

## PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	107-12
<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>	5µg/20µg/1000µg
<b>AA Sequence:</b>	DGNSTRSPET NGLLCGDPEE NCAATTTQSK RKGHFSRCPK QYKHYCIKGR CRFVVAEQTP SCVCDEGYIG ARCERVDLFY
<b>Purity:</b>	> 98 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>7</sup> IU/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
<b>Endotoxin:</b>	Less than 1 EU/µg of rHuBTC 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 ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### **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. It is expressed in most tissues including kidney, uterus, liver and pancreas. BTC also presents in body fluids, including serum, milk, and colostrum. At the amino acid sequence level, human mature BTC protein exhibits 80 % identity with mouse BTC protein. The protein binds to EGFR, ERBB4 and other EGF receptor family members and acts as a potent mitogen for retinal pigment epithelial cells and vascular smooth muscle cells.