

MMGT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4731B

Specification

MMGT1 Antibody (C-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	<u>08N4V1</u>
Other Accession	<u>032LC4</u>
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

MMGT1 Antibody (C-term) - Additional Information

Gene ID 93380

Other Names

Membrane magnesium transporter 1, ER membrane protein complex subunit 5, Transmembrane protein 32, MMGT1, EMC5, TMEM32

Target/Specificity

This MMGT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 103-131 amino acids from the C-terminal region of human MMGT1.

Dilution WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

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

MMGT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MMGT1 Antibody (C-term) - Protein Information



Name MMGT1 (HGNC:28100)

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:<u>30415835</u>, PubMed:<u>29809151</u>, PubMed:<u>29242231</u>, PubMed:<u>32459176</u>, PubMed:<u>32439656</u>). Preferentially accommodates proteins with transmembrane domains that are weakly hydrophobic or contain destabilizing features such as charged and aromatic residues (PubMed:<u>30415835</u>, PubMed:<u>29809151</u>, PubMed:<u>29242231</u>). Involved in the cotranslational insertion of multi-pass membrane proteins in which stop-transfer membrane-anchor sequences become ER membrane spanning helices (PubMed:<u>30415835</u>, PubMed:<u>29809151</u>). It is also required for the post-translational insertion of tail-anchored/TA proteins in endoplasmic reticulum membranes (PubMed:<u>29809151</u>, PubMed:<u>29242231</u>). 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:<u>30415835</u>). By regulating the insertion of various proteins in membranes, it is indirectly involved in many cellular processes (By similarity). May be involved in Mg(2+) transport (By similarity).

Cellular Location

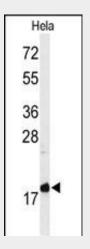
Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q8K273}; Multi-pass membrane protein Early endosome membrane {ECO:0000250|UniProtKB:Q8K273}; Multi-pass membrane protein

MMGT1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

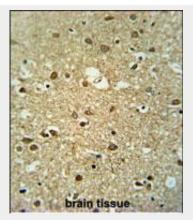
- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MMGT1 Antibody (C-term) - Images

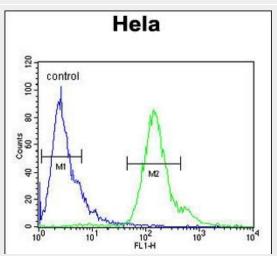


Western blot analysis of MMGT1 Antibody (C-term) (Cat. #AP4731b) in Hela cell line lysates (35ug/lane). MMGT1 (arrow) was detected using the purified Pab.





MMGT1 Antibody (C-term) (Cat. #AP4731b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the MMGT1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



MMGT1 Antibody (C-term) (Cat. #AP4731b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MMGT1 Antibody (C-term) - Background

MMGT1 mediates Mg(2+) transport.

MMGT1 Antibody (C-term) - References

Goytain, A., et al. Am. J. Physiol., Cell Physiol. 294 (2), C495-C502 (2008) Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000)