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STC1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14863b

Product Information

Application	WB, E
Primary Accession	P52823
Other Accession	P97574, O55183, NP_003146.1
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35004
Calculated MW	27621
Antigen Region	193-221

Additional Information

Gene ID	6781
Other Names	Stanniocalcin-1, STC-1, STC1, STC
Target/Specificity	This STC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 193-221 amino acids from the C-terminal region of human STC1.
Dilution	WB~~1:1000 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	STC1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	STC1
Synonyms	STC
Function	Stimulates renal phosphate reabsorption, and could therefore prevent

hypercalcemia.

Cellular Location Secreted.

Tissue Location Expressed in most tissues, with the highest levels in ovary, prostate, heart, kidney and thyroid. In the kidney, expression is confined to the nephron, specifically in the distal convoluted tubule and in the collecting tubule. Not detected in the brain, liver, spleen, peripheral blood leukocytes and adrenal medulla

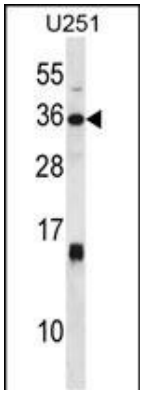
Background

This gene encodes a secreted, homodimeric glycoprotein that is expressed in a wide variety of tissues and may have autocrine or paracrine functions. The gene contains a 5' UTR rich in CAG trinucleotide repeats. The encoded protein contains 11 conserved cysteine residues and is phosphorylated by protein kinase C exclusively on its serine residues. The protein may play a role in the regulation of renal and intestinal calcium and phosphate transport, cell metabolism, or cellular calcium/phosphate homeostasis. Overexpression of human stanniocalcin 1 in mice produces high serum phosphate levels, dwarfism, and increased metabolic rate. This gene has altered expression in hepatocellular, ovarian, and breast cancers.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Liu, G., et al. J. Natl. Cancer Inst. 102(11):812-827(2010)
Kottgen, A., et al. Nat. Genet. 42(5):376-384(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Trindade, D.M., et al. BMC Struct. Biol. 9, 57 (2009) :

Images



STC1 Antibody (C-term) (Cat. #AP14863b) western blot analysis in U251 cell line lysates (35ug/lane).This demonstrates the STC1 antibody detected the STC1 protein (arrow).