

Synonym

betacellulin,BTC

Source

Human Betacellulin, Fc Tag (BEN-H525x) is expressed from human 293 cells (HEK293). It contains AA Asp 32 - Tyr 111 (Accession # [AAH11618](#)).

Predicted N-terminus: Asp 32

Molecular Characterization

Betacellulin(Asp 32 - Tyr 111) AAH11618	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 35.8 kDa. The protein migrates as 45-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>92% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

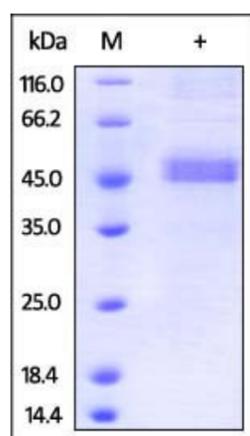
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human Betacellulin, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 92%.

Background

Probetacellulin can be cleaved into the Betacellulin (BTC) that is a single-pass type I membrane protein containing 1 EGF-like domain. Predominantly expressed in pancreas and small intestine, Betacellulin (BTC) is synthesized primarily as a transmembrane precursor, which is then processed to mature molecule by proteolytic events. As a potent mitogen for retinal pigment epithelial cells and vascular smooth muscle cells, Betacellulin (BTC) is also the growth factor that binds to EGFR, ERBB4 and other EGF receptor family members. Betacellulin (BTC) was originally identified as a growth-promoting factor in mouse pancreatic β-cell carcinoma cell line and has since been identified in humans. The amino acid sequence of mature mBTC is 82.5%, identical with that of human BTC (hBTC), and both exhibit significant overall similarity with other members of the EGF family.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.