

SPCA2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56773

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	O75185
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	103169

Additional Information

Gene ID	9914
Other Names	Calcium-transporting ATPase type 2C member 2, ATPase 2C2, 7.2.2.10, Secretory pathway Ca(2+)-ATPase 2, ATP2C2 (HGNC:29103), KIAA0703, SPCA2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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.

Protein Information

Name	ATP2C2 (HGNC:29103)
Synonyms	KIAA0703, SPCA2
Function	ATP-driven pump that supplies the Golgi apparatus with Ca(2+) and Mn(2+) ions, both essential cofactors for processing and trafficking of newly synthesized proteins in the secretory pathway (PubMed: 15677451 , PubMed: 15831496 , PubMed: 16332677 , PubMed: 30923126). Within a catalytic cycle, acquires Ca(2+) or Mn(2+) ions on the cytoplasmic side of the membrane and delivers them to the luminal side. The transfer of ions across the membrane is coupled to ATP hydrolysis and is associated with a transient phosphorylation that shifts the pump conformation from inward-facing to outward-facing state (PubMed: 15831496 , PubMed: 16332677). Induces Ca(2+) influx independently of its ATP-driven pump function. At the basolateral membrane of mammary epithelial cells, interacts with Ca(2+) channel ORAI1 and mediates Ca(2+) entry independently of the Ca(2+) content of endoplasmic reticulum or Golgi stores. May facilitate transepithelial transport of large quantities of Ca(2+) for milk secretion via activation of Ca(2+) influx channels at the plasma membrane and active Ca(2+) transport at the Golgi

apparatus (PubMed:[20887894](#), PubMed:[23840669](#)).

Cellular Location

Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:A7L9Z8}; Multi-pass membrane protein

Tissue Location

Highly expressed in the gastrointestinal and respiratory tracts, prostate, thyroid, salivary, and mammary glands (PubMed:15831496). Expressed in colon epithelial cells (at protein level). Expressed in brain and testis (at protein level) (PubMed:15677451).

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