

# GroPep Bioreagents

## Bovine Betacellulin

### 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. 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 [Gly<sup>1</sup>] bovine betacellulin (50%) and Des [1-4] bovine betacellulin (50%).**

### References

Pinkas-Kramarski R *et al* (1998) *Oncogene* **16**, 1249-1258  
Dunbar AJ & Goddard C (2000) *International Journal of Biochemistry and Cell Biology* **32**, 805-815.

### Source:

Produced in *E.coli*.

### Molecular Weight:

Theoretical molecular weight is 8995 daltons.  
Actual mass is 9052 daltons and 8709 daltons

### Purity:

>95 % of the two bovine betacellulin variants (by SDS-PAGE)

### N-terminal sequence:

Analysis of 5 residues demonstrating an equal mixture of [Gly<sup>1</sup>] bovine betacellulin (50%) and Des [1-4] bovine betacellulin

### Biological Activity:

Stimulation of cell growth in Balb/c 3T3 fibroblasts  
(ED<sub>50</sub> < 10 ng/ml)

### Endotoxin:

< 0.1 EU/μg

### Appearance:

White powder freeze-dried from 0.05M acetic acid/0.05% (v/v) trifluoroacetic acid and stored under nitrogen at a slight vacuum.

### Storage/Stability:

At least 2 years at 2-4°C (as a freeze dried product).

### Reconstitution:

*Handling of EGF, TGF-α and Betacellulin*

### Product Codes and Pricing

#### Bovine betacellulin

100 μg

ARU100

### Related Products:

Bovine betacellulin antiserum (Rabbit)

**\*\*NOT FOR USE IN HUMANS\*\***

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