Datasheet

Cat. No. P1308

Recombinant Human Betacellulin

Information

Gene ID	685
Accession #	P35070
Alternate Names	
Source	Escherichia coli.
M.Wt	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.
AA Sequence	DGNSTRSPET NGLLCGDPEE NCAATTTQSK RKGHFSRCPK QYKHYCIKGR CRFVVAEQTP SCVCDEGYIG ARCERVDLFY
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
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 ⩽ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Fully biologically active when compared to standard. The ED 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 × 10 IU/mg.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5μg	100μg	500μg
Recombinant Human Betacellulin	5μg	100μg	500μg

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

Quality Control

Purity	> 98 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rHuBTC as determined by LAL method.

Description

Betacellulin (BTC) is a member of the EGF family of cytokines that also includes EGF, TGF-a, 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.

Reference

1. Pinkas-Kramarski R, Lenferink AE, Bacus SS, et al. 1998. Oncogene, 16: 1249-58
2. Dunbar AJandGoddard C. 2000. Int J Biochem Cell Biol, 32: 805-15
3. Mifune M, Ohtsu H, Suzuki H, et al. 2004. Am J Physiol Cell Physiol, 287: C807-13
4. Schneider MR, Mayer-Roenne B, Dahlhoff M, et al. 2009. J Bone Miner Res, 24: 455-67.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com