

TPCN1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56586**Specification**

TPCN1 Polyclonal Antibody - Product Information

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	O9ULQ1
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	94147

TPCN1 Polyclonal Antibody - Additional Information**Gene ID** 53373**Other Names**

Two pore calcium channel protein 1, Voltage-dependent calcium channel protein TPC1, TPCN1, KIAA1169, TPC1

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

TPCN1 Polyclonal Antibody - Protein Information**Name** TPCN1 ([HGNC:18182](#))**Function**

Intracellular channel initially characterized as a non- selective Ca(2+)-permeable channel activated by NAADP (nicotinic acid adenine dinucleotide phosphate), it is also a voltage-gated highly- selective Na(+) channel activated directly by PI(3,5)P2 (phosphatidylinositol 3,5-bisphosphate) that senses pH changes and confers electrical excitability to organelles (PubMed:19620632, PubMed:23063126, PubMed:24776928, PubMed:23394946). Localizes to the early and recycling endosomes membranes where it plays a role in the uptake and processing of proteins and regulates organellar membrane excitability, membrane trafficking and pH homeostasis (PubMed:23394946) (Probable). Ion selectivity is not fixed but rather agonist-dependent and under defined ionic conditions, can be readily activated by both NAADP and PI(3,5)P2 (Probable). Required for mTOR-dependent nutrient sensing (PubMed:23394946) (Probable).

Cellular Location

Lysosome membrane; Multi-pass membrane protein. Endosome membrane; Multi-pass membrane protein. Early endosome membrane {ECO:0000250|UniProtKB:Q9EQJ0}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9EQJ0}. Recycling endosome membrane {ECO:0000250|UniProtKB:Q9EQJ0}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9EQJ0}

Tissue Location

Highest expression found in the heart and kidney, and lowest expression found in the spleen

TPCN1 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TPCN1 Polyclonal Antibody - Images