

## Recombinant Murine Betacellulin (rMuBetacellulin)

## **ChemWhat Technical Data Sheet (TDS)**

Catalog Number:	127-12
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.
Quantity:	5µg/20µg/1000µg
AA Sequence:	DGNTTRTPET NGSLCGAPGE NCTGTTPRQK VKTHFSRCPK QYKHYCIHGR CRFVVDEQTP
	SCICEKGYFG ARCERVDLFY
Purity:	> 96 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> 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 >
	$1.0 \times 10^8  \text{IU/mg}.$
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in 2 $\times$ PBS, pH 7.4.
Endotoxin:	Less than 1 EU/µg of rMuBetacellulin as determined by LAL method.
<b>Reconstitution:</b>	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 $\mathbb C$ . Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature
	recommended below.
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.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further
	evaluation purposes. NOT FOR HUMAN USE.

## Murine Betacellulin

Betacellulin (BTC) encoded by the BTC gene located on the chromosome 4, is a member of the EGF family that also includes EGF, TGF-alpha, 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 Betacellulin is a heparin binding protein containing 80 amino acids residues.