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

TMEM111 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5782a

Product Information

Application	FC, WB, E
Primary Accession	Q9P0I2
Other Accession	Q5U2V8, Q99KI3, Q7SXW4, Q3ZCB8, NP_060917.1
Reactivity	Human
Predicted	Mouse, Rat, Zebrafish, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27315
Calculated MW	29952
Antigen Region	42-70

Additional Information

Gene ID	55831
Other Names	ER membrane protein complex subunit 3, Transmembrane protein 111, EMC3, TMEM111
Target/Specificity	This TM111 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 42-70 amino acids from the N-terminal region of human TM111.
Dilution	FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TMEM111 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

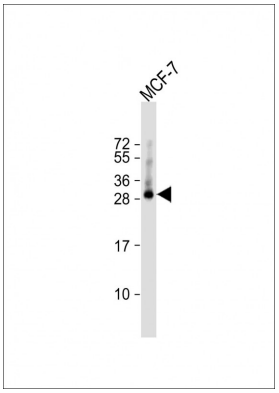
Name	EMC3
Synonyms	TMEM111

Function	Part of the endoplasmic reticulum membrane protein complex (EMC) that enables the energy-independent insertion into endoplasmic reticulum membranes of newly synthesized membrane proteins (PubMed:29242231, PubMed:29809151, PubMed:30415835, PubMed:32439656, PubMed:32459176). Preferentially accommodates proteins with transmembrane domains that are weakly hydrophobic or contain destabilizing features such as charged and aromatic residues (PubMed:29242231, PubMed:29809151, PubMed:30415835). Involved in the cotranslational insertion of multi-pass membrane proteins in which stop-transfer membrane-anchor sequences become ER membrane spanning helices (PubMed:29809151, PubMed:30415835). It is also required for the post-translational insertion of tail-anchored/TA proteins in endoplasmic reticulum membranes (PubMed:29242231, PubMed:29809151). By mediating the proper cotranslational insertion of N-terminal transmembrane domains in an N-exo topology, with translocated N- terminus in the lumen of the ER, controls the topology of multi-pass membrane proteins like the G protein-coupled receptors (PubMed:30415835). By regulating the insertion of various proteins in membranes, it is indirectly involved in many cellular processes (Probable).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein

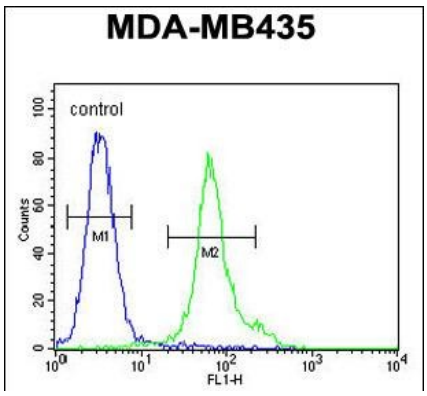
References

Hu, R.M., et al. Proc. Natl. Acad. Sci. U.S.A. 97(17):9543-9548(2000)

Images



Anti-TMEM111 Antibody (N-term) at 1:1000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



TMEM111 Antibody (N-term) (Cat. #AP5782a) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- The endoplasmic reticulum membrane complex promotes proteostasis of GABAreceptors

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