

## Betacellulin, Human

**Cat. No.:** Z02749-20

**Size:** 20.0 ug

**Synonyms:** Betacellulin (BTC), Human;

### Description:

Betacellulin (BTC) is a member of the EGF family of cytokines that also includes EGF, TGF- $\alpha$ , Amphiregulin, HB-EGF, Epiregulin, Tomoregulin and the Neuregulins. At the amino acid sequence level, human mature BTC protein exhibits 80% identity 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.

### Amino Acid Sequence:

00001 DGNSTRSPET NLLCGDPEE NCAATTTQSK RKGHFSRCPK  
00041 QYKHYCIKGR CRFVVAEQTP SCVCDEGYIG ARCERVDLFY  
00081

**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  $0.05 \text{ ng/ml}$ , corresponding to a specific activity of  $2.0 \times 10^7 \text{ units/mg}$ .

**Molecular Weight:** Recombinant human Betacellulin is a 9.0 kDa monomeric protein, containing 80 amino residues, which comprises the mature EGF homologous portion of the Betacellulin protein.

**Formulation:** Lyophilized from a  $0.2 \text{ mg/ml}$  filtered concentrated solution in PBS, pH 7.4.

**Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at  $-20 \text{ }^\circ\text{C}$ . Further dilutions should be made in appropriate buffered solutions.

**Purity:**  $>98\%$  by SDS-PAGE and HPLC analyses.

**Endotoxin Level:** Less than 0.2EU/ug of rHuBetacellulin as determined by LAL method.

**Storage:** This lyophilized preparation is stable at 2-8  $^\circ\text{C}$ , but should be kept at  $-20 \text{ }^\circ\text{C}$  for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8  $^\circ\text{C}$ . For maximal stability, apportion the reconstituted preparation into working aliquots and store at  $-20 \text{ }^\circ\text{C}$  to  $-70 \text{ }^\circ\text{C}$ . Avoid repeated freeze/thaw cycles.