

## Recombinant Human TGFBR3/Betaglycan Protein (His Tag)

**Catalog Number:** PKSH031430

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

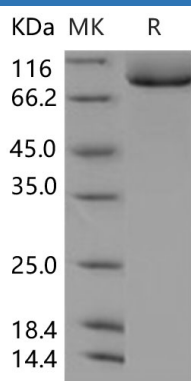
### Description

<b>Species</b>	Human
<b>Source</b>	Baculovirus-Insect Cells-derived Human TGFBR3/Betaglycan protein Met 1-Gly781, with an C-terminal His
<b>Calculated MW</b>	87.8 kDa
<b>Observed MW</b>	88 kDa
<b>Accession</b>	Q03167-1
<b>Bio-activity</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 sterile 20 mM Tris, 500 mM NaCl, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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

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