

Recombinant Human CC16 protein (His Tag)

Catalog Number: PDMH100049

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

Description

Species	Human
Source	HEK293 Cells-derived Human Uteroglobin; SCGB1A1 protein Glu22-Asn91, with an C-terminal His
Mol_Mass	9.9 kDa
Accession	P11684
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 is a small, non-glycosylated secreted protein of the secretoglobin superfamily. It is produced by the non-ciliated, non-mucous secretory cells that predominate in lung bronchioles (Clara cells), and other non-ciliated epithelia that communicate with the external environment. Expression is induced by steroid hormones such as estrogen, and enhanced by the non-steroid hormone prolactin. Human Uteroglobin cDNA encodes a 21 amino acid (aa) signal sequence and a 70 aa mature protein. The mature protein forms a disulfide-linked head-to-tail homodimer of 16 kDa. This homodimer is thought to form a binding pocket that binds hydrophobic ligands such as phospholipids, progesterone and retinols. Binding of fibronectin to Uteroglobin in the kidney is thought to protect against nephropathy, while binding of the lipocalin-1 receptor has been reported to suppress cancer cell motility and invasion.