

Recombinant Murine Betacellulin

#R00276

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) encoded by the BTC gene located on the chromosome 4, is a member of the EGF family of cytokines that also includes EGF, TGF- α , Amphiregulin, HB-EGF, Epiregulin, Tomoregulin and the Neuregulins. BTC is expressed in most tissues including kidney, uterus, liver and pancreas. It is also present in body fluids, including serum, milk, and colostrum. Mouse BTC is expressed as a 178-amino acid precursor and the amino acid sequence of the mature form is 80% identical with human BTC. Both human and mouse BTC exhibit significant overall similarity with other members of the EGF family. Recombinant murine beta-cellulin is a heparinbinding protein containing 80 amino acids residues.

AA Sequence

DGNTTTRTPETNGSLCGAPGENCTGTTPRQKVKTHFS
RCPKQYKHYCIHGRCRFVWDEQTPSCICEKGYFGAR

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

Synonyms

Accession	Q05928
GeneID	12223
Species	Murine
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	> 96 % 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 0.01 ng/ml, corresponding to a specific activity of $> 1.0 \times 10^8$ IU/mg.

Physical Appearance Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation Lyophilized from a 0.2 μm filtered concentrated solution in $2 \times \text{PBS}$, pH 7.4.

Endotoxin Less than 1 EU/ μg of rMuBetacellulin as determined by LAL method.
