

# Stanniocalcin-2 (STC2) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1443A

# **Specification**

# Stanniocalcin-2 (STC2) Antibody (N-term) - Product Information

Application WB, IHC-P,E
Primary Accession Other Accession O88452

Reactivity Human, Mouse

Host Rabbit Clonality Polyclonal Isotype Rabbit IgG Antigen Region 16-46

## Stanniocalcin-2 (STC2) Antibody (N-term) - Additional Information

#### **Gene ID 8614**

### **Other Names**

Stanniocalcin-2, STC-2, Stanniocalcin-related protein, STC-related protein, STCRP, STC2

# Target/Specificity

This Stanniocalcin-2 (STC2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 16-46 amino acids from the N-terminal region of human Stanniocalcin-2 (STC2).

# **Dilution**

WB~~1:500 IHC-P~~1:50~100

 $E\sim\sim$ Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### 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**

Stanniocalcin-2 (STC2) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# Stanniocalcin-2 (STC2) Antibody (N-term) - Protein Information

#### Name STC2





Function Has an anti-hypocalcemic action on calcium and phosphate homeostasis.

# Cellular Location Secreted.

# **Tissue Location**

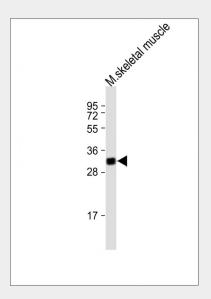
Expressed in a variety of tissues including muscle, heart, pancreas, kidney, spleen, prostate, small intestine, colon and peripheral blood leukocytes

# Stanniocalcin-2 (STC2) Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

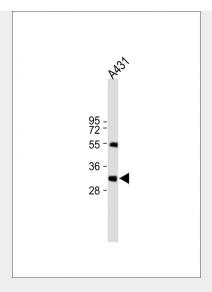
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Stanniocalcin-2 (STC2) Antibody (N-term) - Images

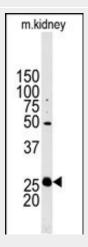


All lanes : Anti-Stanniocalcin-2 (STC2) Antibody (N-term) at 1:500 dilution Lane 1: mouse skeletal muscle tissue lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Mouse IgG/A/M(H/L), Peroxidase conjugated at 1/2000 dilution. Observed band size : 32kDa Blocking/Dilution buffer: 5% NFDM/TBST.

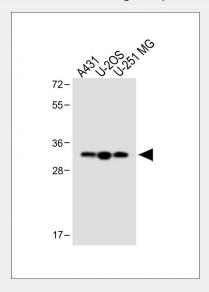




All lanes : Anti-Stanniocalcin-2 (STC2) Antibody (N-term) at 1:1000 dilution Lane 1: A431 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Mouse IgG/A/M(H/L), Peroxidase conjugated at 1/2000 dilution. Observed band size : 33kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of anti-STC2 Antibody (N-term) (Cat# AP1443a) in mouse kidney tissue lysates (35ug/lane). STC2(arrow) was detected using the purified polyclonal antibody.





All lanes : Anti-Stanniocalcin-2 (STC2) Antibody (N-term) at 1:500 dilution Lane 1: A431 whole cell lysate Lane 2: U-2OS whole cell lysate Lane 3: U-251 MG whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Stanniocalcin-2 (STC2) Antibody (N-term) (Cat. #AP1443a)immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Stanniocalcin-2 (STC2) Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# Stanniocalcin-2 (STC2) Antibody (N-term) - Background

STC2 is 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 is induced by estrogen and altered in some breast cancers.

# Stanniocalcin-2 (STC2) Antibody (N-term) - References

Ishibashi, K., et al., Biochem. Biophys. Res. Commun. 250(2):252-258 (1998). DiMattia, G.E., et al., Mol. Cell. Endocrinol. 146 (1-2), 137-140 (1998). Chang, A.C., et al., Mol. Cell. Endocrinol. 141 (1-2), 95-99 (1998).