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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

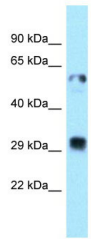
Name	TMX1 {ECO:0000303|PubMed:37648867, ECO:0000312|HGNC:HGNC:15487}
Function	Thioredoxin domain-containing protein that participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyze dithiol-disulfide exchange reactions (PubMed:11152479, 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'.