

TMEM65 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP10360a

Product Information

Application	WB, FC, E
Primary Accession	Q6PI78
Other Accession	NP_919267.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27969
Calculated MW	25498
Antigen Region	33-61

Additional Information

Gene ID	157378
Other Names	Transmembrane protein 65, TMEM65
Target/Specificity	This TMEM65 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 33-61 amino acids from the N-terminal region of human TMEM65.
Dilution	WB~~1:1000 FC~~1:10~50 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	TMEM65 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TMEM65 {ECO:0000303 PubMed:40200126, ECO:0000312 HGNC:HGNC:25203}
Function	Mitochondrial protein that plays a critical role in the sodium-dependent calcium efflux from mitochondrion (PubMed: 40200126 , PubMed: 40691517).

The precise role of TMEM65 in mitochondrial sodium/calcium exchange is however unclear: TMEM65 associates with the SLC8B1/NCLX antiporter and probably promotes the sodium/calcium exchange mediated by SLC8B1/NCLX (PubMed:[40200126](#)). According to another report, TMEM65 functions as the mitochondrial sodium/calcium antiporter itself: homodimerization drives formation of a pocket capable of binding calcium (PubMed:[40691517](#)). Essential for maintaining proper cardiac intercalated disk (ICD) structure and function as well as cardiac conduction velocity in the heart (By similarity). Its association with SCN1B is required for stabilizing the perinexus in the ICD and for localization of GJA1 and SCN5A to the ICD (By similarity).

Cellular Location

Mitochondrion inner membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Localizes at the intercalated disk in the ventricular tissue (PubMed:26403541).

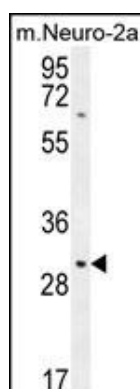
Tissue Location

Predominantly expressed the ventricular tissue (at protein level).

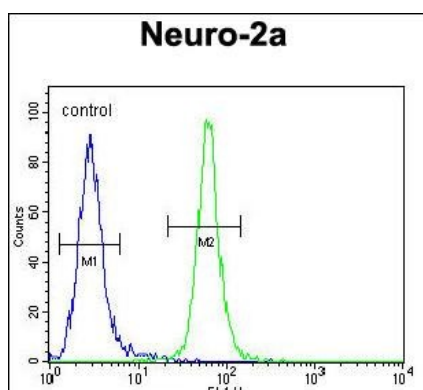
References

Gerhard, D.S., et al. Genome Res. 14 (10B), 2121-2127 (2004) :
Bonaldo, M.F., et al. Genome Res. 6(9):791-806(1996)

Images



TMEM65 Antibody (N-term) (Cat. #AP10360a) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane). This demonstrates the TMEM65 antibody detected the TMEM65 protein (arrow).



TMEM65 Antibody (N-term) (Cat. #AP10360a) flow cytometric analysis of Neuro-2a cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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