10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# STC2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14314b

## Product Information

| | |
|---|---|
| **Application** | WB, IHC-P, E |
| **Primary Accession** | O76061 |
| **Other Accession** | Q9R0K8, O88452, NP_003705.1 |
| **Reactivity** | Mouse |
| **Predicted** | Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB11920 |
| **Calculated MW** | 33249 |
| **Antigen Region** | 273-302 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 8614 |
| **Other Names** | Stanniocalcin-2, STC-2, Stanniocalcin-related protein, STC-related protein, STCRP, STC2 |
| **Target/Specificity** | This STC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 273-302 amino acids from the C-terminal region of human STC2. |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 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** | STC2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | STC2 |
| **Function** | Has an anti-hypocalcemic action on calcium and phosphate homeostasis. |

| | |
|---|---|
| **Cellular Location** | Secreted. |
| **Tissue Location** | Expressed in a variety of tissues including muscle, heart, pancreas, kidney, spleen, prostate, small intestine, colon and peripheral blood leukocytes |

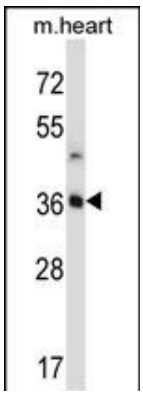
## Background

This gene encodes a secreted, homodimeric glycoprotein that is expressed in a wide variety of tissues and may have autocrine or paracrine functions. The encoded protein has 10 of its 15 cysteine residues conserved among stanniocalcin family members and is phosphorylated by casein kinase 2 exclusively on its serine residues. Its C-terminus contains a cluster of histidine residues which may interact with metal ions. The protein may play a role in the regulation of renal and intestinal calcium and phosphate transport, cell metabolism, or cellular calcium/phosphate homeostasis. Constitutive overexpression of human stanniocalcin 2 in mice resulted in pre- and postnatal growth restriction, reduced bone and skeletal muscle growth, and organomegaly. Expression of this gene is induced by estrogen and altered in some breast cancers.

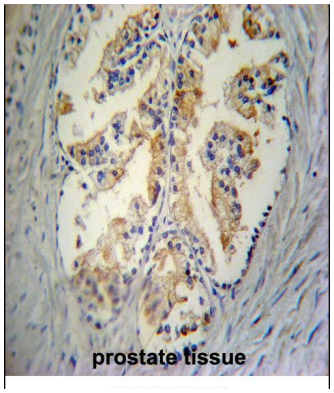
## References


Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :
Law, A.Y., et al. Exp. Cell Res. 316(3):466-476(2010)
Volland, S., et al. Int. J. Cancer 125(9):2049-2057(2009)
Ieta, K., et al. Int. J. Cancer 125(4):926-931(2009)
Tamura, K., et al. Cancer Sci. 100(5):914-919(2009)


## Images




STC2 Antibody (C-term) (Cat. #AP14314b) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the STC2 antibody detected the STC2 protein (arrow).




STC2 Antibody (C-term) (Cat. #AP14314b)immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of STC2 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.