

DATASHEET
Version 20181206**Betacellulin, Human****Cat. No.:** Z03244-1**Size:** 1.0 mg**Synonyms:** BTC**Description:**

Betacellulin (BTC) is a member of the EGF family of growth factors that also includes EGF, TGF- α , 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.

Amino Acid Sequence:

00001 MDGNSTRSPE TNGLLCGDPE ENCAATTTQS KRKGHFSRCP
00041 KQYKHYCIKG RCRFVVAEQT PSCVCDEGYI GARCERVDLF
00081 Y

Source: *E. coli***Species:** Human

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 10⁸ units/mg.

Molecular Weight: 15 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 μ g/ml.

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

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

Storage: Lyophilized recombinant human Betacellulin (BTC) remains stable up to 6 months at lower than -70°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.