



## Product Datasheet

<b>Product Name</b>	Stanniocalcin-2 Human Recombinant
<b>Cata No</b>	CB500744
<b>Source</b>	293 cell line (Human embryonic kidney).
<b>Synonyms</b>	Stanniocalcin-2, STC, STC2, STCRP, STC-2, Stanniocalcin-related protein, STC-related protein.

### Description

STC2 is a 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 over expression 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.

Stanniocalcin-2 Human Recombinant produced in 293 cell line is a single, glycosylated, polypeptide chain containing 289 amino acids and having a total molecular mass of 32 kDa. The Stanniocalcin contains four extra residues which were used as a spacer and 8 residues form the C-Terminal Flag- tag. Stanniocalcin is purified by proprietary chromatographic techniques.

The amino acid sequence of the recombinant human Stanniocalcin-2 is 100% homologous to the amino acid sequence AA 25-302 of the human mature Human Stanniocalcin-2.

### Physical Appearance

White lyophilized (freeze-dried) powder.

### Purity

Greater than 90.0% as determined by:  
(a) Analysis by RP-HPLC.  
(b) Analysis by SDS-PAGE.

### Formulation

Filtered (0.4µm) and lyophilized in 0.5 mg/ml in 20mM Tris buffer, 20mM NaCl, pH 7.5.

### Stability

Lyophilized STC-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Stanniocalcin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### Sequence

TDATNPPEGP QDRSSQKGR LSLQNTAEIQ  
HCLVNAGDVG CGVFECFENN SCEIRGLHGI  
CMTFLHNAGKFDAQGKSFIL DALKCKAHAL  
RHRFGCISRK CPAIREMVSQ LQRECYLKHD  
LCAAQENTR VIVEMIHFKDLLLHEPYVDL  
VNLLTCGEE VKEAITHSVQ VQCEQNWGSL  
CSILSFCTSA IQKPPTAPPE  
RQPQVDRTKLSRAHHGEAGH HLPEPSSRET  
GRGAKGERGS KSHPNHARG RVGGLGAQGP  
SGSSEWEDEQ SEYSDIRRAAADYKDDDDK

**\* For Non-Clinical Research Use Only \***



# California Bioscience

---

83103 Avenue 48, Ste.1B #204  
Coachella, CA 92236 USA  
Phone : +1.6268339877  
Email : [info@cali-bio.com](mailto:info@cali-bio.com)

## Product Datasheet

**\* For Non-Clinical Research Use Only \***