

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- α , 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 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 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.