells.
Sequence:	<p>MGCAEGKAVA AAPTELQTK GKNKGRRRS AKDHHPGKTL PENPAGFTST ATADSRALLQ</p> <p>AYIDGHSVVI FSRSTCTRCT EVKKLFKSLC VPFVLELDQ TEDGRALEGT LSELAAETDL</p> <p>PVVFVKQRKI GGHGPTLKAY QEGRLLKLLK MNGPEDLPKS YDYDLIIIGG GSGGLAAAKE</p> <p>AAQYGKKVMV LDFVTPPLG TRWGLGGTCV NVGCIPKKLM HQAALLGQAL QDSRNYGWKV</p> <p>EETVKHDWDR MIEAVQNHIG SLNWGYRVAL REKKVYENA YGQFIGPHRI KATNNKGKEK</p> <p>IYSAERFLIA TGERPRYLG PGDKEYCISS DDLFSLPYCP GKTLVVGASY VALEAGFLA</p> <p>GIGLDVTVMV RSILLRGFDQ DMANKIGEHEM EEHGIKFIRQ FVPIKVEQIE AGTPGRLRVV</p> <p>AQSTNSEEII EGEYNTVMLA IGRDACTRKI GLETVGVKIN EKTGKIPVTD EEQTNVPYIY</p> <p>AIGDILEDKV ELTPVAIQAG RLLAQRLYAG STVKCDYENV PTTVFTPLEY GACGLSEEKA</p> <p>VEKFGEENIE VYHSYFWPLE WTIPSRDNNK CYAKIICNTK DNERVVGPHV LGPNAGEVTQ</p> <p>GFAAALKCGL TTKQLDSTIG IHPVCAEVFT TLSVTKRSGA SILQAGCUG Sequence without tag.</p>

The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

TXNRD1

Alternative Name:

TXNRD1 ([TXNRD1 Products](#))

Background:

Thioredoxin reductase 1, cytoplasmic (TR) (EC 1.8.1.9) (Gene associated with retinoic and interferon-induced mortality 12 protein) (GRIM-12) (Gene associated with retinoic and IFN-induced mortality 12 protein) (KM-102-derived reductase-like factor) (Peroxidase TXNRD1) (EC 1.11.1.2) (Thioredoxin reductase TR1), FUNCTION: Reduces disulfideprotein thioredoxin (Trx) to its dithiol-containing form (PubMed:8577704). Homodimeric flavoprotein involved in the regulation of cellular redox reactions, growth and differentiation. Contains a selenocysteine residue at the C-terminal active site that is essential for catalysis (Probable). Also has reductase activity on hydrogen peroxide (H₂O₂) (PubMed:10849437). {ECO:0000269|PubMed:10849437, ECO:0000269|PubMed:8577704, ECO:0000305|PubMed:17512005}., FUNCTION: [Isoform 1]: Induces actin and tubulin polymerization, leading to formation of cell membrane protrusions.

Target Details

{ECO:0000269|PubMed:18042542, ECO:0000269|PubMed:8577704}., FUNCTION: [Isoform 4]: Enhances the transcriptional activity of estrogen receptors ESR1 and ESR2.
{ECO:0000269|PubMed:15199063}., FUNCTION: [Isoform 5]: Enhances the transcriptional activity of the estrogen receptor ESR2 only (PubMed:15199063). Mediates cell death induced by a combination of interferon-beta and retinoic acid (PubMed:9774665).
{ECO:0000269|PubMed:15199063, ECO:0000269|PubMed:9774665}.

Molecular Weight:	70.9 kDa
UniProt:	Q16881
Pathways:	Regulation of Lipid Metabolism by PPARAlpha , Regulation of Carbohydrate Metabolic Process , Cell RedoxHomeostasis

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months