Recombinant Human Uteroglobin/SCGB1A1 Protein (His Tag)

Catalog Number: PKSH031418

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

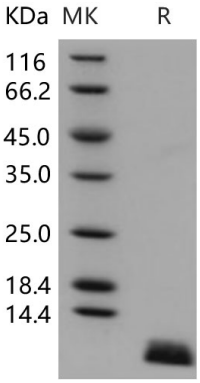
Description

Species	Human
Source	HEK293 Cells-derived Human Uteroglobin/SCGB1A1 protein Met 1-Asn 91, with an C-terminal His
Calculated MW	9.2 kDa
Observed MW	9.2 kDa
Accession	P11684
Bio-activity	Measured by the ability of the immobilized protein to support the adhesion of the A549 human lung carcinoma cell line. When 5 x 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 ℃.

Properties

Purity	> 97 % 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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



> 97 % 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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