

## 32-1705: SCGB1A1 Recombinant Protein

Alternative Name 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,CC16.

## Description

Source : Escherichia Coli. Uteroglobin Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 70 amino acids and having a molecular mass of 15.8kDa.The SCGB1A1 is purified by proprietary chromatographic techniques. Uteroglobin (SCGB1A1) which belongs to the Secretoglobin (SCGBs) superfamily, is a multifunctional protein that exerts anti-inflammatory and anti-tumorigenic effects by binding small hydrophobic molecules such as phospholipids and prostaglandins. Uteroglobin is involved in numerous functions including anti-inflammation, inhibition of phospholipase A2 and the sequestering of hydrophobic ligands. SCGB1A1 is expressed by Clara cells, the non-ciliated, non-mucous secretory cells predominant in lung bronchioles, and by other epithelia which communicate with the external environment. On top of sequestering pro-inflammatory mediators and carcinogens, Uteroglobin is implicated in the inhibition of cell migration and invasion, platelet aggregation, and T cell differentiation. SCGB1A1 gene defects are associated with a susceptibility to asthma.

## **Product Info**

Amount :	50 µg
Purification :	Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	The Uteroglobin protein was lyophilized from a 0.2 $\mu m$ filtered concentrated solution in PBS, pH 7.4.
Storage condition :	Lyophilized Uteroglobin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SCGB1A1 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.
Amino Acid :	EICPSFQRVI ETLLMDTPSS YEAAMELFSP DQDMREAGAQ LKKLVDTLPQ KPRESIIKLM EKIAQSSLCN.

## **Application Note**

It is recommended to reconstitute the lyophilized SCGB1A1 in sterile 18M-cm H2O not less than  $100\tilde{A} \Delta \mu g/ml$ , which can then be further diluted to other aqueous solutions. The ED50 as determined by the ability of the immobilized protein to support the adhesion of the A549 human lung carcinoma cells is less than  $5.0\tilde{A} \Delta \mu g/ml$ , corresponding to a specific activity of > 200 IU/mg.

