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TPCN1 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10812

Product Information

Application	WB
Primary Accession	Q9ULQ1
Other Accession	NM_017901, NP_060371
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Horse, Bovine
Predicted	Human, Mouse, Rabbit, Pig, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	94147

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.

Protein Information

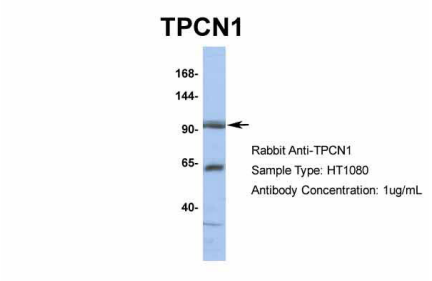
Name	TPCN1 (HGNC:18182)
Function	Intracellular channel initially characterized as a non- selective Ca(2+)-permeable channel activated by NAADP (nicotinic acid adenine dinucleotide phosphate), it is also a voltage-gated highly- selective Na(+) channel activated directly by PI(3,5)P2 (phosphatidylinositol 3,5-bisphosphate) that senses pH changes and confers electrical excitability to organelles (PubMed:19620632, PubMed:23063126, PubMed:23394946, PubMed:24776928). 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 (Probable) (PubMed:23394946). 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 (Probable) (PubMed:23394946).
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

References

Clapham,D.E. (2005) Pharmacol. Rev. 57 (4), 451-454Reconstitution 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.

Images



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

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