



## Technical Data Sheet

### Recombinant Human Betacellulin (rHu BTC)

#### **Recombinant Human Betacellulin**

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.

<b>Catalog Number:</b>	RC218-23
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	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.
<b>Quantity:</b>	5 $\mu$ g/20 $\mu$ g/1mg
<b>Purity:</b>	>98% by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	The ED <sub>50</sub> was determined by the dose-dependent stimulation of the proliferation of murine Balb/3T3 cells is $\leq 0.05$ ng/ml, corresponding to a specific activity of $\geq 2 \times 10^7$ units/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 $\mu$ m filtered concentrated (1mg/ml) solution in PBS, pH 7.4.
<b>AA Sequence:</b>	DGNSTRSPET NGLLCGDPEE NCAATTTQSK RKGHFSRCPK QYKHYCIKGR CRFVVAEQTP SCVCDEGYIG ARCERVDLFY
<b>Endotoxin:</b>	Less than 1EU/ $\mu$ g of rHuBetacellulin as determined by LAL method.
<b>Reconstitution:</b>	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 $\leq -20^\circ\text{C}$ . Further dilutions should be made in appropriate buffered solutions.
<b>Storage:</b>	This lyophilized preparation is stable at 2-8 $^\circ\text{C}$ , but should be kept at -20 $^\circ\text{C}$ 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 $^\circ\text{C}$ to -70 $^\circ\text{C}$ . <b>Avoid repeated freeze/thaw cycles.</b>
<b>Usage:</b>	This material is offered by Bio Basic Inc. for research, laboratory or further



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