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

TMCO1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI13022

Product Information

Application	WB
Primary Accession	Q9UM00
Other Accession	NM_019026, NP_061899
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Zebrafish, Pig, Chicken, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27079

Additional Information

Gene ID	54499
Alias Symbol	HP10122, PCIA3, PNAS-136, RP11-466F5.7, TMCC4
Other Names	Transmembrane and coiled-coil domain-containing protein 1, Transmembrane and coiled-coil domains protein 4, Xenogeneic cross-immune protein PCIA3, TMCO1, TMCC4
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-TMCO1 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	TMCO1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TMCO1 (HGNC:18188)
Function	Endoplasmic reticulum (ER) calcium-selective channel preventing intracellular Ca2(+) stores from overfilling and maintaining calcium homeostasis in the ER (PubMed:27212239). In response to endoplasmic reticulum (ER) Ca2(+) overloading, assembles into a homotetramer, forming a functional calcium-selective channel facilitating Ca2(+) release (PubMed:27212239). Mediates ER Ca2(+) homeostasis in osteoblasts and plays a key role in bone formation, via the CaMKII-HDAC4-RUNX2 signaling axis (By similarity). Component of the multi-pass translocon (MPT) complex that mediates insertion of multi- pass membrane proteins into the lipid bilayer of

membranes (PubMed:32820719, PubMed:36261522). The MPT complex takes over after the SEC61 complex: following membrane insertion of the first few transmembrane segments of proteins by the SEC61 complex, the MPT complex occludes the lateral gate of the SEC61 complex to promote insertion of subsequent transmembrane regions (PubMed:36261522). Within the MPT complex, the GEL subcomplex may mediate insertion of transmembrane regions into the membrane (PubMed:36261522).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Mitochondrion membrane {ECO:0000250|UniProtKB:C5HGF3}; Multi-pass membrane protein. Note=The first transmembrane region is required for localization to the endoplasmic reticulum (PubMed:27212239). A publication reported localization in cytoplasm and nucleus (PubMed:22714896). Nuclear localization is however in contradiction with two other reports (PubMed:10393320, PubMed:27212239).

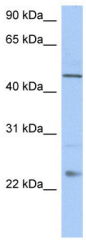
Tissue Location

Widely expressed in adult and fetal tissues, with higher levels in thymus, prostate, testis and small intestine and lower levels in brain, placenta, lung and kidney (PubMed:10393320, PubMed:20018682). Present in most tissues in the eye, including the trabecular meshwork and retina (at protein level) (PubMed:22714896)

References

Iwamuro S.,et al.J. Biochem. 126:48-53(1999).
Deng H.-X.,et al.Submitted (SEP-2004) to the EMBL/GenBank/DDBJ databases.
Yu W.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
Yu W.-Q.,et al.Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).

Images



WB Suggested Anti-TMCO1 Antibody Titration: 0.2-1 µg/ml
Positive Control: Human Liver

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