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

Anti-TXNDC1 / TMX1 Antibody (aa269-280)

Goat Anti Human Polyclonal Antibody
Catalog # ALS17652

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9H3N1
Predicted	Human
Host	Goat
Clonality	Polyclonal
Calculated MW	31791
Concentration (mg/ml)	0.5 mg/ml

Additional Information

Gene ID	81542
Alias Symbol	TMX1
Other Names	TMX1, TXNDC1, Thioredoxin domain-containing, TXNDC, PDIA11, Thioredoxin domain containing, TMX
Target/Specificity	Human TMX1 / TXNDC.
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-TXNDC1 / TMX1 Antibody (aa269-280) 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)

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