Recombinant Mouse Uteroglobin/SCGB1A1 Protein (His Tag)

Catalog Number: PKSM040754

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

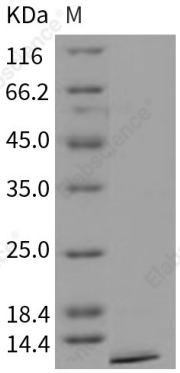
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse Uteroglobin/SCGB1A1 protein Met 1-Phe 96, with an C-terminal His
Calculated MW	9.8 kDa
Observed MW	12 kDa
Accession	Q06318
Bio-activity	Measured by the ability of the immobilized protein to support the adhesion of the A549 human lung carcinoma cell line. When 5 × 10^4 cells/well are added to SCGB1A1 coated plates (5 μg/ml with 100 μl/well), approximately > 40% will adhere after 1 hour at 37°C.

Properties

Purity	> 88% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 88 % as determined by reducing SDS-PAGE.

Background

Uteroglobin (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 secretoglobin 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. Uteroglobin is a multifunctional protein with antiinflammatory/immunomodulatory properties. Uteroglobin 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, Uteroglobin manifests antichemotactic, antiallergic, antitumorigenic, and embryonic growth-stimulatory activities. The tissue-specific expression of the Uteroglobin 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, Uteroglobin is a potential drug target. The mechanism of Uteroglobin action is likely to be even more complex as it also functions via a putative receptor-mediated pathway.

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