

Betacellulin (BTC), Mouse

Cat.no. PK0216

Product size: 10ug 50ug 1mg

Source: E. coli

Species: Mouse

Biological Activity: ED50 <0.5ng/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of >2×10⁶ units/mg.

Molecular Weight: 9.2 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 50mM Tris, 300mM NaCl, pH9.0.

Reconstitution: Reconstituted in ddH₂O at 100 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant mouse Betacellulin (rmBetacellulin) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmBetacellulin remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.

Description: Betacellulin is a pleiotropic cytokine that belongs to the Epidermal Growth Factor (EGF) family. Like other members of the EGF family, Betacellulin possesses a conserved sequence of 35-40 amino acids which contain 3 disulfide bonds formed by 6 cysteines. Betacellulin is unique in the EGF family since it can bind and activate a broad spectrum of ErbB receptors. Functionally, Betacellulin plays a role in the development of the pancreas by activating signaling pathways beneficial for the function, survival and regeneration of pancreatic β-cells. Additionally, Betacellulin has potential angiogenic activities and is important for the growth, development and repair of certain tissues. Recombinant mouse Betacellulin (rmBetacellulin) produced in E. coli is a single non-glycosylated polypeptide chain containing 81 amino acids.

Amino Acid Sequence:

00001 MDGNTTTRTPE TNGSLCGAPG ENCTGTTPRQ KVKTHFSRCP

00041 KQYKHYCIHG RCRFVVDEQT PSCICEKGYF GARCERVDLF

00081 Y

Synonyms: Betacellulin, BTC

Note: For research use only, not for use in diagnostic procedure.