

# Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

BTC (Betacellulin) is an EGF related growth factor containing 6 conserved cysteine residues, which form 3 intramolecular disulfide bonds essential for biological activity. It was originally isolated from the MCF-7 human breast carcinoma cell line and it is expressed in most tissues including kidney, uterus, liver and pancreas. BTC is also present in body fluids, including serum, milk, and colostrum. BTC is a ligand for the receptors erbB1 and erbB4. It is synthesized as a transmembrane protein and the ectodomain is cleaved by a protease to release the mature protein. BTC exhibits mitogenic activity for retinal pigment epithelial cells and vascular smooth muscle cells. It also exhibits growth-promoting activity that is similar to that of EGF.

<b>Catalog Number</b>	<b>1170-12</b>
<b>Product Name</b>	<b>BTC, Human</b> Recombinant Human Betacellulin (BTC) BCN
<b>Source</b>	<i>Escherichia coli</i>
<b>MW</b>	~9.0 kDa (80 amino acids)
<b>Sequence</b>	DGNSTRSPET NGLLCGDPEE NCAATTQSK RKGHFSRCPK QYKHYCIKGR CRFVVAEQTP SCVCDEGYIG ARCERVDLFY
<b>Accession Number</b>	<a href="#">P35070</a>
<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 $>2.0 \times 10^7$ IU/mg.
<b>Formulation</b>	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
<b>Storage/Handling</b>	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
<b>Reconstitution</b>	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.