Recombinant Human Betacellulin/BTC Protein(Sumo Tag)

Catalog Number: PDEH100599

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

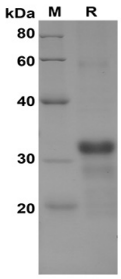
Description

Species	Human
Source	E.coli-derived Human Betacellulin/BTC protein Asp32-Tyr111, with an N-terminal Sumo
Calculated MW	21.7 kDa
Observed MW	32 kDa
Accession	P35070
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 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 ℃. 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 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.

Data



SDS-PAGE analysis of Human Betacellulin/BTC proteins, 2 μg/lane of Recombinant Human Betacellulin/BTC proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 32 KD

Background

Betacellulin(Betacellulin/BTC) is a member of the epidermal growth factor (EGF) family. These soluble proteins are ligands for one or more of the four receptor tyrosine kinases encoded by the ErbB gene family (ErbB-1/epidermal growth factor receptor (EGFR), neu/ErbB-2/HER2, ErbB-3/HER3 and ErbB-4/HER4). Betacellulin is a 32-kilodalton glycoprotein that appears to be processed from a larger transmembrane precursor by proteolytic cleavage. This protein is a ligand for the EGF receptor. Betacellulin/BTC is a polymer of about 62-111 amino acid residues. Secondary Structure: 6% helical (1 helices, 3 residues)36% beta sheet (5 strands, 18 residues). Betacellulin/BTC was originally identified as a growth-promoting factor in mouse pancreatic β-cell carcinoma cell line and has since been identified in humans. It plays a role in the growth and development of the neonate and/or mammary gland function. Betacellulin is a potent mitogen for retinal pigment epithelial cells and vascular smooth muscle cells.