

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Betacellulin, Mouse

Catalog Number: BK0009-50µg

Source: Escherichia coli.

Quantity: 50µg

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. A fully biologically active molecule, rmBetacellulin has a molecular mass of 9.2 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

9.2 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE analysis.

Biological Activity:

ED50 <0.5ng/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of $>2 \times 10^6$ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

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

AA Sequence:

MDGNTTRTPETNGSLCGAPGENC-
TGTTPRQKVKTHFSRCPKQYKHY-
CIHGRCRFVVDEQTPSCICEKGYFGARCER-
VDLFY

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 µg/mL.

Storage:

Lyophilized recombinant mouse Betacellulin (rmBetacellulin) remains stable up to 6 months at -80 °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.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.