

Recombinant Rat TGFBR2 Protein (Fc Tag)

Catalog No. PKSR030350

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

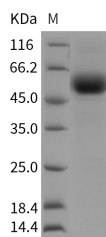
Description

Synonyms	TGFBR2
Species	Rat
Expression Host	HEK293 Cells
Sequence	Met1-Gln166
Accession	P38438
Calculated Molecular Weight	43.0 kDa
Observed molecular weight	54 kDa
Tag	C-hFc
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 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.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

TGFBR2 is member of the Ser/Thr protein kinase family and the TGFB receptor subfamily. It is a transmembrane protein. TGFBR2 is comprised by a C-terminal protein kinase domain and an N-terminal ectodomain. The ectodomain

For Research Use Only

consists of a compact fold containing nine beta-strands and a single helix stabilised by a network of six intra strand disulphide bonds. The folding topology includes a central five-stranded antiparallel beta-sheet, eight-residues long at its centre, covered by a second layer consisting of two segments of two-stranded antiparallel beta-sheets. TGFBR2 has a protein kinase domain, forms a heterodimeric complex with another receptor protein, and binds TGF-beta. This receptor/ligand complex phosphorylates proteins, which then enter the nucleus and regulate the transcription of a subset of genes related to cell proliferation. Mutations in TGFBR2 gene have been associated with Marfan syndrome, Loeys-Deitz Aortic Aneurysm Syndrome, and the development of various types of tumors. TGFBR2 attenuates the biological activities of TGF-beta in colorectal cancer. TGFBR2 expression is increased in oral squamous cell carcinoma cells. Its expression is decreased by IL-1beta while inducing Sp3 via NFkappaB. TGFBR2 and TGFBR2 are involved in the antiestrogenic activity.