abcam

Product datasheet

# Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] ab255610

Recombinant RabMAb

2 Abreviews 2 References 10 Images

## Overview

| | |
|---|---|
| **Product name** | Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] |
| **Description** | Rabbit monoclonal [EPR22866-10] to Stanniocalcin 2/STC-2 |
| **Host species** | Rabbit |
| **Tested applications** | **Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP |
| **Species reactivity** | **Reacts with:** Human |
| **Immunogen** | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| **Positive control** | WB: HeLa, HepG2, MCF7, HT-29, 293T, HCT116 and Human breast cancer lysates. IHC-P: Human lung cancer and Human breast cancer tissues. ICC/IF: T-47D and HepG2 cells. Flow Cyt (intra): T-47D and HepG2 cells. IP: T-47D cells. |
| **General notes** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. |

## Properties

| | |
|---|---|
| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |
| **Storage buffer** | pH: 7.2<br>Preservative: 0.01% Sodium azide<br>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| **Purity** | Protein A purified |
| **Clonality** | Monoclonal |

| | |
|---|---|
| **Clone number** | EPR22866-10 |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab255610 in the following tested applications.

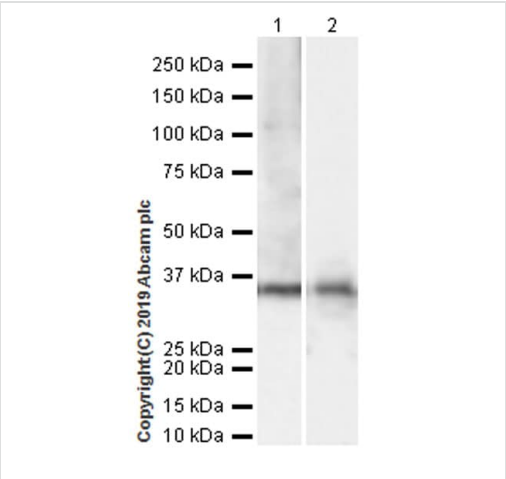
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| **Flow Cyt (Intra)** | | 1/50. |
| **WB** | | 1/1000. Detects a band of approximately 33, 35 kDa (predicted molecular weight: 33 kDa). |
| **IHC-P** | | 1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| **ICC/IF** | | 1/50. |
| **IP** | | 1/30. |

## Target

| | |
|---|---|
| **Function** | Has an anti-hypocalcemic action on calcium and phosphate homeostasis. |
| **Tissue specificity** | Expressed in a variety of tissues including muscle, heart, pancreas, kidney, spleen, prostate, small intestine, colon and peripheral blood leukocytes. |
| **Sequence similarities** | Belongs to the stanniocalcin family. |
| **Cellular localization** | Secreted. |

## Images




Western blot - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

**All lanes :** Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610) at 1/1000 dilution

**Lane 1 :** HCT116 (human colorectal carcinoma epithelial cell), whole cell lysate
**Lane 2 :** Human breast cancer tissue lysate

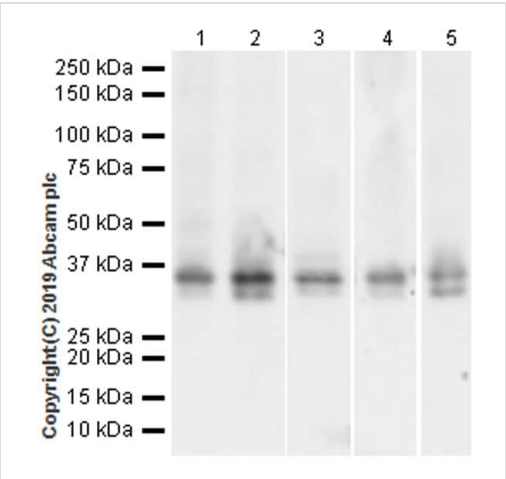
Lysates/proteins at 20 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 33 kDa
**Observed band size:** 35 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST
The expression profile observed is consistent with what has been described in the literature (PMID:15367391, 25463045, 26361149).

Exposure time: Lane 1: 3 minutes; Lane 2: 48 seconds.




Western blot - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

**All lanes :** Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610) at 1/1000 dilution

**Lane 1 :** HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate
**Lane 2 :** HepG2 (human hepatocellular carcinoma epithelial cell), whole cell lysate
**Lane 3 :** MCF7 (human breast adenocarcinoma epithelial cell), whole cell lysate
**Lane 4 :** HT-29 (human colorectal adenocarcinoma epithelial cell), whole cell lysate
**Lane 5 :** 293T (human embryonic kidney epithelial cell), whole cell lysate

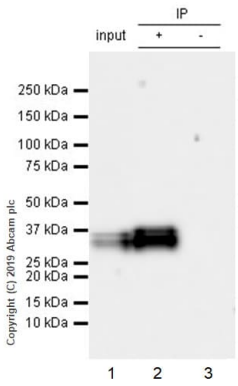
Lysates/proteins at 20 µg per lane.

**Secondary**
**Lanes 1-2 :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**)
**Lanes 3-5 :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 33 kDa
**Observed band size:** 33-35 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST
The expression profile observed is consistent with what has been described in the literature, the dual bands caused by different posttranslational modifications (PMID: 15367391, 25463045, 26361149).

Exposure time: Lane 1-2: 48 seconds; Lane 3: 26 seconds; Lane 4: 114 seconds; Lane 5: 15 seconds.




Immunoprecipitation - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

STC2 was immunoprecipitated from 0.35 mg T-47D (human ductal breast epithelial tumor epithelial cell) whole cell lysate with ab255610 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab255610 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/5000 dilution.

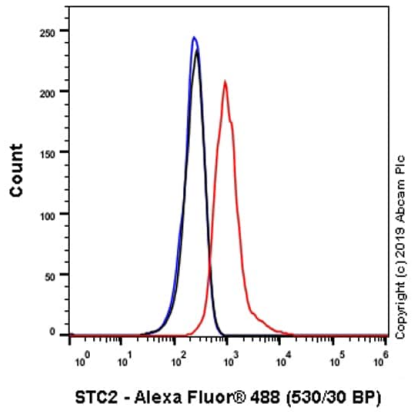
Lane 1: T-47D (human ductal breast epithelial tumor epithelial cell) whole cell lysate 10ug

Lane 2: ab255610 IP in T-47D whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab255610 in T-47D whole cell lysate

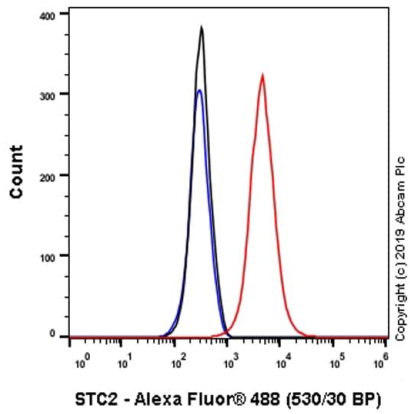
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.



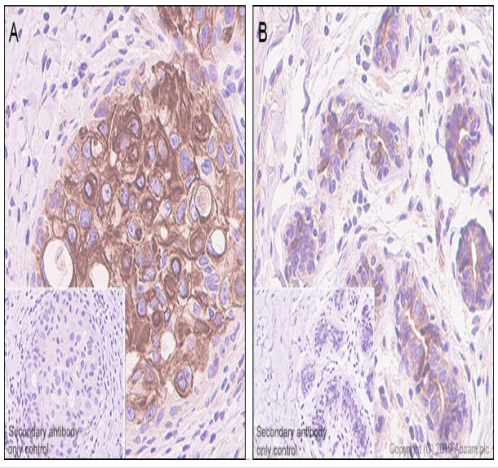

Flow Cytometry (Intracellular) - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized HepG2 (human hepatocellular carcinoma epithelial cell) cells labelling STC2 with ab255610 at 1/50 dilution (Red) compared with a Rabbit monoclonal IgG (**ab172730**) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.




Flow Cytometry (Intracellular) - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized T-47D (human ductal breast epithelial tumor epithelial cell) cells labelling STC2 with ab255610 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (**ab172730**) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

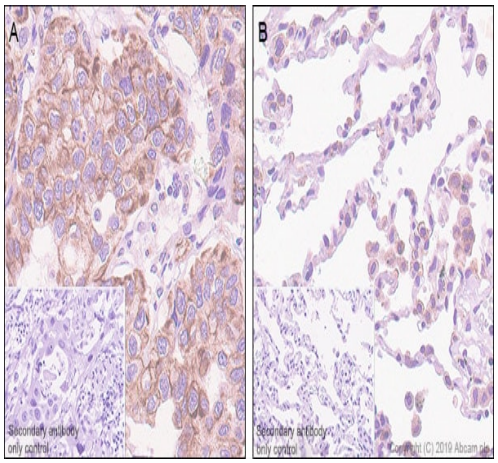



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

Immunohistochemical analysis of paraffin-embedded Human breast cancer (A) and its adjacent noncancerous breast tissue (B) tissue labeling STC2 with ab255610 at 1/ 200 dilution (2.29ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Strong cytoplasmic staining in human breast cancer tissue (A) while weak staining in its adjacent noncancerous breast tissue (B) (PMID: 18492817) is observed. The section was incubated with ab255610 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

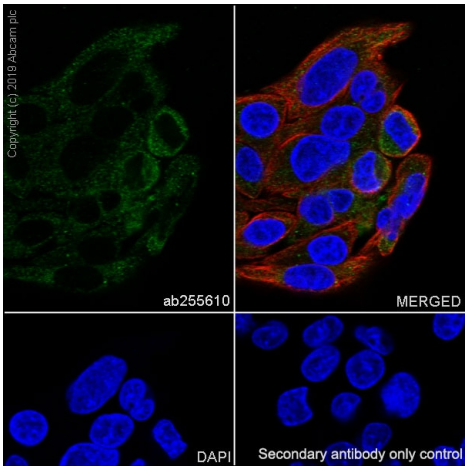



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

Immunohistochemical analysis of paraffin-embedded Human lung cancer (A) and its adjacent noncancerous lung tissue (B) tissue labeling STC2 with ab255610 at 1/ 200 dilution (2.29ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Strong cytoplasmic staining in human lung cancer tissue (A) while weak staining in its adjacent noncancerous lung tissue (B) (PMID: 25463045) is observed. The section was incubated with ab255610 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

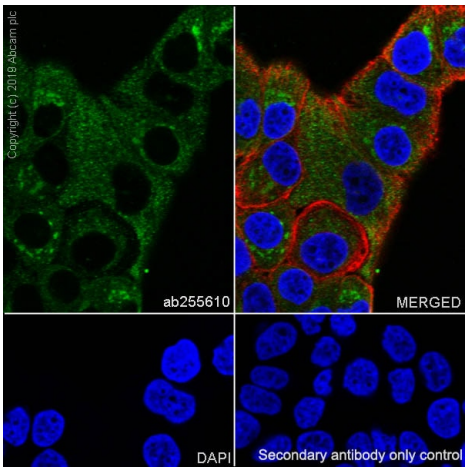
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.




Immunocytochemistry/ Immunofluorescence - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HepG2 (human hepatocellular carcinoma epithelial cell) cells labelling STC2 with ab255610 at 1/50 (9 ug/ml) dilution, followed by **ab150077** AlexaFluor® 488 Goat anti-Rabbit secondary antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing cytoplasmic staining in HepG2 cell line. Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

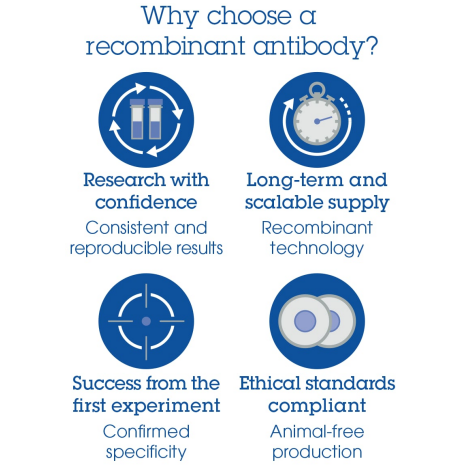
Secondary antibody only control: Secondary antibody is **ab150077** AlexaFluor® 488 Goat anti-Rabbit secondary at 1/1000 (2 ug/ml) dilution.




Immunocytochemistry/ Immunofluorescence - Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized T-47D (human ductal breast epithelial tumor epithelial cell) cells labelling STC2 with ab255610 at 1/50 (9 ug/ml) dilution, followed by **ab150077** AlexaFluor® 488 Goat anti-Rabbit secondary antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing cytoplasmic staining in T-47D cell line. Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is Ab255610 anti-STC2 **ab150077** AlexaFluor® 488 Goat anti-Rabbit secondary at 1/1000 (2 ug/ml) dilution.




Anti-Stanniocalcin 2/STC-2 antibody [EPR22866-10] (ab255610)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors