

# Recombinant human TGF-beta RI/ALK-5 protein

Catalog Number: ATGP3735

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

27-126aa

### UniProt No.

P36897

### NCBI Accession No.

NP\_004603.1

### Alternative Names

TGF-beta receptor type-1 isoform 1, TGFBR1, AAT5, ACVRLK4, ALK-5, ALK5, ESS1, LDS1, LDS1A, LDS2A, MSSE, SKR4, tbetaR-I, TGFR-1

## PRODUCT SPECIFICATION

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### Molecular Weight

38kDa (342aa)

### Concentration

0.5mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

hIgG-His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

TGFBR1, also known as TGF-beta receptor type-1 isoform 1, is a single-pass type 1 membrane protein which belongs to the protein kinase superfamily and TGFB receptor subfamily. This protein is a secreted protein that performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation and

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apoptosis. Also, it plays an important role in controlling the immune system, and shows different activities on different types of cell, or cells at different developmental stages. Defects in TGFBR1 are the cause of Loeys-Dietz syndrome type 1A (LDS1A), Loeys-Dietz syndrome type 2A (LDS2A), and aortic aneurysm familial thoracic type 5 (AAT5). Recombinant human TGFBR1, fused to hlgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

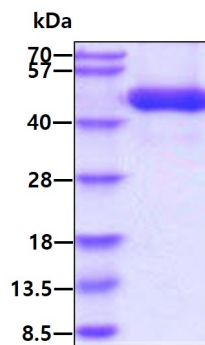
<ADL>LLPGATA LQCFCHLCTK DNFTCVTDGL CFVSVTETTD KVIHNSMCIA EIDLIPRDRP FVCAPSSKTG SVTTTTYCCNQ DHCNKIELPT TVKSSPGLGP VEL<VEPKSCD KTHTCPPCPA PELLGGPSVF LFPPKPKDTL MISRTPEVTC VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC KVS NKALPAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLTCLVKG FYPSDIAVEW ESNQGPENNY KTTPPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL SLSPGKHHHH HH>

## General References

Wrana JL., et al, (1992) Cell 71:1003-1014.  
Huse M., et al, (1999) Cell 96:425-436.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain