

Catalogue # Aliquot Size

T07-35G-20 20 μg T07-35G-50 50 μg

## TGFBR1, Unactive

Recombinant protein expressed in Sf9 cells

Catalog # T07-35G

Lot # G071-2

## **Product Description**

Recombinant human TGF $\beta$ R1 (80-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is <u>BC071181</u>.

#### **Gene Aliases**

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

#### **Formulation**

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.

## Storage and Stability

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

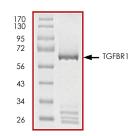
### **Scientific Background**

TGF $\beta$ R1 is a transmembrane serine/threonine protein kinase and a member of the TGF $\beta$  receptor subfamily (1). TGF $\beta$  regulates cell cycle progression by a unique signaling mechanism that involves its binding to TGF $\beta$ R2 and activation of TGF $\beta$ R1. TGF $\beta$ R1 may be inactivated in many of the cases of human tumor cells refractory to TGF $\beta$ -mediated cell cycle arrest. Heterozygous mutations in TGF $\beta$ R1 and TGF $\beta$ R2 have been reported in Loeys-Dietz aortic aneurysm syndrome (LDS) and also dominant TGF $\beta$ R2 mutations have been identified in Marfan syndrome type 2 (MFS2) and familial thoracic aortic aneurysms and dissections (TAAD). Mutations of TGF $\beta$ R1 and TGF $\beta$ R2 are associated with atherosclerosis and several human cancers (2).

#### References

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

## **Purity**



The purity of TGFBR1 was determined to be >90% by densitometry. Approx. MW 65kDa.

# TGFβR1, Unactive

Recombinant protein expressed in Sf9 cells

Catalog Number Specific Lot Number

Purity Concentration Stability Storage & Shipping

T07-35G G071-2 >90% 0.2 µg/µl

lyr At –70°C from date of shipment Store product at –70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: <a href="mailto:orders@signalchem.com">orders@signalchem.com</a> <a href="mailto:www.signalchem.com">www.signalchem.com</a>