

**Datasheet for KOA0847****Human Stanniocalcin 1 - STC1 ELISA Kit****Overview**

|                      |                                                           |
|----------------------|-----------------------------------------------------------|
| <b>Description:</b>  | Human Stanniocalcin 1/STC1 AccuSignal ELISA Kit - KOA0847 |
| <b>Item No.:</b>     | KOA0847                                                   |
| <b>Size:</b>         | 1 Kit                                                     |
| <b>Applications:</b> | ELISA                                                     |
| <b>Reactivity:</b>   | Human                                                     |
| <b>Range:</b>        | 31.2 pg/ml - 2000 pg/ml                                   |

**Product Details**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>         | Stanniocalcin-1 is a glycoprotein which is encoded by the STC1 gene. This gene encodes a secreted, homodimeric glycoprotein that is expressed in a wide variety of tissues and may have autocrine or paracrine functions. Human Stanniocalcin-1 is a putative molecular biomarker of leukemic microenvironment and the only molecular function known up to date is a SUMO E3 ligase activity in the SUMOylation cycle. STC1 interacts with lots of proteins in the cytoplasm, mitochondria, endoplasmatic reticulum and dot-like fashion in the nucleus. The N-terminal region of STC1 is the function region which is responsible to establish the interaction with its partners, including SUMO1. Low resolution studies shows that STC1 is an anti-parallel homodimer in solution and the cystein 202 is responsible for the dimerization of this protein. All the 5 disulfide bonds of human STC1 are conserved and have the same profile of fish STC. |
| <b>Synonyms:</b>           | Stanniocalcin, Stanniocalcin-1, STC, STC-1, STC1, STC1_HUMAN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Detection Kit Type:</b> | ELISA Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Detection Range:</b>    | 31.2 pg/ml - 2000 pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Sensitivity:</b>        | <10 pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Target Details**

|                    |                                                                   |
|--------------------|-------------------------------------------------------------------|
| <b>Gene Name:</b>  | STC1                                                              |
| <b>Reactivity:</b> | Human                                                             |
| <b>Immunogen:</b>  | Expression system for standard: NSO; Immunogen sequence: V34-A247 |

**Purity/Specificity:** Natural and recombinant human STC1. There is no detectable cross-reactivity with other relevant proteins.

**Relevant Links:**

- [UniProtKB - P52823](#)
- [NCBI - NP\\_003146.1](#)
- [GeneID - 6781](#)
- [KOA0847 Protocol](#)

## Application Details

**Tested Applications:** ELISA

**Application Note:** Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml human STC1 standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernates, serum and plasma (heparin, EDTA) to each empty well. It is recommended that each human STC1 standard solution and each sample be measured in duplicate.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**Other:** DOE:  
2-8° C - 01/09/2021  
-20° C - 07/10/2021

## Formulation

**Concentration:** 1 Kit

**Anticoagulant:** Heparin Sodium

## Shipping & Handling

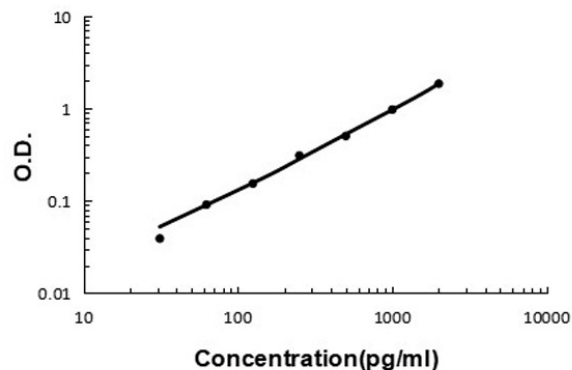
**Shipping Condition:** Wet Ice

**Storage Condition:** Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

**Expiration:** See kit insert for complete instructions.

## Images

### Human STC1 ELISA Kit



### ELISA

Human Stanniocalcin 1/STC1 ELISA Kit standard curve.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.