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

# TMX1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14893

## Product Information

| | |
|---|---|
| **Application** | WB |
| **Primary Accession** | Q9H3N1 |
| **Other Accession** | NM_030755, NP_110382 |
| **Reactivity** | Human, Pig, Dog, Horse, Bovine |
| **Predicted** | Human, Dog, Horse, Bovine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 31791 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 81542 |
| **Alias Symbol** | DKFZp564E1962, PDIA11, TMX, TXNDC, TXNDC1 |
| **Other Names** | Thioredoxin-related transmembrane protein 1, Thioredoxin domain-containing protein 1, Transmembrane Trx-related protein, TMX1, TMX, TXNDC, TXNDC1 |
| **Format** | Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. |
| **Reconstitution & Storage** | Add 50 ul of distilled water. Final anti-TMX1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles. |
| **Precautions** | TMX1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

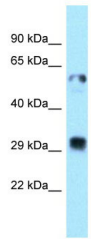
| | |
|---|---|
| **Name** | TMX1 {ECO:0000303\|PubMed:37648867, ECO:0000312\|HGNC:HGNC:15487} |
| **Function** | Thioredoxin domain-containing protein that participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyze dithiol-disulfide exchange reactions (PubMed:11152479, PubMed:37648867). Acts as a key inhibitor of the alternative triglyceride biosynthesis pathway by inhibiting the activity of TMEM68/DIESL at the endoplasmic reticulum, thereby restricting accumulation of triacylglycerol (PubMed:37648867). The alternative triglyceride biosynthesis pathway mediates formation of triacylglycerol from diacylglycerol and membrane phospholipids (PubMed:37648867). Acts as a protein disulfide isomerase by |

| | |
|---|---|
| | catalyzing formation or reduction of disulfide bonds (PubMed:22228764, PubMed:29932915). Specifically mediates formation of disulfide bonds of transmembrane proteins at the endoplasmic reticulum membrane (PubMed:22228764). Involved in endoplasmic reticulum-associated degradation (ERAD) via its protein disulfide isomerase activity by acting on folding-defective polypeptides at the endoplasmic reticulum membrane (PubMed:29932915). Acts as a negative regulator of platelet aggregation following secretion in the extracellular space (PubMed:30425049). Acts as a regulator of endoplasmic reticulum- mitochondria contact sites via its ability to regulate redox signals (PubMed:27502484, PubMed:31304984). Regulates endoplasmic reticulum- mitochondria Ca(2+) flux (PubMed:27502484). |
| **Cellular Location** | Endoplasmic reticulum membrane; Single-pass type I membrane protein. Mitochondrion membrane; Single-pass type I membrane protein. Secreted. Note=Predominantly found in the endoplasmic reticulum (PubMed:11152479). Secreted in the extracellular space following thrombin stimulation (PubMed:30425049). Localizes to mitochondria-associated endoplasmic reticulum membrane (MAM); palmitoylation is required for MAM localization (PubMed:22045338, PubMed:27502484, PubMed:31304984). |
| **Tissue Location** | Ubiquitous (PubMed:11152479). Highly expressed in kidney, liver, placenta and lung (PubMed:11152479) |

## References


Matsuo Y.,et al.J. Biol. Chem. 276:10032-10038(2001).
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Otsuki T.,et al.DNA Res. 12:117-126(2005).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).


## Images




WB Suggested Anti-TMX1 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Lung


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