



Recombinant Protein Technical Manual  
Recombinant Human SGK3/SGKL Protein (His & GST  
Tag)  
RPES0895

Product Data:

**Product SKU:** RPES0895

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** Q96BR1

Protein Information:

**Molecular Mass:** 85 kDa

**AP Molecular Mass:** 68 kDa

**Tag:** N-His & GST

**Bio-activity:**

**Purity:** > 80 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 20mM Tris, 500mM NaCl, 0.5mM PMSF, 10% gly, 1mM GSH, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** CISK;SGK2;SGKL

## Immunogen Information:

**Sequence:** Met 1-Leu 496

## Background:

Serine / threonine-protein kinase Sgk3, also known as Serum / glucocorticoid-regulated kinase 3, Serum / glucocorticoid-regulated kinase-like and SGK3, is a cytoplasmic vesicle protein which belongs to the protein kinase superfamily and AGC Ser/Thr protein kinase family. SGK3 contains one AGC-kinase C-terminal domain, one protein kinase domain and one PX (phox homology) domain. Two specific sites of SGK3, one in the kinase domain (Thr-320) and the other in the C-terminal regulatory region (Ser-486), is needed to be phosphorylated for its full activation. SGK3 is expressed in most tissues with highest levels in pancreas, kidney liver, heart and brain and lower levels in lung, placenta and skeletal muscle. SGK3 is involved in the activation of potassium channels. It mediates cell IL-3-dependent survival signals. SGK3 participates in the regulation of HERG by increasing HERG protein abundance in the plasma membrane and may thus modify the duration of the cardiac action potential. SGK3 is also a very important and characteristic molecule that plays a critical role in both hair follicle morphogenesis and hair cycling.