

Betacellulin Protein, Human

Cat. No.:	HY-P7005
Synonyms:	rHuBetacellulin; Probetacellulin; BTC
Species:	Human
Source:	E. coli
Accession:	P35070 (D32-Y111)
Gene ID:	685
Molecular Weight:	Approximately 15 kDa

PROPERTIES

AA Sequence	D G N S T R S P E T N G L L C G D P E E N C A A T T T Q S K R K G H F S R C P K Q Y K H Y C I K G R C R F V V A E Q T P S C V C D E G Y I G A R C E R V D L F Y
Biological Activity	The ED ₅₀ is <0.01 ng/mL as measured by murine Balb/3T3 cells, corresponding to a specific activity of >1.0 × 10 ⁸ units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against PBS.
Endotoxin Level	<0.2 EU/μg of protein by gel clotting method
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Betacellulin (BTC), a member of the epidermal growth factor family, is expressed predominantly in the human pancreas and induces the differentiation of a pancreatic acinar cell line (AR42J) into insulin-secreting cells. Betacellulin binds and activates the EGF receptor (EGFR/erbB-1) and erbB-4, and it induces tyrosine phosphorylation of erbB-2, which couples with the EGFR or erbB-4 ^[1] .
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REFERENCES

[1]. Yamamoto K, et al. Recombinant human betacellulin promotes the neogenesis of beta-cells and ameliorates glucose intolerance in mice with diabetes induced by selective alloxan perfusion. *Diabetes*. 2000 Dec;49(12):2021-7.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA