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BTC
Recombinant Bovine Betacellulin

Catalog No.	ARU100	**Quantity:**	100 µg

Alternate Names: BTC

Description: Bovine Betacellulin (BTC), a member of the EGF family, is an 80 amino acid heparin-binding protein. Like other members of the EGF family, it is synthesized as a transmembrane precursor, probetacellulin. The soluble cytokine, containing one EGF structural motif, is released by proteolytic cleavage. BTC can bind to the EGF receptor (ErbB-1) which then dimerizes with another member of the ErbB receptor family to signal through the tyrosine kinase pathway. BTC is a potent mitogen for Balb/c 3T3 fibroblasts, retinal pigment epithelial cells and vascular smooth muscle cells and is the only member of the EGF family to stimulate insulin secretion in pancreatic beta cells.
This product is a mixture of [Gly1] bovine betacellulin (50%) and Des [1-4] bovine betacellulin (50%).

UniProt ID: Q9TTC5

Source: Expressed in E. *coli*

Molecular Weight: Theoretical MW: 8995 Daltons
Actual MW: 50% [Gly^{1}] BTC (9.052 kDa) and 50% Des(1-4) BTC (8.709 kDa) as determined by mass spectroscopy

Formulation: Lyophilized from 0.05 M acetic acid/0.05% (v/v) TFA and stored under dry nitrogen at a slight vacuum (-25 kPa).

Purity: > 95% bovine betacellulin, comprising an equal mixture of [Gly^{1}] betacellulin and Des(1-4) betacellulin as determined by N-terminal sequencing.

Endotoxin Level: < 0.1 EU/µg

N-terminal Sequence: Analysis of 5 residues demonstrating and equal mixture of [Gly1] bovine betacellulin (50%) and Des [1-4] bovine betacellulin

Biological Activity: ED_{50} < 10 ng/ml, determined by proliferation of Balb/c 3T3 fibroblasts

Reconstitution: See Protocol 1500 attached

Storage & Stability: Store as supplied for up to 1 year at 2-8°C

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