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# Product Information

**TGFβR1 (80-end), GST-tagged, human recombinant, expressed in *Sf*9 cells**

Catalog Number **SRP5145**
Storage Temperature –70 °C

Synonyms: ST AAT5, ALK5, SKR4, ALK-5, TGFR-1, ACVRLK4

## Product Description

TGFβR1 is a transmembrane serine/threonine protein kinase and a member of the TGFβ receptor subfamily.[1] TGFβ regulates cell cycle progression by a unique signaling mechanism that involves its binding to TGFβR2 and activation of TGFβR1. TGFβR1 may be inactivated in many of the cases of human tumor cells refractory to TGFβ-mediated cell cycle arrest. Heterozygous mutations in TGFβR1 and TGFβR2 have been reported in Loeys-Dietz aortic aneurysm syndrome (LDS) and also dominant TGFβR2 mutations have been identified in Marfan syndrome type 2 (MFS2) and familial thoracic aortic aneurysms and dissections (TAAD). Mutations of TGFβR1 and TGFβR2 are associated with atherosclerosis and several human cancers.[2]

Recombinant human TGFβR1 (80-end) was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST tag. The gene accession number is BC071181. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~65 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

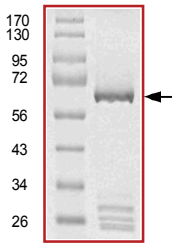
## Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

## Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

**Figure 1.**
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)




## References

1. Mátyás, G. et al., Identification and *in silico* analyses of novel TGFBR1 and TGFBR2 mutations in Marfan syndrome-related disorders. Hum. Mutat., **27**(8), 760-9 (2006).
2. Suarez, B.K. et al., TGFBR1*6A is not associated with prostate cancer in men of European ancestry. Prostate Cancer Prostatic Dis., **8**(1), 50-3 (2005).

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