

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant Betacellulin, Human

Catalog Number: BK0008-10µg

Source: Escherichia coli.

Quantity: 10µg

### Description:

Betacellulin (BTC) is a member of the EGF family of growth factors that also includes EGF, TGF- $\alpha$ , Amphiregulin, HB-EGF, Epiregulin, Tomoregulin, Heregulin and Neuregulins. Mature human BTC protein exhibits 80% amino acid similarity with mouse BTC protein. BTC is expressed in most tissues including kidney, uterus, liver and pancreas. It is also present in body fluids, including serum, milk, and colostrum. It is synthesized primarily as a transmembrane precursor, which is then processed to a mature molecule by proteolytic events. BTC signals through the EGF receptor. Recombinant Human Betacellulin (BTC) produced in E. coli is a single non-glycosylated polypeptide chain containing 81 amino acids. A fully biologically active molecule, rhBTC has a molecular mass of 15 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Molecular Weight:

15 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

The ED50 was determined by the dose-dependent stimulation of the proliferation of murine Balb/3T3 cells is < 0.01 ng/ml, corresponding to a specific activity of >1 x 10<sup>8</sup> units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

MDGNSTRSPETNGLLCGDPEEN-  
CAATTTQSKRKGHFSRCPKQYKHY-  
CIKGRCRFVVAEQTPSCVCEGYIGARCER-  
VDLFY

### Endotoxin:

< 0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

### Storage:

Lyophilized recombinant human Betacellulin (BTC) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, human Betacellulin (BTC) should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

### Usage:

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