

TPCN1 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI10812**Specification**

TPCN1 antibody - N-terminal region - Product Information

Application	WB
Primary Accession	O9ULQ1
Other Accession	NM_017901 , NP_060371
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Horse, Bovine, Dog
Predicted	Human, Mouse, Rabbit, Pig, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	94kDa kDa

TPCN1 antibody - N-terminal region - Additional Information**Gene ID** 53373**Alias Symbol** **FLJ20612, KIAA1169, TPC1****Other Names**

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

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-TPCN1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

TPCN1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

TPCN1 antibody - N-terminal region - 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

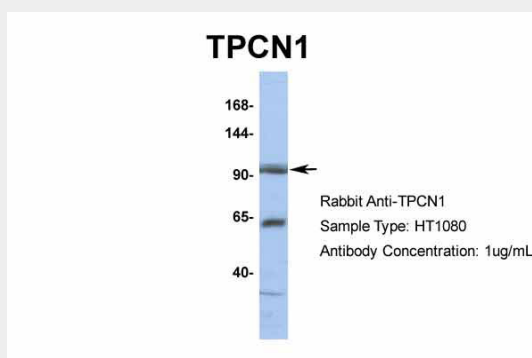
Highest expression found in the heart and kidney, and lowest expression found in the spleen

TPCN1 antibody - N-terminal region - 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 antibody - N-terminal region - Images



Host: Rabbit
Target Name: TPCN1
Sample Tissue: HT1080
Antibody Dilution: 1.0µg/ml

TPCN1 antibody - N-terminal region - References

Clapham,D.E. (2005) Pharmacol. Rev. 57 (4), 451-454
Reconstitution and Storage:For short term

use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.