



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 [Gly¹] 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 [Gly¹] bovine betacellulin (50%) and Des [1-4] bovine betacellulin

Biological Activity:

Stimulation of cell growth in Balb/c 3T3 fibroblasts
(ED₅₀ < 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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