## **Elabscience**®

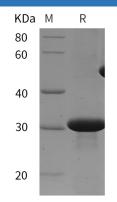
## Recombinant Mouse TGFBR2 protein (His Tag)

## Catalog Number: PDEM100290

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

Description	
Species	Mouse
Source	E.coli-derived Mouse TGFBR2 protein Asp371-Lys592, with an N-terminal His
Calculated MW	24.3 kDa
Observed MW	32 kDa
Accession	Q62312
Bio-activity	Not validated for activity
Properties	
Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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 a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.





> 95 % as determined by reducing SDS-PAGE.

## Background

Transforming growth factor- $\beta$  (TGF- $\beta$ ) is an essential regulator in the processes of development, cell proliferation, and extracellular matrix deposition. TGF- $\beta$  regulates cellular processes by binding to three high-affinity cell surface receptors: TGF- $\beta$  receptor type I (TGF- $\beta$ -RI), TGF- $\beta$  receptor type II (TGF- $\beta$ -RII), and TGF- $\beta\beta$  receptor type III (TGF- $\beta$ -RIII). TGF- $\beta$ RII is consists of a C-terminal protein kinase domain and an N-terminal ectodomain and belongs to transforming growth factor-beta (TGF- $\beta$ ) receptor subfamily. TGF- $\beta$  RII has a protein kinase domain which can form a heterodimeric complex with another receptor protein and bind TGF-beta. This receptor/ligand complex phosphorylates protein will enter the nucleus and regulate the transcription of a subset of genes related to cell proliferation.