

TGFBR1 Peptide

Cat. No. TGFBR1-5523H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human TGFBR1 is derived from human SMAD3 (215-230) and is suitable for use as the substrate for TGFBR1 superfamily.
Species	Human
Source	Sf9 Cells
Protein Length	215-230 a.a.
Description	The protein encoded by this gene forms a heteromeric complex with type II TGF-beta receptors when bound to TGF-beta, transducing the TGF-beta signal from the cell surface to the cytoplasm. The encoded protein is a serine/threonine protein kinase. Mutations in this gene have been associated with Loeys-Dietz aortic aneurysm syndrome (LDAS).
Form	Lyophilized
Purity	95.79% by HPLC analysis
Molecular Weight	CRT194 Da
Amino Acid Sequence	KKKVLTQMGPSIRC-S(pS)VS
Applications	Peptide Substrate. The peptide can be used as a substrate for the following active

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	proteinkinases: ALK1, ALK2, and ALK4.
Reconstitution	Dilute peptide in 20mM Tris-HCl, pH 7.5 to a final concentration of 1 mg/ml.
Storage	Store product at -20°C. Stable for 1 year from date of shipment. For optimal storage, aliquot diluted product into smaller quantities and store at -20°C. Avoid repeated freeze-thaw cycles.
Official Symbol	TGFBR1
Pathways	ALK1 signaling events; Adherens junction; Chagas disease (American trypanosomiasis); Chronic myeloid leukemia; Colorectal cancer; Cytokine-cytokine receptor interaction; Endocytosis; Glypican 1 network; HTLV-I infection; MAPK signaling pathway; Osteoclast differentiation; Pancreatic cancer; Pathways in cancer; Signal Transduction; Signaling by TGF beta; TGF Beta Signaling Pathway; TGF-beta signaling pathway

GENE INFORMATION

Gene Name	TGFBR1 transforming growth factor, beta receptor 1 [Homo sapiens]
Synonyms	TGFBR1; transforming growth factor, beta receptor 1; AAT5; ALK5; MSSE; SKR4; ALK-5; LDS1A; LDS2A; TGFR-1; ACVRLK4; TGF-beta receptor type-1; tbetaR-I; OTTHUMP00000021783; OTTHUMP00000242324; OTTHUMP00000242325; OTTHUMP00000242326; OTTHUMP00000242329; TGF-beta receptor type I; TGF-beta type I receptor; activin receptor-like kinase 5; transforming growth factor beta receptor I; serine/threonine-protein kinase receptor R4; activin A receptor type II-like kinase, 53kD; activin A receptor type II-like kinase, 53kDa; transforming growth factor-beta receptor type I; activin A receptor type II-like protein kinase of 53kD; transforming growth factor, beta receptor I (activin A

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receptor type II-like kinase, 53kD); EC 2.7.11.30; Activin A receptor type II-like protein kinase of 53kD; Activinreceptor-like kinase 5; Serine/threonine-protein kinase receptor R4;Transforming growth factor-beta receptor type I

Gene ID [7046](#)

mRNA Refseq [NM_001130916](#)

Protein Refseq [NP_001124388](#)

MIM [190181](#)

UniProt ID [P36897](#)

Chromosome Location 9q22

Function ATP binding; I-SMADbinding; SMAD binding; contributes to growth factor binding; metal ionbinding; nucleotide binding; protein binding; protein heterodimerizationactivity; protein serine/threonine kinase activity; receptor activity;transforming growth factor beta binding; contributes to transforming growthfactor beta binding; transforming growth factor beta binding; transforminggrowth factor beta-activated receptor activity; contributes to transforminggrowth factor beta-activated receptor activity

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