

Transforming Growth Factor Beta Receptor II (TGFbR2) Active Protein | TGFbR2 active protein

Active Transforming Growth Factor Beta Receptor II (TGFbR2)

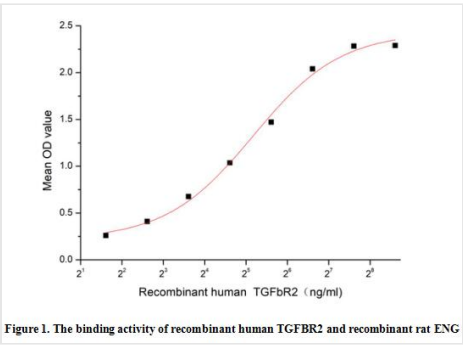
CATALOG # AAA161898	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Transforming Growth Factor Beta Receptor II (TGFbR2); Active Transforming Growth Factor Beta Receptor II (TGFbR2); Transforming Growth Factor Beta Receptor II; MFS24; TGFbR2 active protein

PRODUCT SPECIFICATIONS

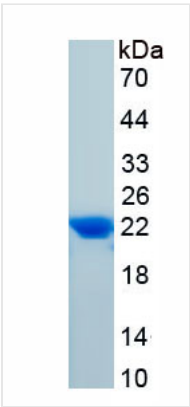
Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Thr23~Gln1 66
Applicable Applications for TGFbR2 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	4.9
Research Area	Infection immunity
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

Transforming growth factor beta receptor 2 (TGFBR2) is a tumor suppressor gene that plays a role in the differentiation of striated cells and remodeling of coronary arteries. Single nucleotide polymorphisms (SNPs) of this gene are associated with Marfan syndrome and sudden death in patients with coronary artery disease. Cardiovascular remodeling and T cell activation of TGFBR2 gene suggest that the TGFBR2 gene SNPs are related to the pathogenesis of Kawasaki disease (KD) and coronary artery lesion (CAL). Endoglin can regulate endothelial cell shape changes in response to blood flow, which drive vascular remodeling and establishment of normal vascular morphology during angiogenesis. A functional ELISA assay was conducted to detect the interaction of recombinant human TGFBR2 and recombinant rat Endoglin (ENG). Briefly, TGFBR2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to ENG-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-TGFBR2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant human TGFBR2 and recombinant rat ENG was shown in Figure 1, the EC50 for this effect is 36.1 ng/mL.

SDS-PAGE
Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for TGFbR2 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	67782326
NCBI GeneID	7048
NCBI Accession #	NP_001020018.1
NCBI GenBank Nucleotide #	NM_001024847.2
UniProt Accession #	P37173; Q15580; Q6DKT6; Q99474; B4DTV5
Molecular Weight	64,568 Da
NCBI Official Full Name	TGF-beta receptor type-2 isoform A
NCBI Official Synonym Full Names	transforming growth factor, beta receptor II (70/80kDa)
NCBI Official Symbol	TGFBR2
NCBI Official Synonym Symbols	AAT3; FAA3; MFS2; RIIC; LDS1B; LDS2B; TAAD2; TGFR-2; TGFbeta-RII
NCBI Protein Information	TGF-beta receptor type-2; tbetaR-II; TGF-beta type II receptor; TGF-beta receptor type IIB; transforming growth factor beta receptor type IIC
UniProt Protein Name	TGF-beta receptor type-2
UniProt Gene Name	TGFBR2

UniProt Synonym Gene Names	TGFR-2; TGF-beta receptor type II; TbetaR-II
UniProt Entry Name	TGFR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/transforming-growth-factor-beta-receptor-ii-tgfr2/161898>