

**Betacellulin Human Recombinant**

Catalogue Number	IY-330
Introduction	Btc is a potent mitogen for retinal pigment epithelial cells and vascular smooth muscle cells. The effects of betacellulin are probably mediated by the egf receptor and other related receptors.
Patent Rights	The sale and/or commercial use of Recombinant Adiponectin is prohibited in the United States of America (U.S.A).
Description	Betacellulin Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 80 amino acids and having a molecular mass of 9 kDa. Betacellulin Human Recombinant is purified by proprietary chromatographic techniques.
Source	Escherichia Coli.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	The Betacellulin Human Recombinant was lyophilized after extensive dialysis against 20mM phosphate buffer pH-7.4.
Solubility	It is recommended to reconstitute the lyophilized BTC Human in sterile 18MΩ-cm H <sub>2</sub> O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Stability	Lyophilized Betacellulin Human Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BTC Human should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). <b>Please prevent freeze-thaw cycles.</b>
Purity	Greater than 97.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Amino acid sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Asp-Gly-Asn-Ser-Thr.
Biological Activity	The ED <sub>50</sub> , calculated by the dose-dependant proliferation of murine BALB\c 3T3 cells (measured by 3H-thymidine uptake) is < 0.05 ng/ml. corresponding to a Specific Activity of >20,000,000IU/mg.
Protein content	Protein quantitation was carried out by two independent methods 1. UV spectroscopy at 280 nm using the absorbency value of 0.69 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a calibrated solution of BTC as a Reference Standard.

Usage	Products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.
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