

Recombinant Human Betacellulin

#R00168

Size: 5 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Betacellulin (BTC) is a member of the EGF family of cytokines that also includes EGF, TGF- α , Amphiregulin, HB-EGF, Epiregulin, Tomoregulin and the Neuregulins. It is expressed in most tissues including kidney, uterus, liver and pancreas. BTC also presents in body fluids, including serum, milk, and colostrum. At the amino acid sequence level, human mature BTC protein exhibits 80 % identity with mouse BTC protein. The protein binds to EGFR, ERBB4 and other EGF receptor family members and acts as a potent mitogen for retinal pigment epithelial cells and vascular smooth muscle cells.

AA Sequence

DGNSTRSPETNGLLCGDPEENCAATTTQSKRKGHFS
RCPKQYKHYCIKGRCRFVVAEQTPSCVCDEGYIGAR
CERVDLFY

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Accession	P35070
GeneID	685
Species	Human
Source	Escherichia coli.
Molecular Weight	Recombinant human Betacellulin is a 9.0 kDa monomeric protein, containing 80 amino residues, which comprises the mature EGF homologous portion of the Betacellulin protein.
Purity	> 98 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 0.05

ng/ml, corresponding to a specific activity of $> 2.0 \times 10^7$ IU/mg.

Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/ μ g of rHuBTC as determined by LAL method.
