

Recombinant human TGF-beta RI/ALK-5 protein

Catalog Number: ATGP4134

PRODUCT INFORMATION

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, TBR-I, TBRI, TGFR-1, Activin A receptor type II-like protein kinase of 53kD, Activin receptor-like kinase 5, Serine/threonine-protein kinase receptor R4, TGF-beta type I receptor, Transforming growth factor-beta receptor type I

PRODUCT SPECIFICATION

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)

Biological Activity

Measured by its binding ability in a functional ELISA with Mouse CD105 (CAT# ATGP3361). The ED50 range \leq 2 ug/ml.

Tag

hIgG-His-Tag

Application

SDS-PAGE, Bioactivity

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.

Recombinant human TGF-beta RI/ALK-5 protein

Catalog Number: ATGP4134

BACKGROUND

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 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 ESNQPENNY KTTPLVLDSD GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL SLSPGKHHHH HH>

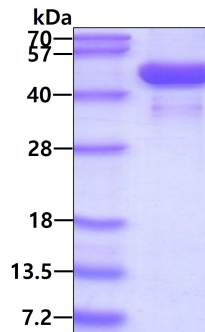
General References

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

Biological Activity

Recombinant human TGF-beta RI/ALK-5 protein

Catalog Number: ATGP4134

Mouse CD105 (CAT# ATGP3361) is coated at 10 ug/ml (100 ul/well) can bind Human TGF-beta RI/ALK-5. The ED50 range ≤ 2 ug/ml.

