

## DESCRIPTION

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human Stanniocalcin 1/STC-1 in direct ELISAs and Western blots. In these formats, less than 1% cross-reactivity with recombinant human STC-2 is observed.   |
| <b>Source</b>             | Polyclonal Goat IgG   |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Stanniocalcin 1<br>Thr18-Ala247<br>Accession # P52823   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

|                     | <b>Recommended Concentration</b> | <b>Sample</b>                     |
|---------------------|----------------------------------|-----------------------------------|
| <b>Western Blot</b> | 0.1 µg/mL                        | Recombinant Human Stanniocalcin 1 |

## PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.2 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

## BACKGROUND

Stanniocalcin-1 (STC-1) is a secreted 35 kDa disulfide-linked homodimer that is related to a calcium-regulating hormone in fish. Mature human Stanniocalcin-1 is 230 aa in length, and contains five intrachain disulfide bonds plus one interchain disulfide bond. Circulating Stanniocalcin-1 is both glycosylated and phosphorylated. Mature human Stanniocalcin-1 is 98%, 97%, 95% and 97% aa identical to mature canine, mouse, bovine and rat Stanniocalcin-1, respectively. Stanniocalcin-1 promotes phosphorus absorption and blocks chemokine-induced chemotaxis.