

## Recombinant Mouse Betacellulin/BTC Protein (His Tag)

**Catalog No.** PKSM040967

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

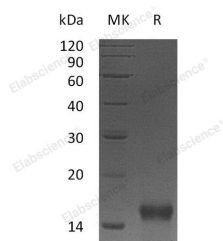
### Description

<b>Synonyms</b>	Btc;Betacellulin;Betacellulin;epidermal growth factor family member;Betacellulin;epidermal growth factor family member;isoform CRA_a;mCG_12529
<b>Species</b>	Mouse
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Asp32-Gln118
<b>Accession</b>	Q543J8
<b>Calculated Molecular Weight</b>	12.2 kDa
<b>Observed molecular weight</b>	16 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

Mouse Betacellulin is a single type I membrane protein which belongs to the EGF family of cytokines. EGF family has many members including EGF, TGF- $\alpha$ , Amphiregulin, HB-EGF, Epiregulin, Tomoregulin and the Neuregulins. Betacellulin is characterised by a six-cysteine consensus motif that forms three intra-molecular disulfide bonds crucial for binding the ErbB receptor family. Betacellulin is expressed in several tissues and tumor cells including kidney, uterus, liver, pancreas and small intestine. Betacellulin binds and activates ErbB-1 and ErbB-4 homodimers. Betacellulin is thought to play a role in the differentiation of pancreatic beta cells. Human and mouse mature BTC protein are 80% identical at the amino acid sequence level. Betacellulin is involved in many biological processes such as stimulating gastrointestinal growth. It is proteolytically processed from a larger membrane-anchored precursor and is a potent mitogen for a wide variety of cell types.