

Recombinant Protein Technical Manual Recombinant Mouse Betacellulin/BTC Protein (His Tag) RPES4889

Product Data:

Product SKU: RPES4889 **Size:** 10μg

Species: Mouse Expression host: E. coli

Uniprot: Q543J8

Protein Information:

Molecular Mass: 12.2 kDa

AP Molecular Mass: 16 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Btc;Betacellulin;Betacellulin; epidermal growth factor family member;Betacellulin;

epidermal growth factor family member; isoform CRA_a;mCG_12529

Immunogen Information:

Sequence: Asp32-Gln118

Background:

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-a, 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 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.