

Betacellulin

Catalog # PVGS1445

Specification

Betacellulin - Product Information

Primary Accession **Species** Human

Sequence Asp32-Tyr111, expressed with an N-terminal Met

Purity > 95% as analyzed by SDS-PAGE

Endotoxin Level < 0.2 EU/ μg of protein by gel clotting method

Biological Activity

The ED₅₀ was determined by the dose-dependent stimulation of the proliferation of murine Balb/3T3 cells is < 0.01 ng/ml, corresponding to a specific activity of >1.0 x 10⁸ units/mg.

P35070

Expression System E. coli

Formulation

Reconstitution

Lyophilized after extensive dialysis against PBS.

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 µg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Betacellulin - Additional Information

Gene ID 685

Other Names Probetacellulin, Betacellulin, BTC, BTC

Target Background

Betacellulin (BTC) is a member of the EGF family of growth factors that also includes EGF, TGF- α , Amphiregulin, HB-EGF, Epiregulin, Tomoregulin, Heregulin and Neuregulins. Mature human BTC protein exhibits 80% amino acidsimilarity with mouse BTC protein. BTC is expressed in most



tissues including kidney, uterus, liver and pancreas. It is also present in body fluids, including serum, milk, and colostrum. It is synthesized primarily as a transmembrane precursor, which is then processed to a mature molecule by proteolytic events. BTC signals through the EGF receptor.

Betacellulin - Protein Information

Name BTC

Function

Growth factor that binds to EGFR, ERBB4 and other EGF receptor family members. Potent mitogen for retinal pigment epithelial cells and vascular smooth muscle cells.

Cellular Location [Betacellulin]: Secreted, extracellular space.

Tissue Location

Synthesized in several tissues and tumor cells. Predominantly expressed in pancreas and small intestine

Betacellulin - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **Betacellulin Images**