

Recombinant Mouse Uteroglobin/SCGB1A1 protein (His Tag)

Catalog Number: PDMM100210

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

Description

Species	Mouse
Source	HEK293 Cells-derived Mouse Uteroglobin protein Met1-Phe96, with an C-terminal His
Calculated MW	10.5 kDa
Observed MW	10 kDa
Accession	Q06318
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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 a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Background

Uteroglobin(UG, SCGB1A1) 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. 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 anti-inflammatory/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 anti-inflammatory activities, Uteroglobin manifests antichemotactic, antiallergic, antitumorigenic, and embryonic growth-stimulatory activities. 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.