



Recombinant Protein Technical Manual

Recombinant Human TGFBR3/Betaglycan Protein (His Tag) RPES2947

Product Data:

Product SKU: RPES2947

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q03167

Protein Information:

Molecular Mass: 87.8 kDa

AP Molecular Mass: 88 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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 sterile 20 mM Tris, 500 mM NaCl, pH 7.4

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

Application:

Synonyms: betaglycan;BGCAN

Immunogen Information:

Sequence: Met 1-Gly781

Background:

Betaglycan also known as transforming growth factor beta receptor III (TGFBR3), is a cell-surface chondroitin sulfate / heparan sulfate proteoglycan. TGFBR3 is a transforming growth factor (TGF)-beta type III receptor. This receptor is a membrane proteoglycan that often functions as a co-receptor with other TGF-beta receptor superfamily members. Ectodomain shedding produces soluble TGFBR3, which may inhibit TGFβ signaling. Decreased expression of this receptor has been observed in various cancers. TGFBR3 is the TGF-β component most commonly downregulated among localized human prostate cancer studies. TGFBR3 knockdown led to focus formation and enhanced expression of CD133, a marker found on prostate cancer stem cells. TGFBR3 is an accessory receptor that binds to and modulates the activities of both transforming growth factor-beta (TGFβ) and inhibin, two members of the TGFβ superfamily of growth factors that regulate many aspects of reproductive biology. TGFBR3 is known to be expressed in adult testis and ovary, but little is known about this receptor during gonadogenesis.