

## Recombinant Human Uteroglobin/SCGB1A1 Protein (His Tag)

Catalog No. PKSH031418

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

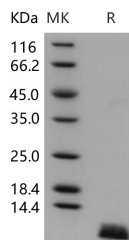
### Description

<b>Synonyms</b>	Uteroglobin;Clara cell phospholipid-binding protein;CCPBP;Clara cells 10 kDa secretory protein;CC10;Secretoglobin family 1A member 1;Urinary protein 1;UP-1;UP1;Urine protein 1;SCGB1A1;CCSP;UGB
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Asn 91
<b>Accession</b>	P11684
<b>Calculated Molecular Weight</b>	9.2 kDa
<b>Observed molecular weight</b>	9.2 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measured by the ability of the immobilized protein to support the adhesion of the A549 human lung carcinoma cell line. When $5 \times 10^4$ cells/well are added to human SCGB1A1 coated plates (2 µg/ml and 100 µl/well), approximately > 30% will adhere after one hour at 37 °C.

### Properties

<b>Purity</b>	> 97 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 97 % as determined by reducing SDS-PAGE.

### For Research Use Only

## Background

Uteroglobulin (UG); also known as Secretoglobin 1A member 1 (SCGB1A1); Blastokinin; Clara cell secretor protein (CCSP) or Clara cell-specific 10-kDa protein (CC10); is the founding member of the secretoglobulin family of small; secreted; disulfide-bridged dimeric proteins found only in mammals. This protein is mainly expressed in lung; with anti-inflammatory/immunomodulatory properties. Previous in vitro studies demonstrated that CCAAT/enhancer-binding proteins (C/EBPs) are the major transcription factors for the regulation of SCGB1A1 gene expression; whereas FOXA1 had a minimum effect on the transcription. Uteroglobulin is a multifunctional protein with antiinflammatory/immunomodulatory properties. Uteroglobulin inhibits soluble phospholipase A(2) activity and binds and perhaps sequesters hydrophobic ligands such as progesterone; retinols; polychlorinated biphenyls; phospholipids; and prostaglandins. In addition to its antiinflammatory activities; Uteroglobulin manifests antichemotactic; antiallergic; antitumorigenic; and embryonic growth-stimulatory activities. The tissue-specific expression of the Uteroglobulin gene is regulated by several steroid hormones; although a nonsteroid hormone; prolactin; further augments its expression in the uterus. Based on its anti-inflammatory and antiallergic properties; Uteroglobulin is a potential drug target. The mechanism of Uteroglobulin action is likely to be even more complex as it also functions via a putative receptor-mediated pathway.