

Uteroglobin, human recombinant, His Tag (rhuUP1)

Catalog No: 99915 Lot No: XXXXX Source: *E. coli*

Synonyms: 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

Background

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.

Description

Uteroglobin Human Recombinant, produced in *E. coli*, is a single, non-glycosylated, polypeptide chain containing 80 amino acids and a 10 amino acid N-terminal His tag. The total molecular mass is 9.2 kDa (calculated).

Physical Appearance

Filtered, white lyophilized (freeze-dried) powder.

Formulation

Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 0.05 M phosphate buffer and 0.075 M NaCl, pH 7.4.

Solubility

It is recommended to add 200 μ l deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. SCGB1A1 is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Stability

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time. It does not show any change after two weeks at 4°C.

Amino Acid Sequence

MKHHHHHHAS EICPSFORVI ETLLMDTPSS YEAAMELFSP DODMREAGAQ LKKLVDTLPQ KPRESIIKLM EKIAQSSLCN

Usage

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