Datasheet

Cat. No. P1358

Recombinant Murine Betacellulin

Information

Gene ID	12223
Accession #	Q05928
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	DGNTTRTPET NGSLCGAPGE NCTGTTPRQK VKTHFSRCPK QYKHYCIHGR CRFVVDEQTP SCICEKGYFG 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 2 × 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 0.01 ng/ml, corresponding to a specific activity of > 1.0 × 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 Murine 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	> 96 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rMuBetacellulin as determined by LAL method.

Description

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-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 beta-cellulin is a heparinbinding protein containing 80 amino acids residues.

Reference

1. Miura K, Doura H, Aizawa T, et al. 2002. Biochem Biophys Res Commun. 294:1040-6
2. Kim HS, Shin HS, Kwak HJ, et al. 2003. FASEB J. 17:318-20
3. Nakagawa T, Furuta H, Sanke T, et al. 2005. Diabetes Res Clin Pract. 68:188-92.

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