

# TMEM111 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP5782a

## Product Information

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<b>Application</b>	FC, WB, E
<b>Primary Accession</b>	<a href="#">Q9P0I2</a>
<b>Other Accession</b>	<a href="#">Q5U2V8</a> , <a href="#">Q99KI3</a> , <a href="#">Q7SXW4</a> , <a href="#">Q3ZCB8</a> , <a href="#">NP_060917.1</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Mouse, Rat, Zebrafish, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB27315
<b>Calculated MW</b>	29952
<b>Antigen Region</b>	42-70

## Additional Information

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<b>Gene ID</b>	55831
<b>Other Names</b>	ER membrane protein complex subunit 3, Transmembrane protein 111, EMC3, TMEM111
<b>Target/Specificity</b>	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.
<b>Dilution</b>	FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	TMEM111 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	EMC3
<b>Synonyms</b>	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).

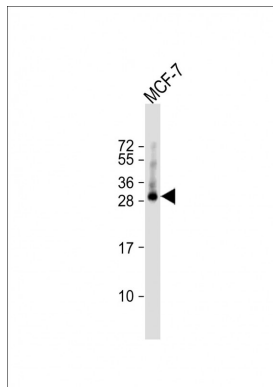
## Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

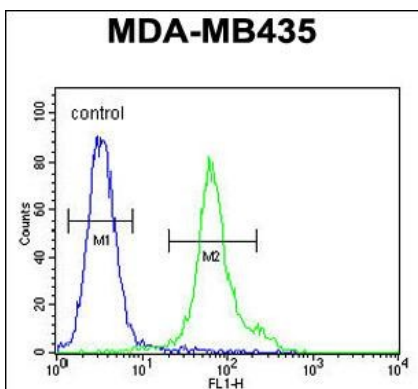
## References

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 GABA receptors](#)

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